

SIMPROJECT™

A Project Management Simulation for Classroom Instruction

PLAYER'S MANUAL

V 1.2

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[Player's Manual for use with SIMPROJECT™](#)

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www.mhhe.com/simproject

PREFACE

This simulation is a dynamic business exercise designed for students enrolled in courses that emphasize the importance of developing project management skills. Because the simulation is designed to offer instructors maximum flexibility, we have included scenarios that bring into clear focus project management challenges within a variety of professions, including new product development, process conversion, construction, and information technology development and implementation. As such, the simulation can be used in academic settings within schools of business, engineering, hospitality management, information and systems, and architecture. The simulation is designed to provide students with real-world experiences in managing the myriad variables that are routinely encountered in project management and decision making. Best and most important, the simulation environment offers students the unique opportunity to practice various components of project management—a hands-on, learning-by-doing approach that emphasizes active learning.

The scenario and rules for the simulation can be learned in a short amount of time: perhaps two or three hours. Your instructor is able to customize the simulation each time it is used such that each simulation is unique. Thus, there is no “key” to successfully winning the simulation, just analysis and thoughtful decision-making. Each time you play the simulation, you must evaluate, analyze and make decisions as if you were actually running a project.

OVERVIEW OF SIMPROJECT™

SimProject™ allows students or student teams (from here forward called players) the opportunity to experience managing a project. The decisions made by the students are used to calculate the “actuals,” or what would happen in real life if the decisions were implemented. The main decisions include obtaining and releasing resources, training, managerial actions (such as rewards and penalties for individuals and teams), and assigning resources to tasks.

Once decisions are made by players in each round, SimProject™ creates a file of actual results for each task and resource in Microsoft Project format and makes the MS Project file available for the players' use. A variety of reports and functionalities are available in MS Project to enable players to analyze the results of their actions and to make additional decisions, thus progressing through the project.

SimProject™ has several standard Gantt charts, called templates or scenarios, within the program. Instructors select the template with which the class will play. Please be reminded that every "play" is different due to the design of the simulation and the customization by the instructor.

SimProject™ is divided into two parts: Pre-Play and Play. Players also analyze their place in the simulation. While each of these sections is discussed below with respect to the changes in SimProject™, for now Pre-Play involves the creation of the virtual project team, and Play involves moving through the Gantt chart that represents the project.

The major changes in Version 1.2 include a new dashboard look and feel. Most commands are one click away from Player Central. You will also note a revised header that matches the Player's Manual. Students should have MacroMedia Flash to fully appreciate the header of Version 1.2.

Playing the simulation gives student the opportunity to work either as individuals or in teams to make a variety of important decisions. First, you must make personnel selections from a randomly generated human resource table. Each individual has strengths and weaknesses; for example, they may be technically proficient but interpersonally challenged! The human resources each team selects is just the start, however; once personnel decisions are made and the simulation project team is formed, the students are expected to make a series of management decisions each period, involving training, management of team personnel (discipline, motivation, team-building and reward distribution), team member training, assignment of resources to project tasks,

and so forth. Each period, these decisions are processed by the instructor and result in impacts on project budget, schedule, functionality, and stakeholder satisfaction. Teams are scored against each other and their relative ranking is established based on scores across these key project performance variables.

Another unique feature of this simulation is its web-based design and the use of a central server to process period decisions. Many simulations require students to hand in hard copy to instructors, who input all decisions and manage the simulation from their own PC. SimProject™ requires students to be responsible for inputting their own decisions, allowing the instructor to monitor the process while still controlling the processing of each period in the simulation. All results are posted to the website, and students can quickly access their results without significant waiting time.

Some of the benefits of simulations such as SimProject™ are:

- 1) To allow students with different academic interests to make business decisions after considering the multidimensional aspects of the decisions.
- 2) To provide the opportunity for students to interact in organized team-based settings.
- 3) To allow students to practice their communication, leadership, and interpersonal skills.
- 4) To aid in developing logical and rational decision-making skills.
- 5) To introduce students to the various issues of quality, stakeholder satisfaction, schedule, and budget implications that arise from decisions they make.

We genuinely hope that you find SimProject™ a valuable, thought-provoking, and useful component for learning project management. Too many current project managers continue to learn their craft through baptisms of fire, with minimal advance preparation. This approach is expensive to their companies and discouraging to these individuals. In the past, this approach was necessary because formal project management training was often lacking and options such as project simulations nonexistent. Fortunately, this is no longer the reality. SimProject™ is a valuable new tool for training successful generations

of future project managers. We wish you the best of luck and success with all your projects!

ACKNOWLEDGEMENTS

Following our original conceptualization of the SimProject™ project management simulation, its development has charted a long and complex course. Though both authors have had extensive experience in using simulations in classroom and corporate training settings, undertaking to create a new simulation on our own was a unique learning process. One clear lesson we learned over the course of this project was the absolute necessity of finding a willing and capable set of partners, equally committed to adding their value to the product. In this, we were lucky enough to work with a developer, who brought a remarkable combination of programming skill, dedication, and creativity to the task of turning our ideas into a reality. James Ropar has been tireless a contributor. He was able to take our suggestions and go not one, but sometimes two or three steps better.

The editorial and book development staff at McGraw-Hill, particularly Scott Isenberg, has contributed much in the way of encouragement and support for our activities. Elizabeth Mavetz of Media Technology has been involved in the later versions and has added insight and enthusiasm to the project. Finally, Cynthia Douglas, Developmental Editor, has also added tremendously to the final product. She has gone well above and beyond the call of duty from the earliest stages of development. We couldn't have made it without her.

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QUICK REFERENCE GUIDE

REGISTERING FOR THE SIMULATION

- 1) Go to website <http://www.mhhe.com/simproject>.
- 2) Register as a New User.
- 3) Use the Player Registration Code in the front of this manual and the Simulation Code from your instructor.
- 4) Select your user name and password for playing the simulation.

NOTE: Once you complete the registration, you will only use the user name and password – not the codes provided in the manual or from the instructor.

STARTING A SIMULATION

- 1) Your instructor will decide on team sizes and number of teams.
- 2) Your instructor creates class simulation teams after players have registered.
- 3) Once all players have been assigned to teams, your instructor will release the simulation for Pre-Play, which is resource selection.
- 4) In the case where the teams receive a randomly generated project team, you can immediately proceed to the period processing stage.

RESOURCE PROCESSING (PRE-PLAY)

- 1) In this round, you will competitively bid for resources from the resource pool.
- 2) Simulation teams submit their bids for resources.
- 3) Each simulation team must have at least one virtual team member in order for the entire simulation to proceed.
- 4) Resources accept a team's offer based on a combination of the monetary bid and the team's attractiveness. Teams that do not win the resources they bid on must resubmit bids based on resources still available in the pool. Winning bids are a combination of monetary bid and team attractiveness factors. The highest monetary bid still might lose the resource. A team should plan their strategy in order to have resources available when they are needed.

- 5) Your instructor will probably conduct multiple iterations of the resource processing cycle until all teams have at least one resource. However, players should plan on only two resource rounds unless your instructor decides differently.

PERIOD PROCESSING

Each team may engage in three types of recurring decisions: managerial decisions, resource decisions, and training decisions.

- 1) **Managerial Decisions**—These represent players' decisions regarding corrective or supportive actions they take with their simulation team members. Decisions can be intended to motivate, punish, or develop group cohesion.
- 2) **Resource Decisions**—These are of two types: a) decisions about resource reallocation and b) resource assignment. Resource reallocation occurs when the players decide that their simulation team needs to be reconfigured, through adding additional team members or removing current team members. Please note that when resources are fired (or otherwise released), they are removed from the team instantly—even before the round has been processed. The team is not able to rehire that resource for a two periods.

Resource assignment decisions require the players to examine the project WBS for activities scheduled for the current project round. All activities must have at least one simulation team member assigned to them. If a player does not assign resources to a task, the simulation will assign resources to tasks in a non-optimal way.

Also note that no more than two resources can be assigned to any task and that teams may hire no more than two times the optimal number of resources.

- 3) **Training Decisions**—These decisions allow the players to assign simulation resources additional training if necessary. Training can either be technical in

nature (e.g., computers or project management skills) or behavioral (e.g., interpersonal skills). Training resources increases their ability to perform project tasks efficiently as the project progresses.

- 4) Each simulation team member should be assigned to no more than 100% of their time (think of 8 hours per day) at a time. Do not assign them to multiple, concurrent tasks unless you adjust their work percentage assigned downward to maintain the 100% total level. Assignment over 100% results in resource leveling by MS Project.

DISPLAYING RESULTS

- 1) Once all players' decisions are entered—or, alternately at a specific time—the instructor processes the round. The resulting output is available to the players and appears under the link “View Period Results:
- 2) Group scores are a combination of cost, time, functionality, and stakeholder satisfaction. Cost refers to adherence to budget; time refers to the total elapsed time to date in the project; functionality refers to maintaining progress against the milestones; and stakeholder satisfaction is a combination of internal and external (client) stakeholder satisfaction levels with the simulation teams' actions. Your instructor may choose to provide additional details about the calculation of each of these metrics although you should be aware that each metric for the entire simulation is placed on a percentile ranking. This means that there will ALWAYS be a 0 and ALWAYS be a 100. In some simulations, the range between these two ranks is very small, implying that all teams have approximately the same level of performance on that specific metric.
- 3) Teams are ranked in terms of overall scores at the end of each decision period. Once again, the weights for each of the four metrics are used and calculated with the percentiles and then the final result is also put on a percentile basis.

REMEMBER!

- 1) Make sure you do not over-assign resources. You should aim for 100% resource usage for each simulation team member at a time. There is no overtime. This means that you should pay attention to concurrent and sequential tasks when you are doing the resource assignment to tasks.
- 2) You will have a set of unspecified management tasks to which you should assign your project manager. You may assign other resource categories but you should know that they will be less effective.
- 3) Your decisions in the simulation always involve trade-offs. Decisions that cut costs may also negatively affect project functionality or stakeholder satisfaction. Make sure you always ask cause and effect questions before engaging in major decisions.
- 4) Read the scenario online carefully. It will provide tips as to the critical issues and success factors for the project. Given the dynamic nature of the simulation and your instructor's ability to customize your scenario, the text is available online only.
- 5) In the case where resource bidding is competitive, it pays to make sure you have plotted both a best case for acquiring your resources and fallback positions in case you fail to obtain your first choice.
- 6) Whether you have been assigned a randomly generated project team or are selecting your own team, carefully examine the personal characteristics of each team member. What are their individual strengths and weaknesses? Use this information to make informed decisions about assigning them to additional training.
- 7) You may complete the decision round without accessing all four period processing selections: training, managerial decisions, resource selection, and WBS assignments. However, you should be sure to assign at least one resource per task or SimProject™ will assign one for you. The other three decisions are optional. Be sure to click "Submit Decisions" on the processing screen in order for your instructor to know that your decisions are completed.

- 8) The cultural background of resources for project teams impacts on cohesion and team performance. A diverse group is more effective than one with minimal diversity. However a group that is too diverse may be dysfunctional also.

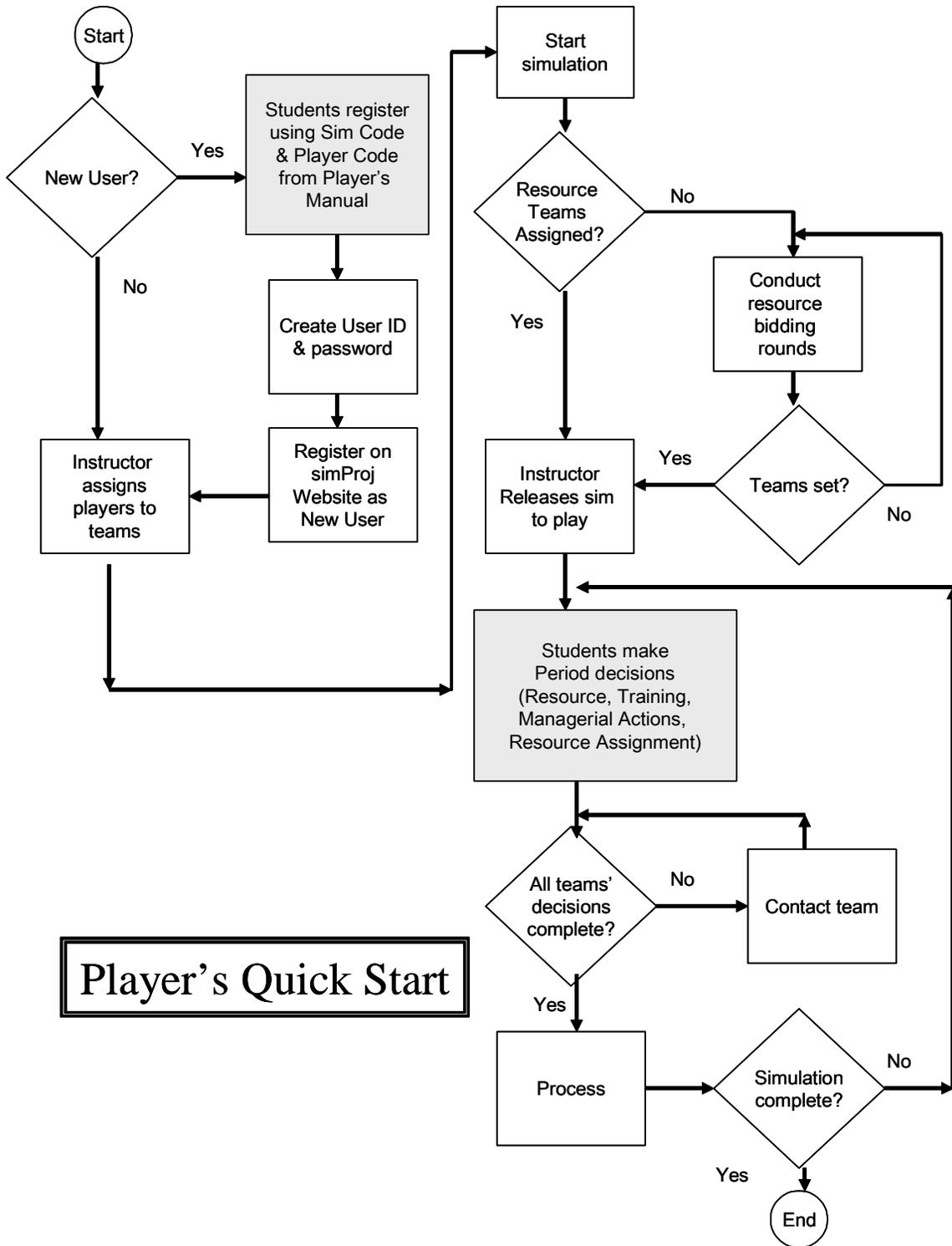


Figure 1 Quickstart Diagram

1.1 THE SIMULATION LEARNING MODEL

In the past several years, a number of significant changes have affected the manner in which we teach in the classroom. Research on active learning models, for example, clearly points out the advantages to students in terms of retention and critical reasoning skill development when they are given the opportunity to learn in an environment that involves them, offers problem-based approaches to learning, makes the process direct and active, and places a greater amount of the responsibility for learning on students. Students in an active learning model are more likely to be involved, to be engaged in the learning process rather than being passive recipients of information, and to employ higher-level reasoning and problem-solving approaches as they work in partnership with instructors to make their educational experience come alive.

Simulation offers one unique and valuable method for promoting active learning. Because it involves them in the “real world,” requiring students to make decisions that are realistic and reflect genuine project circumstances, the simulation prepares students for the sorts of challenges they are likely to face in the workplace. Further, because decisions often have unexpected side effects or unintended consequences, the sooner students can be educated to think in terms of cause and effect, the better equipped they will be when faced with complex decisions on their own. Finally, simulations, to be effective, must force students to be reflective decision makers: to be proactive rather than reactive and to plan rather than respond emotionally or in a disjointed fashion.

SimProject™ rewards participants who develop a coherent strategy for managing their project from start to finish, who plan their approach and stick to that plan. It specifically discourages the sorts of “hit-or-miss” responses that do not work in the workplace any more than in a simulation. These points are important because they offer your instructor the opportunity to create a unique learning environment for your class that can be specially tailored to your needs—while keeping learning active, interactive, and fun!

One truism of project management is that there is no such thing as a trouble-free project. In fact, research in the field suggests that many times successful projects are those that have simply recovered faster from delays and unexpected events than others that failed. One reason project management is such a challenge is because it frequently involves the need to quickly respond to unanticipated events or deviations from the original plans. SimProject™ incorporates this unique, but common, component of projects through an “unanticipated event” generator. Your instructor will have the opportunity at the beginning of the simulation to “sow” a series of unexpected events throughout the development cycle of the project, without your advance knowledge. These events, which range from the relatively benign (e.g., corporate training session) to potentially catastrophic (e.g., project budget unexpectedly cut by 20%), cannot be anticipated by simulation teams but offer an excellent opportunity for you to learn appropriate responses to minimize the negative impact on your project.

One additional, unique feature of SimProject™ is the direct linkage between the simulation and Microsoft© Project (MS Project) software. SimProject™ calculates the actual times for each task based on your decisions and creates a MS Project file for your virtual project. You may use MS Project to actively track your team projects, including all budget decisions, schedule status updates, and so forth. Consequently, an extremely valuable feature of SimProject™ is its ability to allow you to transition directly to MS Project, to use the software to track your simulated project, and become increasingly comfortable in using MS Project and understanding its multiple utilities. As a result, it is strongly suggested that student teams play SimProject™ in conjunction with networked computers that also provide access to MS Project. If you are playing the simulation using a stand-alone personal computer, please ensure that you have MS Project installed in order to gain the simulation's full functionality. A free 120-day trial version of MS Project 2002 is made available to you on the CD-ROM that accompanies the Player's Manual. Please note that if a trial version has been previously installed on your computer, a second trial version will not work.

An additional feature of the link between SimProject™ and MS Project is the ability to save MS Project output files directly to your local drive, using the “Save as” option when in the MS Project output screen. Once you have saved the file to an alternative location on your computer, it is possible to brainstorm alternative resource loadings, schedule lengths, and so forth, without adversely affecting the simulation-generated version of the output. You should note that you must still manually enter your decisions into SimProject™. You will not be able to upload your manipulations from the “offline” brainstorming into SimProject™.

We strongly recommended that you recognize that simulations are only useful for active learning if they are approached with care and diligence. In practical terms, this means that you should seriously work to manage your project, just as though you were operating in a real work situation. Alternatively, when you try to simply “beat the game,” you lose the opportunities for genuine active learning that simulation methodologies offer. As with any simulation experience, there are bound to be some rough spots early, as you become comfortable with the game. Keep in mind that everyone makes mistakes. Learn from them. Focus on these errors as a learning opportunity and a point of departure for playing the balance of the simulation. As you experience additional decision cycles, you will gain confidence in the processes and begin to recognize the links between project decisions you make and outcomes you achieve.

Even the best simulations cannot hope to completely mirror real-world experience. However, through the application of real-life project examples, coupled with links to MS Project and randomization options such as the unanticipated events generator, we truly believe that SimProject™ offers a significant advance over current simulation technology. Just as the best flight training includes simulators, SimProject™ gives you the chance to stretch your wings and fly, before you ever manage an actual project!

1.2 SIMULATION OVERVIEW

Managing projects represents one of the most important challenges we face in business today. The need to constantly balance the competing demands of diverse team members, top management, and customers requires project managers to work at a frenetic pace, to be creative, to exhibit leadership, use planning and organizing skills, acquire technical competency, and keep an eye always on the ultimate goal: the successful delivery of a viable project. Project management requires project teams to work to their best ability within constraints. The project has a limited budget, a fixed date for completion, and a defined set of deliverables (functionality). The goal of the project team is to complete the project while simultaneously responding to and satisfying all of these constraints.

Project management presents a number of challenges that are unique in business. Project managers must become not only technically proficient, understanding concepts such as scheduling, resource management, budgeting, and planning; they must also become adept at managing the behavioral side of projects—leadership, team development, motivation, goal setting, and conflict management. In this way, projects require the broadest possible set of skills from those charged with their successful completion. The “technical gurus” who cannot manage their teams will be no more successful than those who emphasize “soft skills” at the expense of planning and technical competency.

This simulation, SimProject™, has been developed to provide project managers and their teams with a realistic, comprehensive simulation experience that, as closely as possible, mirrors the diverse challenges and experiences you will face in running projects in your organizations. As players, you will work in class teams, making joint decisions, as you create and manage the performance of your project team, composed of personnel you will select, compensate, train, reward, and discipline over the life of the project. As a result, the simulation provides a dual learning experience. First, the simulation offers the opportunity to manage a project team through the trials and challenges of completing a project. The second challenge derives from the need to create and maintain a harmonious class team, composed of other students, who must develop a shared vision for project

success and the most effective means for achieving it. Effective classroom simulations teach us exactly the sort of management skills that will become necessary in the business workplace: teamwork, decision-making, conflict resolution, organization and time management.

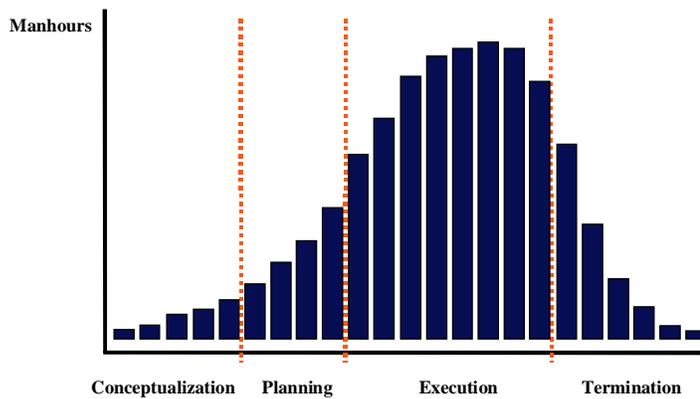
In playing SimProject™, all students start from an identical position. You (either individually or as part of a classroom team) have just been assigned to oversee the development of a new project at your company. You will either receive or be required to create a project team, and make a series of decisions every period as you move your project forward. You will compete with other project teams over a period of up to 12 decision rounds, where each round represents a set of tasks leading to an end of period project milestone. Your instructor may choose to play fewer than 12 rounds. Your challenge is to make the most effective decisions possible for each round, resulting in superior performance for your project relative to other teams in your class. Your goal is to complete your project with the highest score against the four project success criteria:

- 1) **Schedule**—All projects have a fixed schedule to completion. Time is a critical constraint for almost all projects. Your decisions must reflect the need to maintain the project schedule.
- 2) **Budget**—Your project has a limited, fixed budget as determined by your instructor and given in the Project Profile. Your score will be affected adversely if you overspend the budget. Team decisions must, as much as possible, recognize the need to keep project costs within acceptable levels.
- 3) **Functionality**—The project must “work.” It is expected that at the end of the simulation, your project perform as intended, within the initially planned specifications. All team decisions should reflect the need to maintain project functionality. This factor is measured by the extent to which the team achieves the milestone relative to the benchmark times.
- 4) **Stakeholder satisfaction**—Project stakeholders come in two major forms: external stakeholders, such as the customer for whom the project is being developed, and top management, who serve as an internal stakeholder for your company and must

be kept happy. Team decisions should recognize that stakeholder satisfaction plays a strong role in project success; when making decisions, it is imperative that your alternatives recognize the need to keep stakeholder satisfaction levels sufficiently high.

To clarify the challenge of managing a project, think in terms of the project lifecycle concept, which identifies the key stages in the development of a project. As Figure 2 shows, project lifecycles generally move through four key phases relating to Conceptualization, Planning, Execution, and Termination. These distinctions will be extremely helpful as your team visualizes the status of your project and the demands and developments necessary to most effectively manage it across each stage. Note also from the figure that the life cycle evaluates project activity (usually measured in terms of man-hours) across the project's scheduled life. Life cycles help us understand resource requirements and budget expenditures over a project's life.

Project Life Cycle Stages



Pekka Rouhiainen
March 26, 2000

Figure 2 Project Life Cycle

- Conceptualization—The term refers to the initial goal development and technical specifications for the projects. We are trying to answer the questions: What is this project intended to accomplish? How will we evaluate its success? What are the

key issues that we need to pay most attention to? It is during conceptualization that the scope of the work is created, the necessary resources are identified, and the important organizational contributors or stakeholders are signed on to the process.

- **Planning**—This is the stage in which all detailed specifications, schematics, schedules, and other plans are developed. The work packages are broken down, individual assignments are created, and the process for goal completion is clearly identified.
- **Execution**—This is the stage in which the actual “work” of the project is done, the system is developed or the product is created and fabricated, and other project-based activities are performed. It is during the execution phase that the bulk of project team labor is performed. As Figure 2 demonstrates, project costs ramp up rapidly during this stage in the project.
- **Termination**—In this phase, the completed project is transferred to its customer, the project resources (people, money, physical plant) are reassigned, and the project is formally closed out. As specific sub-activities are completed, the project begins to reduce in scope and costs decline rapidly.

These stages are the waypoints at which your project team can evaluate their own group’s and project’s performance. This life cycle is relevant only after the contract has been signed or the “go” decision has been made. It is signaled by the actual kick-off of project development, the creation of plans and schedules, the “work” of project development being performed, and the completion of the project and reassignment of personnel. When we evaluate projects in terms of this life cycle model, we are given some clues about their resource requirements. In this way, when we begin planning the project’s life cycle, we are also acquiring important information related to lining up the necessary resources to accomplish the project’s tasks. The life cycle model, then, serves as a combination of project timing (schedule) and project requirements (resources), allowing project team members to better focus on what is needed, and when.

Please Note: It is important to differentiate between the class team, to which you will be assigned, and the performance of your project team in the simulation. Your class team is responsible for creating and overseeing the performance of the simulated project team. Either you (the class team) will receive your team or select members from a personnel pool, add project team members or remove them, send them to training, discipline or reward them. The class team is expected to make decisions collectively that can affect the performance of your project team.

1.3 THE WEBSITE www.mhhe.com/simproject

The simulation is managed at a central server and can be accessed through the URL address: <http://www.mhhe.com/simproject>

During the simulation you will use the website to:

- Register
- Read the initial project scenario online
- Enter your class team decisions each decision period
- Communicate with or post messages for team members
- Obtain end of period results, including Microsoft Project output
- Receive communications from the course instructor
- Find answers to frequently asked questions

SimProject™ requires students to have access to Microsoft Project in order to view the project plans. Microsoft Project must be available to the SimProject™ program either as a resident program or on a network.

The steps in starting up and playing the SimProject™ simulation generally follow this model: 1) setup, 2) project review, 3) decision making, 4) analysis, and 5) post project audits. Each of these stages will be examined in more detail in the following sections.

1.4 SIMULATION SETUP

The first time you access the SimProject™ website, you need to register as a first-time user. Registration involves the creation of a user name and password that you will use throughout your participation in the simulation project. To create the user name and password, follow the “First Time User? Register Now!” link toward the bottom of the page. You will need the Registration Code found on the inside front cover of this Player’s Manual and the Simulation Code provided by your instructor. In addition, you will be asked to provide personal data in “My Profile.” Once you have created your user name and password, there are a number of setup operations that you need to perform. We suggest that you first read the “Simulation Information” folder, which can be accessed from the opening window. Once you have read about the simulation, return to SimProject Central. You should click on your team name and then enter the “Modify Team” to enter your class team data, including the names of all members of your classmates assigned to your simulation team. You can add to or change team member information at this site..

The instructor will have access to all team member profile information and can verify that all team members have registered to play the simulation. Once the instructor has made this verification, you can move to the Project Review step.

1.5 PROJECT REVIEW

In the project review, all students should read the general project scenario under the Simulation Information, learning about the specific character of this project, its goals, constraints, and timeframes. **PLEASE READ THIS SCENARIO CAREFULLY!** The Project overview contains a great deal of vital information that can be a tremendous help in making decisions at each development step. Groups that thoroughly master the

features of the project are in excellent condition to make informed decisions throughout the simulation.

1.5.1 Project Status Reviews

Among the key items to review are the initial scenario, the project Work Breakdown Structure, and the initial project schedule shown as a Gantt chart.

- **Project Scenario**—The scenario gives an overview of the project, its goals, important constraints (timeframe, budget, and deliverables) that must be accomplished in order for the project to be successful. The scenario represents your best guide to making decisions as you progress through the simulation.
- **Work Breakdown Structure (WBS)**—The WBS identifies the key activities, or tasks, needed to complete the project. Further, we have determined the stages at which these tasks must be performed, so you can begin to develop a sense of not only **what** tasks need to be accomplished for the project to succeed, but also **when** they need to be addressed. This information is critical as you begin to make decisions about resource assignments. You will find the updated WBS by scrolling down to the Period Tasks and then View Project Tasks. The tasks may be sorted by several criteria including period, task name, task group, or hours.
- **Project Schedule (Gantt Chart)**—The preliminary project schedule creates a time-phased plan to accomplish each of the tasks identified by the WBS. It also offers us the ability to link these tasks together using activity network logic. That is, all tasks are defined, as well as their predecessor and subsequent follow-on tasks. The advantage of a project schedule, such as a Gantt chart, is that it allows us to understand the effect that activities have on each other. If early tasks are late, it will negatively affect activities scheduled later in the activity network. The Gantt chart can be accessed from Period Tasks and then View MS Project Plan on the SimProject Central screen.

1.5.2 Requirements Review

All of this information helps us begin to assess our requirements for the project. The most important requirements, or resources, you will need to make the project succeed are people, or human resources. Therefore, one of the most important decisions your class team can make is the selection of effective personnel for the project team. As you examine the WBS and the Gantt chart, you can recognize that certain personnel are going to be vital to completing the project. For example, in a new product introduction, design and engineering input is an absolute necessity. Likewise, having members on the project team from manufacturing and marketing would be very desirable in order to gain the widest possible input to the team. Make sure that you begin to develop a sense for the resources you will need to successfully populate your project team and the right time to have the appropriate resources available.

1.5.3 Project Priorities Review

In reviewing the various elements of the project, make sure to pay particular attention to the project success criteria. While all projects are evaluated on the basis of conformance to budget, schedule, functionality, and stakeholder satisfaction, ask yourselves how these criteria conform to this particular project. Are some of these success criteria potentially more important than others? For example, in creating a new software product, you may feel that functionality and schedule conformance are key success criteria and focusing on these factors outweighs other considerations. Your project team's decisions should reflect this priority. Likewise, determine if there are other priorities that should guide, or underpin, group decisions. In situations where you face conflicts or obvious trade-offs, it is important that the class teams determine up front which priorities will guide decisions.

Your class team may find it helpful, prior to beginning to make period decisions, to conduct a goal-setting exercise. Once all team members have familiarized themselves with the project scenario, the other review documents, and project success criteria, begin

to formulate a plan for how your team will work together to make consistent and appropriate decisions throughout the project. What are the goals that will guide your team? Are you in agreement on the key success “drivers” for this simulated project? Routinely ask yourselves prior to entering period decisions: Do these choices accurately reflect our perception of the key project success criteria? Are they consistent with the strategy you have chosen in developing and managing the project team throughout the simulation?

1.6 MAKING DECISIONS

The decision-making cycle consists of two parts: Pre-Play and Period Processing decisions. The Pre-Play or initial decisions that your class team must make concern assigning resources in order to construct your project team. Please note that it may be the case that your instructor has already randomly generated a project team for you. In this case, your primary concern will be with recurring decisions, although you will need to assess the skills of your assigned personnel and make changes as appropriate. Recurring decisions involve your class teams' decisions that must be submitted every period throughout the life of the simulation. You will make a series of decisions regarding resource commitment, training, and managerial actions on a recurring basis.

1.6.1 Randomly Generated Project Teams

A feature of SimProject™ that is intended to streamline play is the random team generator option. Using this option, the instructor can instantly create a project team for each of the playing groups. The initial team is populated with a random set of resources. The specific job titles or resource types are different for each scenario. Whether these individuals are senior or junior level, technically or interpersonally proficient, is purely a matter of random chance. This option mirrors the circumstance in many organizations when project teams are created and populated with personnel about whom the project manager has minimal input. When a simulation team receives their randomly-generated

project team, they will then proceed directly to considering the recurring decisions discussed in the next section..

1.6.2 Initial Decisions

The initial decisions your team makes play a large role in your future success playing the simulation so they must be carefully considered. You will be expected to operate like a real project manager and bid for resources to populate your project team. Of course, depending upon how desirable the resources are, other class teams may also be bidding for their services. Therefore, it is important to remember: **resource selection is competitive and the approach you take must be carefully considered!** Consider your personnel choices and be prepared to pay them what you feel they are worth. If rival teams outbid you or have a higher attractiveness rating, you will lose your first choices.

When bidding for personnel, it is important to first make a preliminary determination as to how many and what type (function) of resources you will invest in for your project team. Remember that every person you add to the team is charged against your project budget, so your goal is select the best possible people, rather than simply adding large quantities of resources to the team. Also, all potential project team members you bid on are available to be bid on by your competition, so plan your bids accordingly. You may find yourself paying a significant premium over a team member's standard rate in order to acquire them. All personnel have a minimum rate as well that only your instructor has access to. If you bid less than the minimum rate for a resource, you will not obtain the resource.

Please note: You should populate your initial team with a view of the resources you will need for the first part of the project. Having resources “on the bench” or underutilized will incur underutilized resource charges – often called a bench penalty. Also remember that it will take at least two periods to bid for, obtain, and schedule a resource. For example, you would bid for a resource in Period 2, obtain in period 3 and then schedule for work for Period 3. If you do not obtain the resource through your bidding, you may

not have that particular resource available to do the task. Further, if the resource needs training, there is little opportunity to train them. Some teams have found that it is preferable to obtain resources early – but not too early.

You will also have the limited option of choosing between senior level people (e.g., a senior product designer) and junior level resources. Your decisions to select either junior or senior level managers will affect both project performance (senior personnel work more efficiently) and your project budget (senior personnel cost more to hire). As the project progresses, your team will have the option of reviewing project team staffing assignments each period and either adding to or deleting personnel from the project team. Note that releasing or firing a resource takes place instantly. You are not able to change your mind. You will not be able to rehire that resource for two periods.

The initial decisions will likely require two or more iterations as teams submit bids and receive word of whom they have gained for their project team and whom they have lost to rival teams. After the first iteration, all teams should reconsider the Available Resource pool for their next set of bidding decisions. The initial decision cycle must continue until every team has populated their team with at least one resource. Your instructor may choose to run additional rounds.

1.6.2 Recurring Decisions

After the teams have assigned the resources to create their project team, the instructor will “release” the game for full play. This release sets in motion the series of recurring decisions that form the bulk of the simulation competition. The key recurring decisions consist of: 1) Resource redeployment, 2) Managerial actions, and 3) Training.

- 1) Resource Redeployment—The WBS and Gantt charts signal the class team as to the upcoming project tasks that must be completed by the end of the milestone. Resource selection must always be based on the types of activities that the project team will be facing. Remember that it is expensive to keep project personnel on the team if there

are no specific activities for them to perform. Hence, the class teams should reevaluate the composition of their team at the end of every decision-processing period and prior to submitting their next set of decisions. If you determine that your project team is lacking members in important areas, you must acquire them. On the other hand, if you feel that keeping an expensive resource is no longer necessary, it is appropriate to release that individual back into the Available Resources pool.

Remember, however, that added personnel will not be available for assignment to project activities until the next round, so PLAN AHEAD! Do this by paying close attention to the project Gantt chart and Work Breakdown Structure, as they signal the upcoming activities and offer important clues as to the best types of functional specialists that can help the project move forward.

2)

One important issue in resource redeployment has to do with assigning project resources to tasks. You will be asked to assign personnel to the upcoming tasks identified in the WBS. You will also have the option of assigning them at full time (100%) or something less, such as part time (50%). Part time assignments make sense when you have two or more tasks that need to be accomplished but only one qualified team member to perform them. Remember that there is a tradeoff here: Assigning a team member to a task at 50% of their time will double the elapsed time needed to complete the assignment. Assigning resources to concurrent tasks totaling more than 100% will decrease their effectiveness. Additionally, MS Project will do the resource leveling and extend the completion time of the period. It is important to look ahead, sometimes several steps, in the WBS to anticipate resource requirements before they become critical and begin adding team members to your project team in advance. Waiting until tasks are ready to be performed and then discovering that you lack a critical resource ensures lengthy project delays.

Managerial Actions—as the “boss” of the project team, your class team has a great deal of control over the performance of project team members. Further, because a key determinant of project success is the degree to which you can create a cohesive team out of a collection of individuals, many managerial actions are aimed at enhancing a sense of teamwork among all project resources or improving individual

performance. Figure 3, shows a set of managerial actions that you can take any period, as well as their cost to the project budget. The actions can range from the small and inexpensive (sponsoring a team Happy Hour or throwing a Pizza Party) to the significant and expensive (holding a Team Retreat). The effects of these actions may consist of short-term morale improvement, speeding project activity completion, or they may be more long term, having no immediate effect but improving the climate for later performance enhancement.

Many managerial actions are routine, but important. For example, holding regular meetings with top management or customers are good methods for keeping stakeholders happy. Of course, the tradeoff is that meetings and many other routine managerial actions can cost your project team precious time. Like any other actions you decide to have your project team take, always remember to weigh the positive and negative consequences.

Managerial Actions

Page 1 of 1 (Records 1 - 7 of 7) Sort by... << Prev 1 Next >>

Managerial Action Name	# Assigned	Cost (per resource)	
Company Sponsored Family Event	0	\$4,000	View
Disciplinary Action	0	\$0	View
Milestone Celebration	0	\$1,000	View
Monetary Bonus	0	\$2,500	View
One-on one Chat	0	\$0	View
Pizza Party	0	\$10	View
Verbal Warning	0	\$0	View

Figure 3 Managerial Actions Screen

All managerial actions have an impact on team performance, either positively or negatively. Further, these effects may be immediate or delayed, short-term or long-term. As a result, some class team decisions may, at first, seem to have no positive effect; however, their effect may be felt over time as the project continues to develop. Also note that excessive managerial actions can lower project performance in the short term. If the team spends all their time having pizza

parties, they are not performing to their capabilities. You will find that it is necessary to strike a balance between excessive and minimal managerial actions.

- 3) Training—Not all project team personnel come to your project team fully trained, with their complete set of skills. You will occasionally find that it is necessary to send team members for advanced training in either technical or behavioral areas. They may need courses in interpersonal skills or advanced database management techniques, basic project management or conflict resolution. Training can have important payoffs but it also has short-term implications. When team members are training, they are not working. Also, training effects may be time delayed, so that immediate payoff is not always apparent. Training can also be expensive. Your class team must make reasoned decisions about project team member training. When should you use it? What types of skills need enhancement? Is it better to do it early and allow the project to lag initially, or wait until you get in trouble later in the development cycle? Make sure your class team considers these issues carefully prior to each decision-processing period.

In order to close the recurring decision cycle, you will need to formally submit your decisions. Make sure that you click the “Submit Decisions” button when you are finished with all of the Resource Deployment, Managerial Actions, and Training decisions (See Figure 4). Your team submission time will be recorded for your instructor.



Figure 4 Period Processing Decisions

1.6.3 Decision Process Cycle

The basic steps in the simulation follow a sequence represented by these steps:

- 1) Instructor registers with the system for the new simulation.
- 2) Instructor configures the new simulation for play.
- 3) Players register with the individual Registration Codes.
- 4) Players are placed in teams by the instructor.
- 5) Instructor releases the simulation for Pre-Play (allowing the teams to make resource acquisition decisions).
- 6) Players make bids for resources.
- 7) Instructor processes resource bids.
- 8) Steps 6 and 7 are repeated until teams are satisfied with their resource composition.
- 9) Instructor releases the simulation for Play (periods of decision making).
- 10) Players make period selections (Resources, Training, Managerial actions).
- 11) Instructor processes period decisions.
- 12) Players review results and make decisions for next period.
- 13) Steps 10 through 12 are repeated until play is complete.
- 14) Instructor ends game and freezes any further input to enable student analysis.

These steps are shown visually in Figure 5.

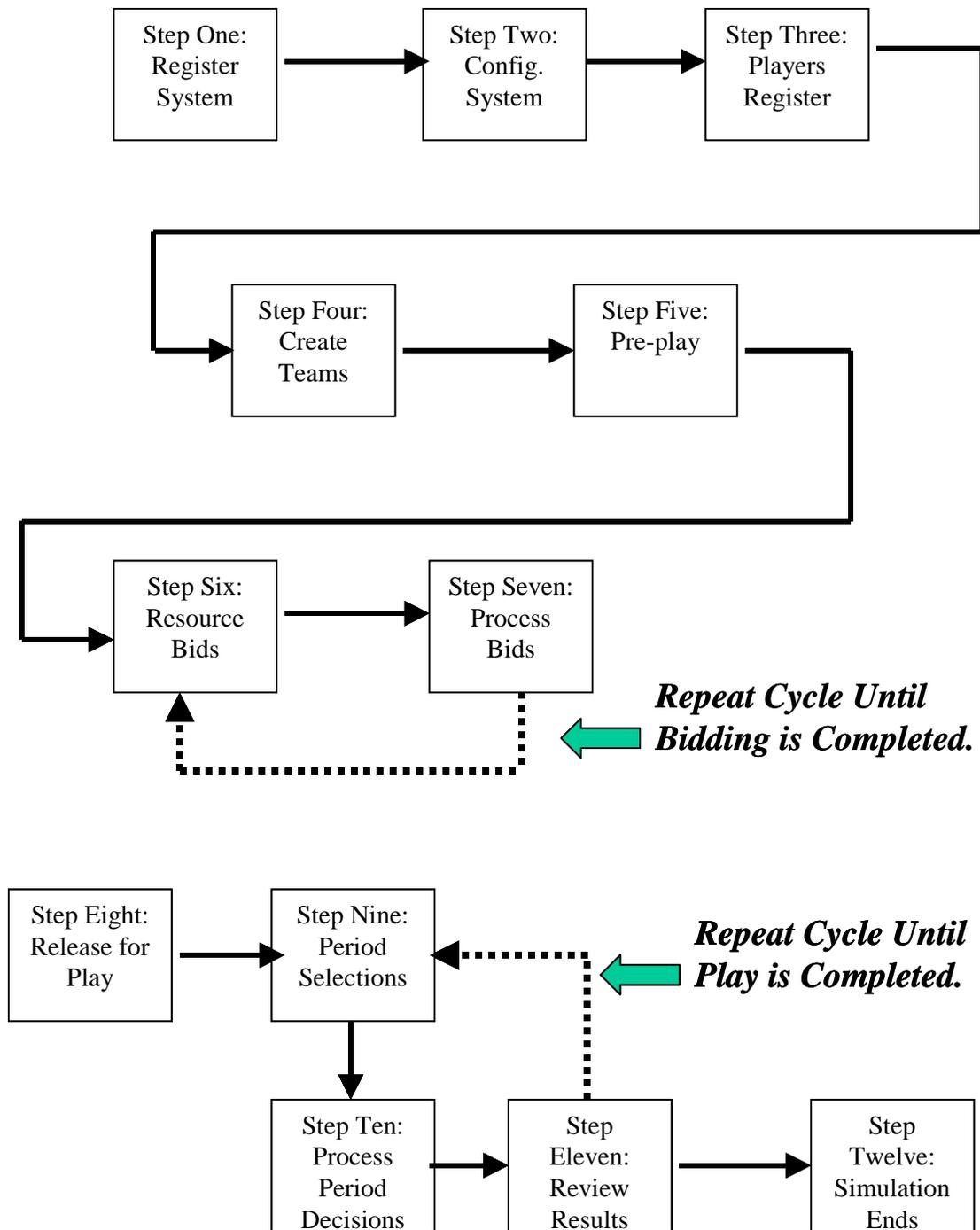


Figure 5 Class Team Decision Flow Chart

1.7 ISSUES TO CONSIDER

Making decisions on projects is a complex process. In trying to balance the multiple needs of keeping the project on time, on budget, on specification, and acceptable to customers, you will be frequently faced with situations in which you discover that these demands may conflict with each other. For example, in trying to keep the customer happy by agreeing to multiple change requests to the project, you can easily overrun your budget. In addition to the functionality of the final project design, you may find your schedule slipping further and further behind. In the real world, these kinds of project tradeoffs happen all the time. This simulation reflects the fact that you must always consider how your decisions will have extra (and sometimes unintended) consequences. As you play the simulation, you will be called upon to make a number of management decisions each period. To make the best possible decisions, you must always keep the goals of the project in mind. If the key success driver of your project is schedule, you should ensure that you prioritize your decisions so that the schedule is not negatively affected. On the other hand, many decisions can have more than one impact; for example, maintaining schedule integrity but angering the project customer. The complex nature of many of the decisions you will be required to make means that you should always consider their effects, both in the short term and across the complete project life cycle.

There are a number of issues and concepts that may affect a project in the real world. Prior to making decisions each period, your class teams must consider a variety of issues for your project, related not only to larger, strategic issues but also to operational decisions that will affect the performance of your project team each period. The set of issues that are relevant to your decisions include the following:

Stakeholders	Project stakeholders consist of all groups, both inside and outside the organization, that have an interest in or can affect the development of your project. Some examples of stakeholders include top management, other functional departments, cost accounting, and the project's customer. As your project progresses, one of your goals is to keep stakeholder satisfaction levels acceptably high.
Top Management Support	Top management support is critical issue for project success. Support may be manifested in a number of ways, including supporting the team in disagreements with other departments in the firm, providing extra resources as the project progresses, and so forth. It may also provide an easier road to company acceptance of the project upon completion.
Managerial Actions	As the project moves forward, your class team will have the option of using a variety of managerial actions to improve the performance of members of your project team. Some of the actions are coercive (disciplining poor performance) and others are intended to reward strong performance. Managerial actions can be applied to either individuals within the project team or to the team as a whole.
Alienating Top Management	Top management support may be lost if the project manager or team members do not act in a professional manner. It is possible to alienate, or estrange, top management by making repeated, similar mistakes, offending the customers, and so forth. Because their support is crucial for project success, you must ensure that your project progresses in a manner satisfactory to top management.
Training Catalog	The Training Catalog consists of courses that are available to the project. Some of the training is behavioral (e.g., interpersonal skills) and some is technical. You may choose to send some or all of your project team personnel away for training during the project. Training your project team members may be both necessary and useful for enhancing their skills and project quality. Note that training occurs first in a period.
Impact Events	Impact events are situations that affect the project. The events may be short term or long term, expected or unexpected, and may or may not be related to the project. Impact events are not predictable. Project management involves the management of risk and uncertainty. Impact events may happen throughout the project as a way of mirroring that uncertainty.

The simulation provides a great deal of information about each potential member of your project team. As you examine the resource pool, you will have the opportunity to consider a number of people for possible inclusion on your project team. As in a real organization, these individuals will have assorted strengths and weaknesses that must be taken into consideration when bidding for resources. These individual attributes are represented on a scale of 1 to 100 and should be examined as relative measures. Among the key issues that characterize the personnel pool are the following:

Individual	Cost/Hour: Regular and Overtime	Individuals have hourly costs assigned. The overtime rate will be some factor multiplied by the hourly rate. Remember that personnel costs are a large component of your project's budget.
	Training	Training is the amount of instruction in specific skills. It may be necessary to apply additional training to project team personnel if you determine it would enhance their ability to perform work efficiently.
	Skill	Skill is the degree of expertise. Initial skill levels can be enhanced through additional training during the simulation.
	Experience	Experience is the length of time that the individual has worked in a specific area (e.g., construction). More experienced personnel tend to be more efficient and (at least initially) adapt faster to working on project teams.
	Education	Each individual will have a specified level of education that will refer to both the level and type of education completed. (i.e., B.S. in Engineering degree)
	Work Ethic	Work ethic is the set of principles that individuals have about performing their job. A stronger work ethic means that the project team member is disposed to work more diligently.
	Reputation	Reputation is the general belief about an individual's character. It may also be described as the state of being well thought of. The better the individual's reputation, the easier it is to hire other team members, retain top management support, and keep stakeholders happy.
	Public Relations Skill	PR skills include employee communications, media relations, advertising, and community relations. They are the ability of a person to present an appropriate

		“face” to the external stakeholders.
	Flexibility	Flexibility is a measure of the adaptability of a person to a change in circumstance and the ability to handle changes.
	Interpersonal Skills	Interpersonal skills are goal-directed behaviors conducted in a face-to-face environment. They are those characteristics of a person to relate and interact with others.
Team	Cohesion	Cohesion is the degree to which the team will tend to stick together. Cohesion is a critical component in creating a well-functioning team.
	Efficiency	Efficiency is also a team concept and reflects the capability of the team to act effectively, with a minimum of wasted time, energy, or money.
	Longevity of Core Team Members	Longevity of core team members is the length of time that the main members of a team have been working together. The longer team members stay part of the project, the more comfortable they are with each other, the better they understand the nature of their assignments, and the higher their learning curve. Teams with poor longevity suffer in their cohesion and efficiency.
	Managerial Style	Managerial style is the way in which Project Managers conduct themselves with respect to performing the business of the project team. With respect to its effect on the Project Team, there are certain styles that will be more or less effective given the make-up of the specific Project Team.
	Team Composition	Team composition is the make-up of the Project Team. Various factors will be considered in team composition including gender, diversity, education, experience, and training. Diversity can improve decision-making results but it can also lead to greater intra-team conflict.
Project	Cost: Estimated and Actual	Project cost is the total time and materials for all costs associated with the project. Both estimated and actual incurred costs are important to project management.
	Functionality	Functionality is the degree to which the project operates in performing a specific task or operation.
	Milestones	Milestones are significant events toward the completion of the project. In the context of the simulation, a milestone marks the end of the set of tasks for each period.
	Project Performance	Project performance is the degree to which the project fulfills the original objectives. The project’s

		performance is measured on four dimensions: 1) adherence to schedule, 2) adherence to budget, 3) functionality (progress toward milestones), and 4) stakeholder satisfaction.
	Project Profile	The project’s profile can be described as the public face of the project. A “high profile” project is one that the company is investing its reputation and credibility in completing. It will command greater top management support but also greater scrutiny from project stakeholders. Your performance on high profile projects can quickly enhance or ruin your reputation in the company.
	Project Stage	The project stage is the point of development of the project. The stage is usually associated with project life cycles.
	Resource allocation	Resource allocation is the way in which the individuals are allocated to tasks within the project plan.
Task Information	Time: Estimated and Actual	Each task has an estimated time associated with it. The actual time will be determined as a result of decisions made in the processing.
	Prior Performance	Prior performance is a measure of experience in performing specific tasks.
Project Management	Managerial Actions	Managerial actions are specific events initiated by the project or organization management. These actions may be of two types: project management practices and specific events implemented as either reward or punishment for the team or team members.
	Managerial Style	Managerial style is the way in which the Project Manager conducts him or herself with respect to performing the business of the project team. Their style can range from autocratic and disciplinary to team based and supportive.

1.8 ANALYSIS

After each period’s decisions have been submitted, the instructor processes the decisions. You can then view the results of the most recent period. There are several forms of project output that the simulation generates, all of which are important for understanding your current status and deciding on future decisions. In SimProject Central menu, select the View Period Results option (see Figure 6). The resulting window (see Figure 7)

provides you with a wide variety of results from the past decision period, including: 1) relative team rankings, 2) training decisions, 3) managerial actions, 4) events, and 5) resource decisions. See Figure 8 for the format of this output

Teams

Page 1 of 1 (Records 1 - 4 of 4) Sort by... << Prev 1 Next >>

Team Name	Time	Cost	Functionality	Stakeholder	Overall	Rank	
lizmavetz	100%	100%	54%	66%	100%	1	View
cynthia	39%	89%	100%	100%	85%	2	View
Mike	37%	88%	81%	74%	76%	3	View
Eric	0%	0%	0%	0%	0%	4	View

Note Overall score is weighted: Time (35%), Cost (35%), Functionality (15%), Stakeholder (15%)*

Period Tasks

Page 1 of 1 (Records 1 - 10 of 10) Sort by... << Prev 1 Next >>

Task Name	Task Group	Est Resource Hours	
Conduct rough-in plumbing inspection	Insulation	8	View
Pour concrete for basement floor	Insulation	88	View
Conduct rough-in electrical inspection	Insulation	8	View
Rough-in HVAC	Insulation	24	View
Conduct rough-in HVAC inspection	Insulation	8	View
Project Management Period 6	Project Management	56	View
Install felt, flashing and shingles	Dry In	24	View
Hang 1st floor exterior doors	Dry In	8	View
Install 1st floor windows	Dry In	24	View
Install 2nd floor windows	Dry In	24	View

View Project Tasks
View Period Results
View MSProject Plan

Figure 6 Sample SimProject Central Screen to Select Period Results

. Other forms of output include a Microsoft Project file, giving the latest project tracking and control information about the status of your project. It is important for all student teams to become adept at interpreting project data from standardized sources, such as Microsoft Project. You will be able to access a number of screens giving information on schedule and budget status. Note that you can use all of the capabilities of MS Project with your simulation project file.

The screenshot displays the SimProject Player interface. At the top, the logo 'SIMPROJECT™' is visible, along with the text 'a project management simulation for classroom instruction' and the names 'JEFFREY K. PINTO' and 'DIANE H. PARENTE'. The McGraw-Hill Higher Education logo is in the top right corner. A quote reads: "A project gets a year late one day at a time." Below this is a navigation bar with links: SimProject Central, Messages, FAQ's, My Team, My Profile, and Logout.

The main content area is titled 'Teams' and shows 'Page 1 of 1 (Records 1 - 4 of 4)'. A 'Sort by...' dropdown menu is present. The table below lists team performance metrics:

Team Name	Time	Cost	Functionality	Stakeholder	Overall	Rank
lizmavetz	100%	100%	54%	66%	100%	1
cynthia	39%	89%	100%	100%	85%	2
Mike	37%	88%	81%	74%	76%	3
Eric	0%	0%	0%	0%	0%	4

A note states: "Note* Overall score is weighted: Time (35%), Cost (35%), Functionality (15%), Stakeholder (15%)". Below the table are three buttons: 'OK', 'View Resource Categories', and 'View MSProject Plan'.

To the right, a 'Period Ranks' section shows a large '5' in a box labeled 'Period'. Below it is a table:

Period	Rank	View
0	1	View
1	3	View
2	4	View
3	4	View
4	4	View
5	4	View

The 'Financials & Statistics' section is partially visible at the bottom.

Figure 7 View Period Results

Financials & Statistics

Beginning Budget	\$5,185	Team Efficiency	76%
Period Costs	\$40,990	Team Cohesion	70%
Adjustments	\$0	Team Composition	91%
Remaining Budget	(\$35,805)	Team Longevity	100%

* Adjustments are due to financial impact of events

Task Actuals

Rough-in plumbing

Resource Name	Category	Effective	Allocated	Efficiency	Hours	Cost
Charles Sahota	Plumber	100%	100%	65%	46	\$3,220

Rough-in electrical

Resource Name	Category	Effective	Allocated	Efficiency	Hours	Cost
Lance Montenegro	Rough Carpenter	100%	73%	47%	29	\$1,305

Resource Decisions

Round (1)

Resource Name	Category	Result
Kate Knoble	Drywall Special...	accepted offer because your bid was the highest

Training Decisions

Basics of Computer-Aided Design (5 days at \$1,000 per resource)

Resource Name	Category	Training	Lost Work	Total
Benjiro Yagi	Electrician	\$1,000	\$3,520	\$4,520

Managerial Action Decisions

There are no managerial action decisions for this period

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5 4 View

Period Milestone

Achieved	<input type="checkbox"/>
Cutoff Score	80%
Team Score	63%
Finish Date	5/3/2006

Period Costs

Resources	\$27,670
Training **	\$4,520
Managerial Actions	\$0
Unallocated Resources	\$8,800
Total	\$40,990

** Training costs include price of

Figure 8 Sample Period Results

1.8.1 Team Rankings

After each decision-processing period, the teams are ranked against each other in terms of their performance relative to the project success criteria of Time, Cost, Functionality, and Stakeholder Satisfaction. Using a perfect score standard of 100, teams will be ranked on

a percentile basis and can compare their scores against the top performing class team. Team rankings can change from period to period as one team in the class outperforms their competition by making more effective decisions.

The score in each of the four components and in the overall metric are calculated and then placed on a percentile basis. All scores are cumulative.

Percentile scoring is accomplished by calculating the appropriate metric for each category and then assigning "0" to the worst metric and "100" to the best. Intermediate values are then prorated. You should remember that a "0" only means that their metric in that category was the minimum or furthest away from the ideal. It is relative to the other teams.

1.8.1.1 Time

A variety of issues can affect the schedule by which project activities occur. Although each team is evaluated against the same project schedules, the manner in which project resources are selected and assigned to project activities, the experience and skill of these resources, their motivation level and training, and the impact of rework can all serve to either keep the team on schedule or lead to significant project delays. The simulation evaluates dozens of variables resulting from resource decisions, training and managerial decisions, WBS decisions, and so forth to calculate the performance of your simulation teams relative to the schedule.

The time score is based on the total number of days elapsed from the project start date to the end date of the last finished milestone. Time in future periods is not factored in since it is an estimate and not actual. Thus, the time score as used in Version 1.2 is cumulative.

The shortest elapsed date would warrant a 100 while the longest time would warrant a 0.

You will see the projected finish date on the right side of the results screen.

1.8.1.2 Cost

The amount of budget money spent in any decision period is a function of how much the simulation teams paid for their resources, whether they fully assigned them to tasks or even over-assigned them, and the overall variance the teams incurred (the difference between the planned rate of project budget expenditures and the actual rate).

The cost score is a metric based on a player achieving the closest to the optimal cost as benchmarked by the baseline generated when the simulation is created for Pre-Play. The metric used is a measure of forecast accuracy (from the operations discipline or class) and measures the deviation from the baseline (forecast) and the actual results project-to-date.

Your instructor may or may not provide the specifics of this calculation.

Thus, the team with the score closest to the benchmark receives a percentile score of 100 while the one with a score farthest from the benchmark receives a percentile score of 0.

The cost score is cumulative.

The baseline is determined by the simulation from determining what the cost would be if one ideal resource was assigned to every task. There is also a training cost factored in for the first 8 periods.

1.8.1.3 Functionality

Functionality is the measure of the average percent completed for every task up to the current period. The percent of task complete is determined by how much of the task the resources completed during the estimated time. For example, if a task is estimated at 40 hours and the team finishes it in 50 hours, then their percent complete would be

$$(\text{estimated time/actual time}) * 100 \rightarrow (40/50) * 100 = 80\%$$

The percent complete for each task is then averaged for all tasks completed, this number represents the functionality score.

The milestone score is the average of percent completed tasks for the period. If the average is greater or equal to the cutoff for the milestone, set to 80% by default, then the team will have achieved the milestone for the period.

Milestone score = Average % Completed for all period tasks in the current period

Functionality score = Average % completed for all tasks completed to date

The Functionality percentage is then put on the percentile basis as in the prior scores, with the lowest percent completion set equal to 0 and the highest percent completion set at 100.

1.8.1.4 Stakeholder Satisfaction

Project stakeholders are defined as any individual or group that has a stake in the project or can affect or be affected by the project's development. Typically, we can think in terms of two general types of stakeholders: internal and external. Internal stakeholders are those internal to the project organization. Top management, the cost accountant, other functional departments and their heads are all examples of internal stakeholders. External stakeholders are those outside of the project organization, and the best example is the project customer, or client. A key goal of the simulation is to maintain strong links and positive relationships with both internal and external stakeholders as players develop their projects. Decisions made to either improve project quality or reduce functionality can also have significant effects on stakeholders. Stakeholder management is a juggling

act, with many different effects on their attitude toward the project resulting from decisions the players make.

Stakeholder satisfaction is measured using both internal and external stakeholders. They are considered equal in terms of their importance. The external stakeholder score is impacted by time, cost and functionality scores as well as the interpersonal skills of your team. The internal stakeholder score is impacted by how often your team met the milestones, the interpersonal skills of your team and the management style of your team.

As in the other metrics, the team with the highest stakeholder score receives a 100 and the team with the lowest stakeholder score receives a 0.

Your instructor may or may not provide the specifics of this calculation.

1.8.2 Training Decisions

The output report will also detail the training decisions your team made this period, showing the team members who were successfully trained, the cost against the project budget, and the number of days required to complete the training. It may occasionally happen that you will receive notification that a team member did not successfully complete a training program, requiring your team to determine whether or not to reinvest in training for that individual. The simulation will keep an up-to-date record of who has received training on your project team and the types of training they have undergone. Remember that training is scheduled as the first activity for the period.

1.8.3 Managerial Actions

The generated simulation output records all managerial actions taken in the preceding decision period. Class teams can keep an updated record of the managerial actions they have elected to take and the personnel affected by these actions.

1.8.4 Events

Projects in real life never run smoothly. One of the real frustrations many project teams face is the fact that uncontrollable events can often intervene and derail a smoothly running project team, often at the worst possible time. SimProject™ was designed to reflect this uncertainty that all project teams face. The simulation, at the direction of the instructor, will sometimes generate an “event” that can have serious implications on the project team’s performance. For example, you may be notified that your project budget has just been cut by 10%, affecting your resource selection decisions for the next decision period. Remember: events are generated in the simulation as in real projects and are unpredictable. It would be costly and ineffective to spend time and budget money making excessive preparations for catastrophe in advance. Do your best to recognize the possibility of trouble spots looming without allowing yourself to become overly transfixed by them.

1.8.5 Resource Decisions

We have noted that your project team staffing must be constantly reassessed. Looking ahead in the WBS and Gantt charts to the tasks for the next period, ask yourself: Does your project team have the skills necessary to complete these activities or is it necessary to acquire additional resources? The output for each period includes a breakdown of resource assignments; this reflects both adding and removing individuals from the project team.

1.9 POST-PROJECT AUDIT

At the completion of the simulation, your instructor may request that you prepare a final project audit. This post-project audit is intended to serve as a debriefing and critical analysis of your team's decisions and the impact on the project in terms of cost, schedule, functionality, and stakeholder satisfaction. Decisions on resources, training, and managerial actions all affect both technical and behavioral performance of the project. Further, random critical events and teams' responses to these events offer some interesting discussion points. Your instructor will provide information as to the content and level of detail that you will be required to prepare.

1.10 ORGANIZING YOUR CLASS TEAM

Experience with simulations clearly demonstrates that no team ever wins the competition by being “lucky.” Successful teams are not just those teams that made the best choices; they are the teams that paid closest attention to how they would function. In other words, while the goal of this simulation is to bring your project in more successfully than the other competing teams, the best route to achieving that goal lies in paying strict attention to how your team performs. Two elements that you must take into serious consideration include issues of 1) structure, and 2) process.

The structure of your team is the manner in which you collectively determine that you will organize yourselves. For example, you may decide to elect one member as the overall team leader, with other people taking on supporting or expert functions. If your team is made up of people with widely divergent skills and backgrounds, analyze who can best serve to support the project in terms of helping with technical information, who can provide clues to behavioral issues, who has administrative experience, and so forth. Effective team structures may evolve over time, but they are rarely fluid. You will need to quickly settle into a structure that allows for maximum input from each member of the team. Look for each other's strengths and exploit them.

The processes you create can make or break your team. Processes refer to the manner in which you interact, your rules of behavior, expectations for community or appropriate behavior, and any other mechanisms by which your team will be expected to operate. For example, you may need to establish a set of ground rules or expectations early that emphasize your desire to make consensual decisions. Your team will function better once you create clear guidelines for how you will interact, punishments for inappropriate behavior, expectations that all members prepare and contribute equally, and so forth. Remember that in the absence of clear process guidelines for team meetings and decision making, there is a natural tendency for some members to dominate, others to withdraw,

and still others to opt out of the process. Make your team expectations clear and make them early!

1.11 HELPFUL HINTS

Each time you play SimProject™ you will find that the results are different. Because of random generators and instructor options, the simulation can literally accommodate thousands of playing cycles and never replicate itself. However, just because the simulation differs in terms of key elements, it does not mean that you cannot learn from the experience. In particular, there are some helpful hints that will make your simulation playing experience more enjoyable and fruitful. Among the best pieces of advice we have gathered from past players, consider the following:

- 1) **Get organized early**—Organizing your team early on will definitely give you a jump on the simulation and your competition. Research and experience with simulations clearly shows that successful teams are invariably those that organized early and created clear structure and process guidelines. The sooner you get your class team up and running smoothly, the sooner you can begin to get your project team up and performing effectively.
- 2) **Read and then reread the manual**—The best way to win the game is to learn the game, thoroughly. You will need to read through this material and familiarize yourself with all the features, the various options, and alternatives. The more you know, the better prepared you will be to develop a winning approach. Every simulation debriefing has generated the same advice from those who just played it: “Read the manual.”
- 3) **Develop a strategy and stick with it**—Consistency may be “the hobgoblin of small minds,” but indecisiveness and changeability are worse. Make a plan for attacking this simulation and then work the plan. It may require fine-tuning, you may initially make some incorrect assumptions and alter your plan, but a consistent strategy is always preferable to simply trying a series of “hit or miss” guesses hoping to get lucky.

- 4) **Remember the law of cause and effect**—Every management decision you make is going to have an outcome, some good and some bad. Sending team members away for training will cost you money and lead to short-term delays. However, downstream payoffs can be quite large. Likewise, you may have to use discipline on some employees. It can negatively affect their morale but it may speed their productivity. Remember to think in terms of consequences. Also, remember that not every effect is immediately felt. There may be some time lags before the payoff becomes apparent.
- 5) **Think two steps ahead**—You have a project plan, including a WBS and Gantt chart. Use them constantly as points of reference to identify where you are in the development cycle. If you notice a task pending that requires a skilled person your team does not currently possess, go out and get them. Likewise, you can minimize current disruption to your schedule by early recognition of those in need of training and get them trained when they are least likely to have a negative impact on your project. For example, if you perceive that a programmer is weak in networking skills, the worst time to send him or her away for training is during the project stage when you need them to develop the networking protocol! Use the WBS to look ahead.
- 6) **Success lies in finding a balance**—Many of the decisions you make will have to balance competing and often conflicting demands. Remember, you have four success criteria: time, cost, functionality, and stakeholder satisfaction. You will occasionally have to make decisions in favor of one of these criteria at the expense of others. For example, to satisfy a stakeholder request, you may need to spend more of your budget than you would like. That is the nature of juggling competing demands. Unless you have a firm belief that one success driver strongly outweighs all others, be careful not to lose your sense of balance. All four criteria will determine your success. Keep an eye on them all.
- 7) **Be a leader, not a follower**—Success lies in charting a reasonable course, without paying too much attention to what other teams are attempting. You will know soon enough how your performance stacks up against theirs based on end of period output. Your best approach is to be original and independently logical,

- without depending upon the other teams and the decisions they make. Yes, you are competing for resources and must factor that into your plan, but as much as possible, try and develop a clear and personalized strategy.
- 8) **Don't rush your decision**—There are a number of decisions that must be made each processing period. Leaving these decisions and analysis to the last minute puts your team at a great disadvantage. The sooner you identify your strengths and weaknesses, the sooner you can take corrective action. Making fast decisions is never a good substitute for making good decisions.
 - 9) **Keep an eye on your budget**—Each team starts with the same project budget. Pay attention to how personnel selection decisions, managerial actions, and other uncontrollable events affect your budget. Using up the budget before the end of the project will incur significant penalties and forfeit top management goodwill. On the other hand, ending the project with significant budget money still available may signal a late project with client dissatisfaction. Find a balance between hoarding and squandering the project budget and review the budget status every decision period.

1.12 ALTERNATIVE STRATEGIES FOR STAFFING TEAMS

The first challenge you will face with SimProject™ is to create an effective team during the resource staffing phase. Recall that the random resource generator creates a set of team resources at the beginning of the simulation, all with varying personality profiles. Some are technically proficient but may lack interpersonal skills. Others have advanced degrees and skills, but come at an accordingly higher cost to your project budget. The manner in which you decide to staff your teams can have some important implications for how your projects progress. Among the alternative staffing strategies and their potential impact are the following:

- 1) Hire the best qualified and most expensive—Bidding for the resources with the highest qualifications will naturally incur a greater charge against the project budget. It is also more likely to provoke bidding wars with other players who also

- covet these highly trained or experienced people. The benefits of adopting this strategy are that they allow you to acquire the top people to get a fast start, they cut down on training costs for the project, and these more proficient people can generally perform their duties more efficiently, with less likelihood of rework expenses or missing deadlines. The major drawback, of course, is that this strategy can be very expensive. These personnel are often in high demand and you should expect to pay a premium for these individuals to ensure you acquire them in the competitive bidding cycle. As a result, it is very important to keep track of the project budget in the event you choose this strategy.
- 2) Find the cheapest resources possible—The opposite of the first strategy is to actively seek to acquire the services of junior or lesser-trained personnel for the project team. Because these individuals are a smaller charge against your budgets, this strategy offers a low-cost alternative. Additional costs may be accrued in training over the course of the project, however, to improve the skill sets of these personnel. The major drawback with this strategy is that it will negatively affect the development speed and functionality of the project. Resources with lower skills cannot work as quickly or efficiently as those with better training and/or experience. Consequently, while this strategy represents a method to control initial budget costs, unless these personnel are given training to enhance their skills, the result will compromise project quality, schedules, and ultimately, stakeholder satisfaction.
 - 3) Acquire “mid-level” personnel—A compromise strategy between the first two strategies is to seek personnel to populate your project teams that are perhaps not the best available but are a close second or third. The advantages of this approach are that it is less likely that you will enter into expensive bidding wars for these individuals, they can be trained to achieve proficiency fairly quickly as the project progresses, and they will do a good, competent job. While not the “super stars,” these personnel will allow your project to progress at a reasonable pace. The disadvantage of using this strategy is that it may slow project development initially, until the additional training given these personnel begins to bear fruit.

- 4) Pay attention to a blend of both technical and interpersonal skills in creating the team—Effective project team members are usually those who have an adequate mix of both “people” skills and technical knowledge. We are all familiar with stories of highly trained but interpersonally inept individuals who adversely affect their project teams’ performance through destroying group cohesion.

SimProject™ recognizes the role that both technical capabilities and human relations skills play in creating a constructive environment for the project team.

The greater the interpersonal abilities of team members, the quicker the team will attain high levels of cohesion, with a positive impact on the project. Likewise, the stronger the technical skills displayed by the project team members, the faster the project will progress, the better its functionality, and the less likely extra time and cost will be needed for project rework.

2.0 PLAYING THE SIMULATION

2.1 Overview

This Player's Manual illustrates how players can use the SimProject™ online simulation software, including general usage of the software and detailed information about playing a simulation. This guide describes the software from the Player's perspective.

2.2 Registering with SimProject™

The first step for using SimProject™ by either the Instructor or the Player is to register with the simulation. To do this, you will need two codes: the Registration Code, and the Simulation Code. Your unique Registration Code can be found in the front of the printed Player's Manual. This is a unique nine-digit code in the following format **XXX-XXX-XXX** and is required to use the SimProject™ software. Your instructor will provide you with a seven-digit Simulation Code which must be used in combination with the Player code.

To register with SimProject™

- 1) Go to <http://www.mhhe.com/simproject>. Figure 9 depicts the SimProject™ Home Page.

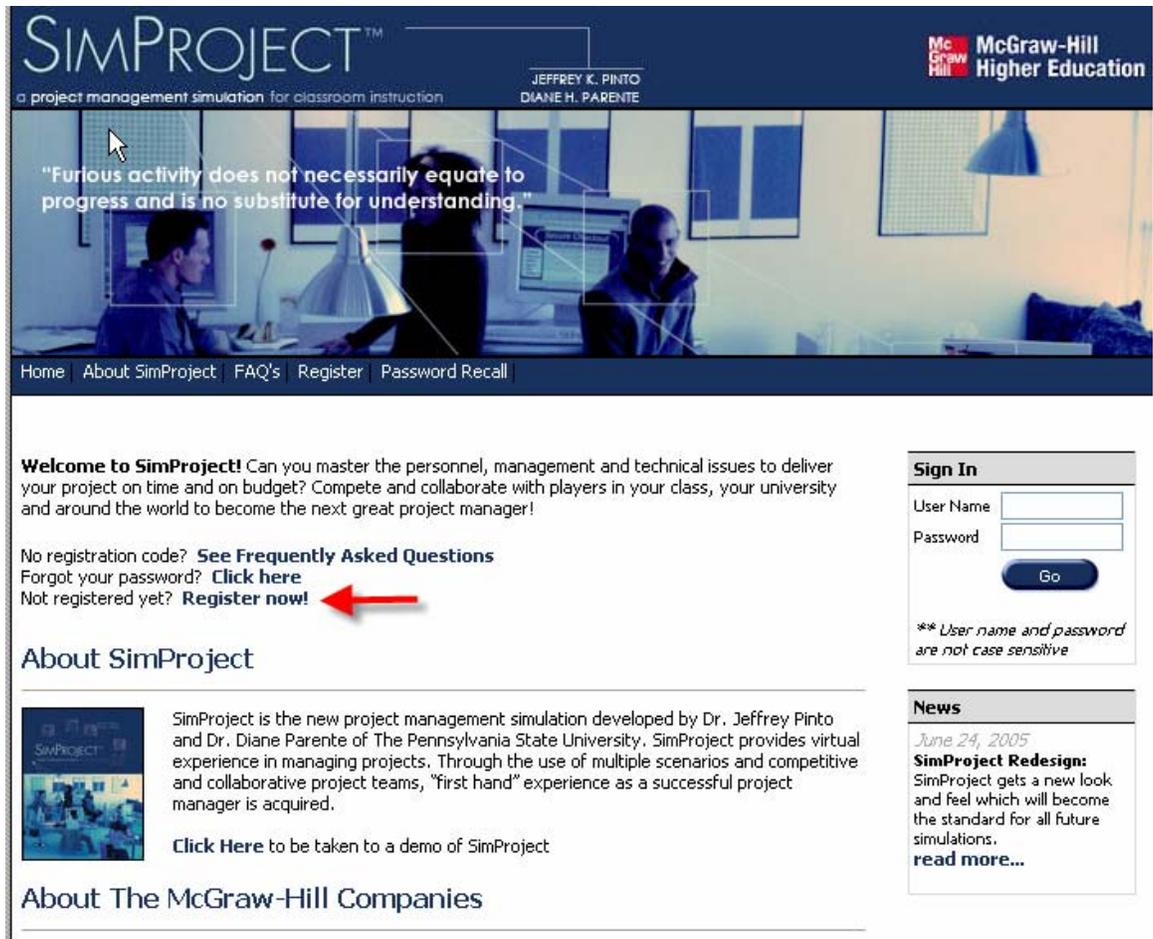


Figure 9 SimProject™ Home Page

- 2) Click on "Register Now!" shown with the red arrow in Figure 9.
- 3) Enter the nine-digit Registration Code found on the inside front cover of the printed Player's Manual, followed by the seven-digit Simulation Code provided by your instructor. Click the "New User" button (unless you have played in a previous simulation). Figure 10 depicts the Registration Information screen.

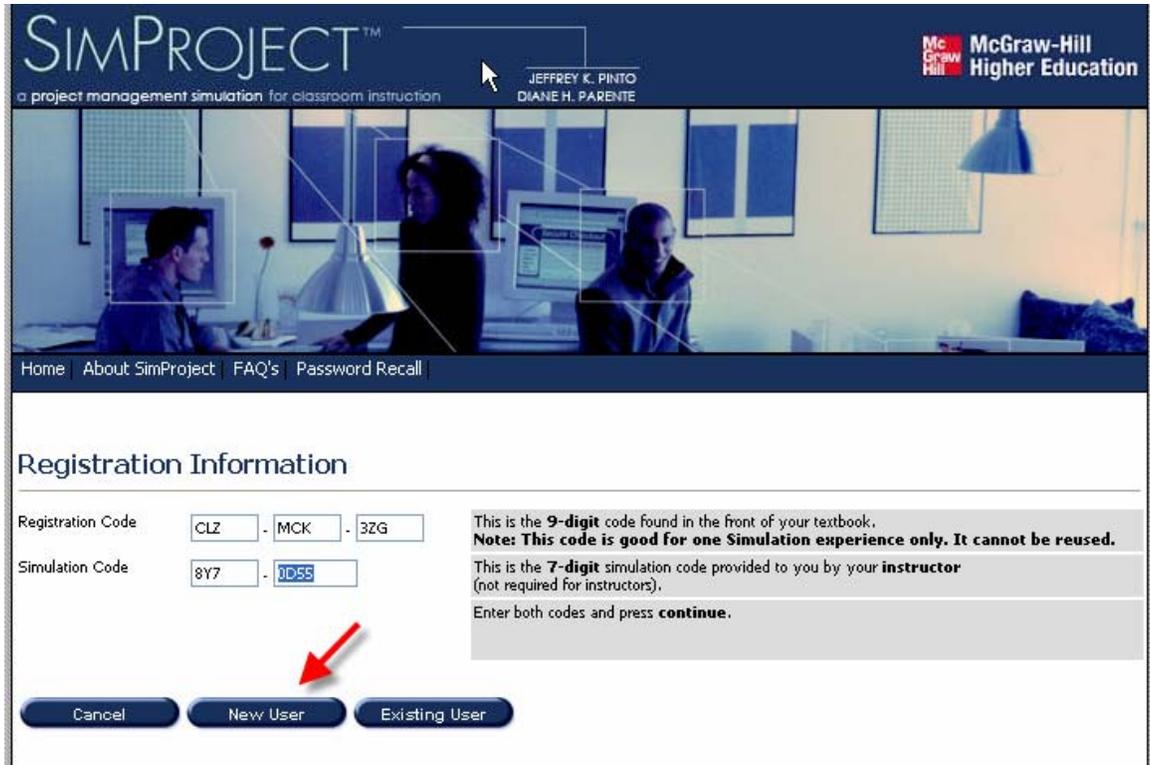


Figure 10 Registration Information Screen

- 4) Enter the required information into the Profile screen and click the “Register” button as shown in Figure 11 . You are now ready to begin a simulation.

* Required field.

Security Information

User Name *	<input type="text" value="suzyq"/>	Create a user name with 6 to 12 characters using only letters (a-z), numbers (0-9), underscores (_), and no spaces.
Password *	<input type="password" value="****"/>	Create a password with 6 to 12 characters using only letters (a-z), numbers (0-9), underscores (_), and no spaces.
Confirm Password *	<input type="password" value="****"/>	
Password Question *	<input type="text" value="cat's name"/>	Enter a question only you know the answer to. If you forget your password, we verify you by you answering this question.
Password Answer *	<input type="text" value="LC"/>	

Contact Information

First Name *	<input type="text" value="Suzanne"/>	Enter your contact information so that your instructor can identify and contact you.
Last Name *	<input type="text" value="Amos"/>	
Address 1 *	<input type="text" value="123 Rookie Drive"/>	This is used by the simulation to send you messages.
Address 2	<input type="text"/>	
City	<input type="text" value="Any City"/>	
State/Province	<input type="text" value="PA"/>	
Zip Code	<input type="text" value="99999"/>	
Phone	<input type="text" value="999-999-9999"/>	
Email *	<input type="text" value="abc@university.edu"/>	



Figure 11 Profile Information

- 5) The process just described will result in the creation of your personal user name and password, which you will use throughout your class to access the simulation.

2.3 Logging In and Out of SimProject™

During the registration process, you created a user name and password. These are required to log in and use the SimProject™ software and protect against misuse of the system. It is recommended that you log out of SimProject™ upon completing your session.

To Log In to SimProject™:

- 1) Go to <http://www.mhhe.com/simproject>. Figure 12 depicts the SimProject™ Home Page.

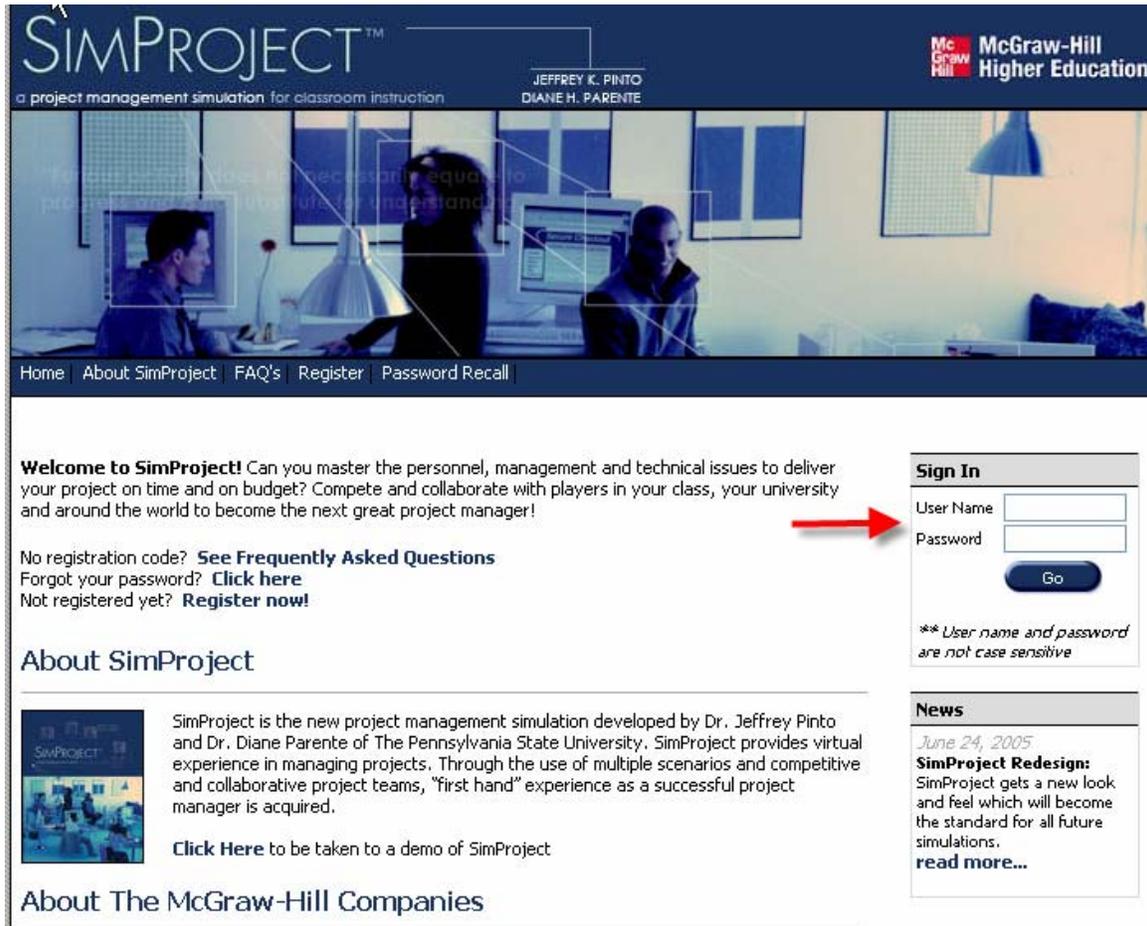


Figure 12 SimProject Home Page

- 2) Enter your user name and password into the respective fields. Note that neither the user name or password are case sensitive, but you must type them in exactly as

you entered them when you registered, including any spaces or other characters. If you have forgotten your password, see the “Forgot your Password?” section, later in this document.

If you have entered your user name and password correctly, you will see a screen listing the simulations in which you are registered. You can select the appropriate simulation as marked in Figure 13. Otherwise, you will receive a message stating that either your user name or password is incorrect or that your account is no longer active.

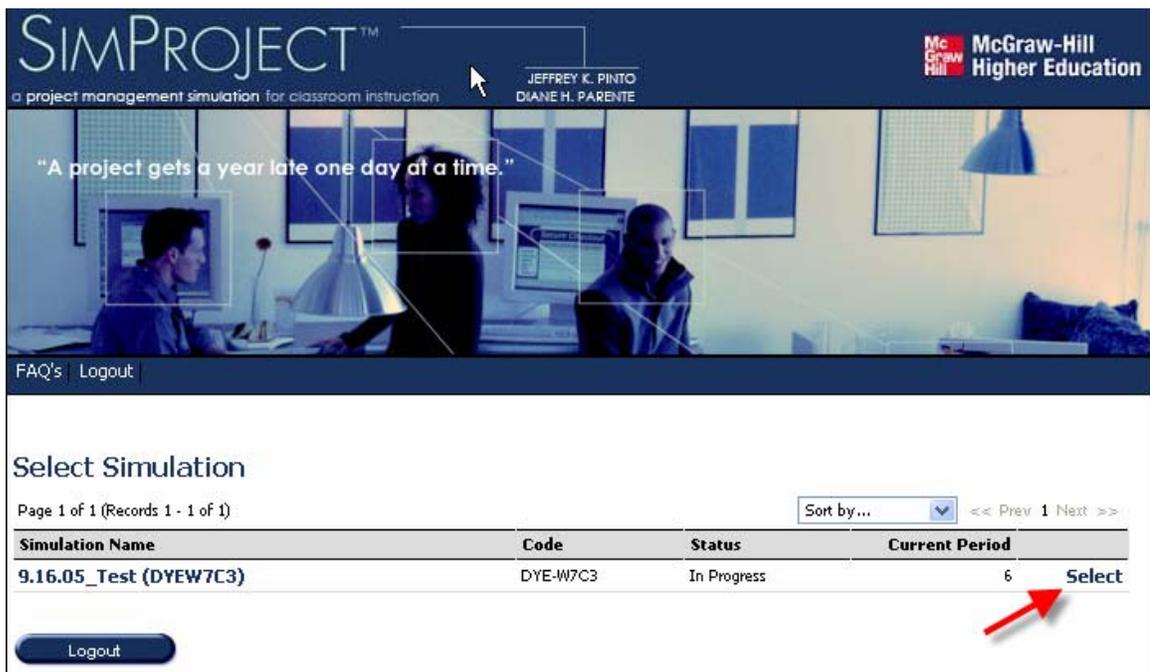


Figure 13 Simulation Selection Screen

To Log Out of SimProject™:

- 1) Click on the “Logout” link in the blue bar on the upper part of the page. It appears as the right-most link. Note that this link does not appear if you have not already logged in.
- 2) You will be returned to the SimProject™ Home Page. See Figure 9.

Note that it is always recommended that you log out of SimProject™ immediately upon completing your session.

2.4 Forgot Your Password?

If at any time you cannot remember your SimProject™ password, you can activate the link to retrieve your password. You were asked to provide a security question when registered with SimProject™.

- 1) Go to <http://www.mhhe.com/simproject> . Figure 9 depicts the SimProject™ Home Page.
- 2) Click on the “Forgot your password? Click here.” link. You will be asked to enter your user name. Then the screen in Figure 14. requires that you answer the security question you originally provided which will reveal your password.

Your instructor also has access to all player usernames and passwords.

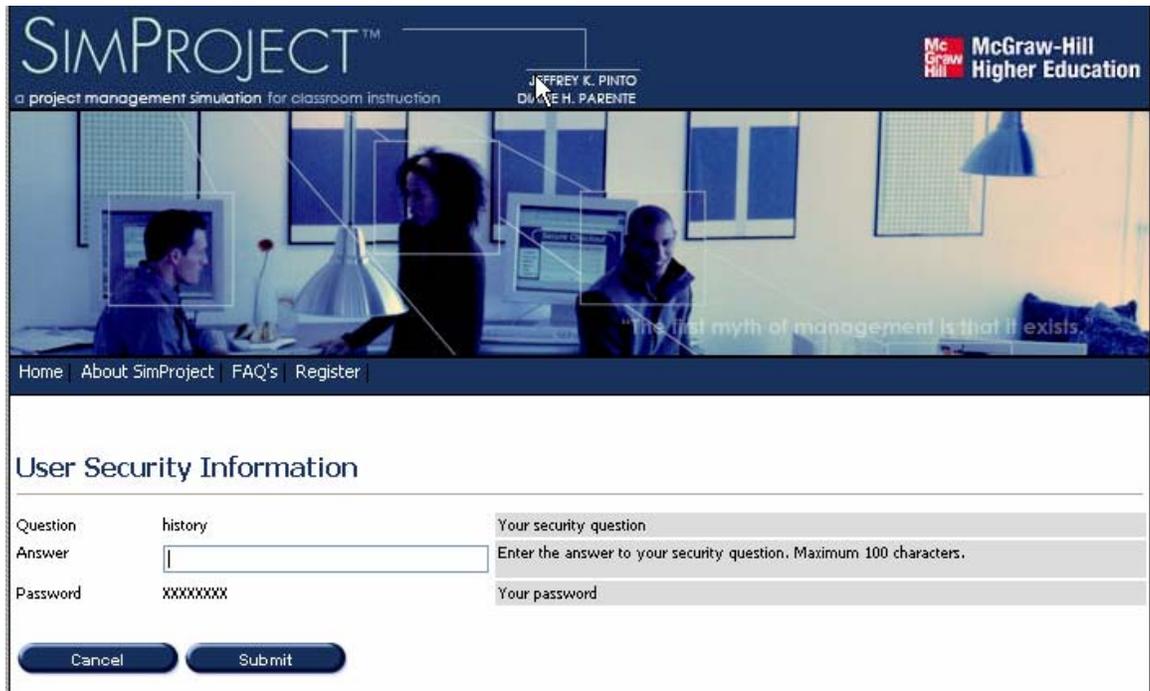


Figure 14 Forgot Password Screen

2.5 Managing Teams

There are a number of elements that are necessary to understand about the “Managing Teams” section of the simulation. Because the manner in which you select and maintain your project team has a direct bearing on project performance, it is critical that you clearly understand how resource options are generated and how the selection process works. You should understand that resources are different during every play of the simulation. Your choices should be based on requirements for your project and the need to balance the skill level of the resource with the costs. You may train resources to accomplish tasks and potentially to incur a relatively less expensive solution to your project. You should also note that resources may be won by other teams. Just as in a real project, you should be sure that – if you need a resource for a specific task, you must be sure to bid appropriately.

2.6 SimProject Central

Once you have logged into the simulation, you will be routed to SimProject Central screen shown in Figure 15. This screen contains the basic information about the simulation, allows you to view most recent period results, make period decisions, view and manage your team profile, and so forth. It also displays the current simulation team rankings. As shown in the figure, you can also take a short cut to Make Period Decisions which is a common screen from which you can easily navigate all of the decisions that can or should be made during a period.



Figure 15 Decision Screen

Figure 16 shows the decisions that are typically made during the processing rounds. This is a convenient location for players to enter the decisions. Each of these decisions can be accessed from the main Player Central screen by scrolling down the main window.

SimProject Central Messages FAQ's My Team My Profile Logout

Project Information

Manager	Eric Jackson	Logged in user
Team	Eric	Manager team
Project Start Date	9/16/2005	Project start date
Project Budget	(\$35,805)	Remaining team budget for project
Decisions Submitted	No	Indicates if period decisions have been submitted

Period
6

In Progress

Period Decisions

- Resource Decisions**
- Training Decisions**
- Managerial Actions**
- Period Tasks**
- Project Tasks**

}

- Add and remove resources from the project
- Send resources to training
- Take management action to influence resources
- Assign resources to period tasks
- View all project tasks

Done

View MSProject Plan

Submit Decisions

Figure 16 Make Period Decision Screen

2.7 Resources

The main components of the simulation are the resources who will perform tasks, the training they receive, the tasks they will perform, the managerial actions the players take, and the random events the instructor assigns.

This section describes how to view and maintain Resources within the simulation.

2.7.1 View Resources

You can view both your resources and the resource pool at any time. From SimProject Central, scroll down to the Team Resources, as shown in Figure 17, where you will see the list of your resource pool and those resources on whom you have bid. You may also click on View Resource Pool to view the available resources, as shown in Figure 18.

Team Resources

Page 1 of 1 (Records 1 - 9 of 9)

Sort by...

<< Prev 1 Next >>

Resource Name	Category	Status	STR	OTR	TRN	SKL	EXP	EDU	REP	WKE	PBR	FLX	IPS	
Pearl Menard	Drywall Special...	(\$60.00 offer)	\$50	\$75	55	69	51	45	45	67	64	48	71	View
Carry Lueras	Drywall Special...	(\$50.00 offer)	\$49	\$74	40	68	49	58	45	65	55	62	71	View
Kurt Snider	Electrician	Hired	\$91	\$136	82	85	93	82	87	96	56	86	80	View
Cody Czapla	Landscaper	(\$30.00 offer)	\$43	\$64	54	42	51	60	70	72	83	59	42	View
Elmo Astor	Landscaper	(\$30.00 offer)	\$57	\$86	48	56	49	73	71	62	70	64	32	View
Jessie Ruddock	Paving and Conc...	Hired	\$105	\$158	69	85	69	49	68	59	42	58	55	View
Fernando Lindbloom	Project Manager	Hired	\$122	\$183	65	90	90	65	70	100	84	95	76	View
Anthony Kovalsky	Rough Carpenter	Hired	\$41	\$62	36	48	38	44	41	55	40	35	43	View
Sheri Hince	Surveyor	Hired	\$77	\$116	73	82	79	60	100	97	29	20	42	View

STR = Standard Rate
OTR = Overtime Rate
TRN = Training

SKL = Skill Level
EXP = Experience
EDU = Education

REP = Reputation
WKE = Work Ethic
PBR = Public Relations

FLX = Flexibility
IPS = Interpersonal Skills

[View Resource Pool](#)

[View Resource Categories](#)

Figure 17 Resources Screen

SimProject Central Messages FAQ's My Team My Profile Logout

Resource Pool

Page 1 of 3 (Records 1 - 20 of 43) Sort by... << Prev 1 2 3 Next >>

Resource Name	Category	Status	STR	OTR	TRN	SKL	EXP	EDU	REP	WKE	PBR	FLX	IPS	
Benjiro Hasegawa	Drywall Special...	Available	\$57	86	49	80	58	45	40	52	65	49	64	View
Yasuo Fuuchou	Drywall Special...	Available	\$54	81	52	75	48	50	38	72	60	53	61	View
Yukio Fujimoto	Drywall Special...	Available	\$53	80	59	73	52	52	33	63	49	55	61	View
Mathew Haubrich	Drywall Special...	Available	\$57	86	49	79	55	48	42	50	53	51	56	View
Madelene Rondeau	Drywall Special...	Available	\$47	70	45	65	41	48	37	63	52	51	59	View
Erik Nimmons	Drywall Special...	Available	\$44	66	48	61	51	52	35	59	64	56	56	View
Javier Bolognese	Electrician	Available	\$82	123	88	76	83	89	80	76	57	85	85	View
Ming Holzer	Electrician	Available	\$72	108	65	77	95	85	100	87	79	89	63	View
My-Trang Ding	Finish Carpente...	Available	\$74	111	78	78	71	67	74	76	44	59	56	View
Hekirou Bunya	Finish Carpente...	Available	\$79	118	71	84	69	68	60	82	50	67	58	View
Cody Becher	Finish Carpente...	Available	\$69	104	82	73	61	69	68	72	49	68	66	View
Brandon Becher	Landscaper	Available	\$52	78	43	51	68	67	65	85	63	58	45	View
Susan North	Landscaper	Available	\$52	78	43	57	70	63	82	65	57	62	37	View
Kaneyasu Yagi	Painter	Available	\$78	117	36	43	49	32	54	95	66	62	35	View
Lorette Mendieta	Painter	Available	\$66	99	43	32	59	29	73	73	56	50	37	View
Coronie Pérez	Painter	Available	\$72	108	35	36	57	27	61	80	60	70	33	View

Figure 18 Resource Pool

2.7.2 View Resource Information

To view detailed information about a resource, including skill levels and other attributes, click on the resource's name from the Resources screen. You will see the Resource Detail screen as depicted in Figure 19.

The screenshot shows the SimProject Central interface. At the top, there is a navigation bar with links: SimProject Central, Messages, FAQ's, My Team, My Profile, and Logout. Below this is the 'Resource Information' section, which includes a 'View Resource Categories' button. The resource details are as follows:

Resource Name	Benjiro Hasegawa	Resource name
Category	Drywall Specialist	Resource category
Standard Rate	\$57	Resource standard rate
Overtime Rate	\$86	Resource overtime rate
Age	35	Resource age (years)
Gender	Male	Resource gender
Cultural Background	Japanese	Resource cultural background

Below the resource information is the 'Resource Metrics' section, which displays a series of progress bars for various attributes:

Training	49 %
Skill Level	80 %
Experience	58 %
Education	45 %
Reputation	40 %
Work Ethic	52 %
Public Relations	65 %
Flexibility	49 %
Interpersonal Skill	64 %

A text box on the right side of the metrics section states: 'Resource metrics define the attributes of a resource and affect their individual efficiency on tasks'. At the bottom of the interface, there are two buttons: 'OK' and 'Add Resource'. A red arrow points to the 'Add Resource' button.

Figure 19 Resource Detail

If you select a name, you will find a description of that person, along with some details regarding their skills and any other pertinent information. Figure 19 shows a sample screen description of Benjiro Hasegawa, a drywall specialist. Note that all skill levels are evaluated against a perfect 100 score. Therefore, Ben is rated a 49% for training, 80% for skill level, 58% for experience, and so forth. Finally, the screen lists the standard rate, including overhead costs and other demographic information about Ben.

You may bid on Ben to join your team by clicking on the Add Resource as illustrated in Figure 19. You will then be asked to enter a bid as shown in Figure 20.

The screenshot displays the SIMPROJECT web application interface. At the top, the logo 'SIMPROJECT™' is visible, along with the tagline 'a project management simulation for classroom instruction'. The McGraw-Hill Higher Education logo is in the top right corner. Below the header, a navigation menu includes 'SimProject Central', 'Messages', 'FAQ's', 'My Team', 'My Profile', and 'Logout'. The main content area is titled 'Resource Bid' and shows details for a resource named 'Benjiro Hasegawa', a 'Drywall Specialist' with a 'Standard Rate' of '\$57' and an 'Overtime Rate' of '\$86'. A red arrow points to the 'Your Offer' input field. To the right, a text box explains that each resource has an asking rate and overtime rate, and that their asking rate is displayed here. At the bottom, there are 'Cancel' and 'Submit Offer' buttons.

Figure 20 Bid for Resource

Once the bid is made, you will see the resource screen as in Figure 17, where resources on which you have bid are shown as having been offered a specific rate. When the simulation is processed, the resource will either be added to your team, go to another team, or go back to the Resource Pool, depending on the competitive bidding.

2.8 Training Catalog

This section describes how to view and maintain Training within the simulation.

2.8.1 View Training

You can view the Training Opportunities at any time. To view the training courses, click on the “Define Training” link. The training screen will appear as depicted in Figure 21.

Training

Page 1 of 1 (Records 1 - 9 of 9) Sort by... << Prev 1 Next >>

Training Name	Duration	Slots	Availability	# Assigned	Cost (per resource)	
Basics of Computer-Aided Design	5 days	5	2	3	\$1,000	View
Bid Evaluation	3 days	4	4	0	\$600	View
Construction Design and Engineering	3 days	4	4	0	\$600	View
Construction Methods	5 days	5	5	0	\$1,000	View
Introduction to Planning	5 days	4	4	0	\$1,000	View
Negotiation Techniques	3 days	5	5	0	\$600	View
Occupational Safety and Health Refresher	3 days	5	5	0	\$600	View
Project Management 101	5 days	5	5	0	\$1,000	View
Real Estate Law	3 days	7	Full	0	\$600	View

Figure 21 Training Catalog

Resources or project team members should be assigned to appropriate training classes. This selection process is shown in Figure 22. You can see the detailed information about the course. Additionally, you may select a resource and then either add them to the training course or remove them as appropriate.

Remember that the impact of training may not be realized immediately. Further, some training dissipates more quickly than others.

Training Information

Training Name	Basics of Computer-Aided Design	Training name
Training Description	Beginner course on the basics of Computer-Aided Design and Drafting for residential construction management	Training description
Cost (per resource)	\$1,000	Training cost per resource
Duration	5 days	Training duration in days
Slots	5	Training slots available
Availability	4	Training slots remaining

Training Assignment

[View Resource Categories](#)

*These resources are currently registered for **Basics of Computer-Aided Design**.*

Kurt Snider (Electrician)

<< Add

Remove >>

*These resources are not registered for **Basics of Computer-Aided Design**.*

Anthony Kovalsky (Rough Carpenter)
 Fernando Lindbloom (Project Manager)
 Jessie Ruddock (Paving and Concrete Contractor)
 Sheri Hince (Surveyor)

[OK](#)

Figure 22 Training Course Detail

2.9 Work Breakdown Structure (WBS)

This section describes how to view and maintain Work Breakdown Structure (WBS) within the simulation.

2.9.1 View WBS

It is possible to access the tasks that have been assigned for each decision period in the project. Figure 23 shows an example of the tasks that have been identified as needing to be scheduled during the current period of the simulation. Note that they include the task name, the task group (also referred to as the work package) under which they are classified, and the estimated resources hours necessary to complete them.

Period Tasks

Page 1 of 1 (Records 1 - 7 of 7) Sort by... << Prev 1 Next >>

Task Name	Task Group	Est Resource Hours	
Project Management Period 3	Project Management	192	View
Excavate for foundation	Foundation	24	View
Form basement walls	Foundation	104	View
Pour concrete for foundation	Foundation	96	View
Waterproof/insulate basement walls	Foundation	16	View
Perform foundation inspection	Foundation	8	View
Backfill foundation	Foundation	16	View

[View Project Tasks](#)
 [View Period Results](#)
 [View MSProject Plan](#)

Figure 23 WBS - Current Period Tasks

2.9.2 View WBS Using MS Project

You may also view the entire WBS by clicking on the View Project Tasks in Figure 23, which produces Figure 24. Task assignments can be viewed by “hovering” over the task.

Project Tasks

Page 1 of 5 (Records 1 - 20 of 91) Sort by... << Prev 1 2 3 4 5 Next >>

Task Name	Task Group	Period	Est Resource Hours	
Apply for all permits	General Conditions	1	16	View
Finalize plans and develop estimates	General Conditions	1	80	View
Install temporary power service	General Conditions	1	8	View
Install underground utilities	General Conditions	1	8	View
Project Management Period 1	Project Management	1	60	View
Surveying	Site Preparation	1	64	View
Apply first coat of asphalt	Site Preparation	2	24	View
Apply second coat of asphalt	Site Preparation	2	16	View
Grading and clearing	Site Preparation	2	40	View
Project Management Period 2	Project Management	2	60	View
Roadway development	Site Preparation	2	32	View
Sign contract and notice to proceed	General Conditions	2	8	View
Backfill foundation	Foundation	3	16	View
Excavate for foundation	Foundation	3	24	View
Form basement walls	Foundation	3	104	View
Perform foundation inspection	Foundation	3	8	View
Pour concrete for foundation	Foundation	3	96	View
Project Management Period 3	Project Management	3	192	View
Waterproof/insulate basement walls	Foundation	3	16	View
Complete roof framing	Framing	4	24	View

Figure 24 WBS - Project Tasks

You can view the MS Project version of the WBS at any time as well. To view it, click on the “View MSProject Plan” link. The MS Project Plan screen will appear as depicted in Figure 25.

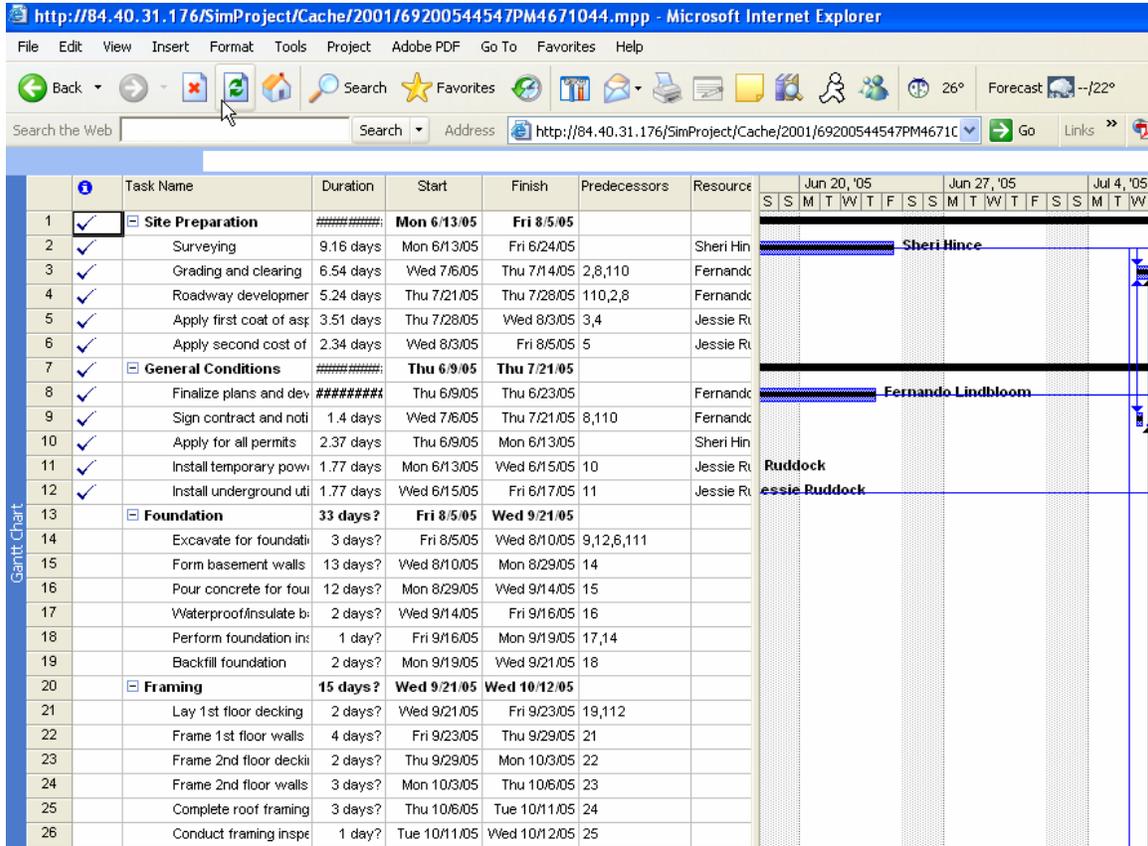


Figure 25 MS Project Plan

It is possible to generate a number of alternative reports using MS Project.

2.9.3 View Task & Dependencies

To view detailed information about a Task or its dependencies, click on the task name from SimProject Central screen under Period Tasks. You will see the Task Detail screen depicted in Figure 26.

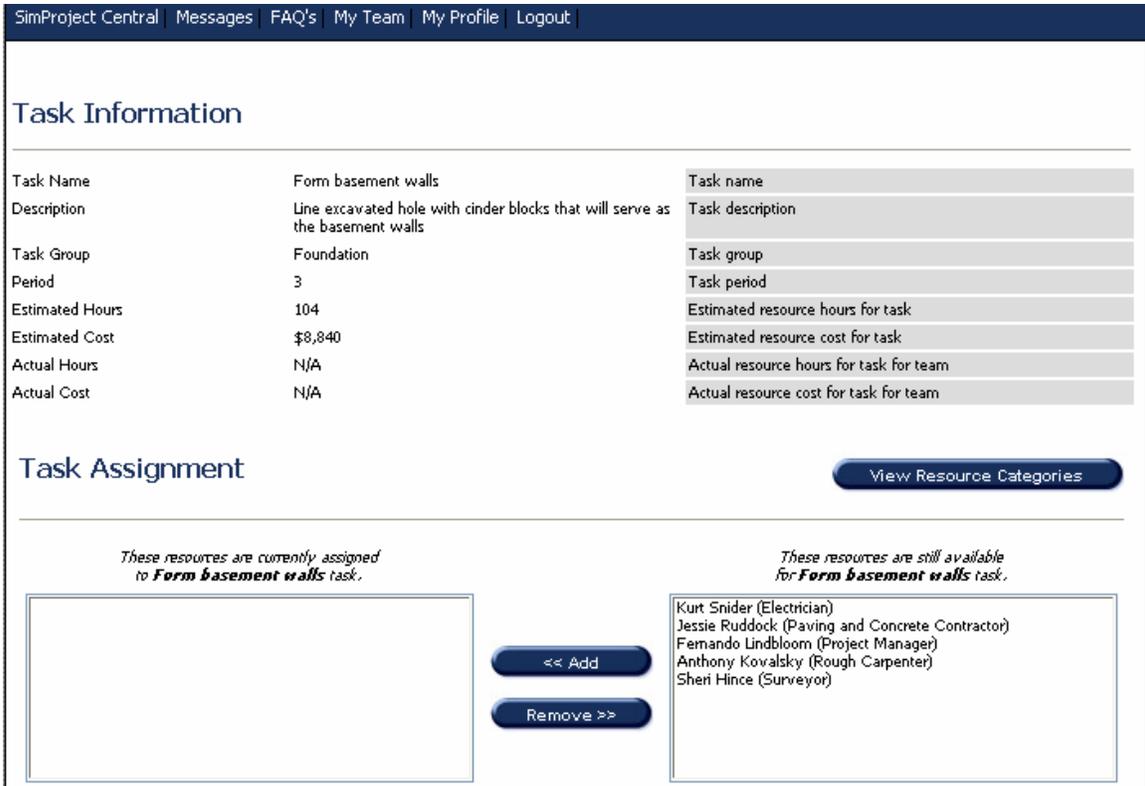


Figure 26 Task Detail Screen

If you assign a resource to a task at 100%, he will work on it 8 hours per day until the task is complete. Note that this is the elapsed time and not the “man-hours” to get the job done. This concept is explained in the following paragraphs.

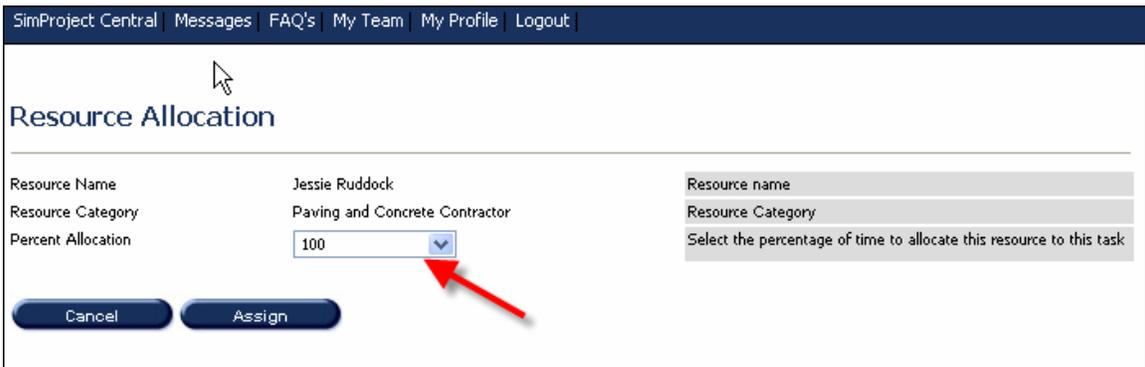


Figure 27 Task Assignment

Resources are assigned to specific tasks based on determining the best person for the job.

In Version 1.2, a maximum of two resources can be assigned to any task. This decision

was made to prevent players from randomly assigning all their resources to a task. First, the actual time to be taken per task is determined. The program calculates the actual time of the decision based on modifying the benchmark time by three factors. First, the appropriate category of resource must be assigned. An engineer should be assigned to an engineering task. If that is the case, then the effectiveness of the resource assigned will be 100%. If a junior engineer is assigned, then the effectiveness for that task may be 90%. The junior engineer will complete the task in $\text{benchmark}/90\%$ or approximately 11% longer.

We know that all engineers are not created equally. The individual attributes contribute to efficiency, which is now noted in the table of task statistics. Finally, we know that people on good teams perform better. Thus, a factor now reported in the results page that is called Team Effectiveness is used to calculate the actual time for each task.

Once the actual time is calculated for each task, the file is sent to Microsoft Project. At this point, MS Project performs the resource leveling function and the elapsed time for the period is determined. *There is no overtime in this version.* Players are penalized by the leveling process if they do not take into account the sequential and concurrent scheduling and also “double-booking” resources.

Your instructor may or may not provide the specifics of this calculation.

2.10 Managerial Actions

This section describes how to view and maintain Managerial Actions within the simulation.

2.10.1 View Managerial Action

You can view the Managerial Actions at any time from SimProject Central as shown in Figure 28.

The screenshot shows a web interface titled "Managerial Actions". Below the title, it indicates "Page 1 of 1 (Records 1 - 7 of 7)" and a "Sort by..." dropdown menu. The main content is a table with the following data:

Managerial Action Name	# Assigned	Cost (per resource)	
Company Sponsored Family Event	0	\$4,000	View
Disciplinary Action	0	\$0	View
Milestone Celebration	0	\$1,000	View
Monetary Bonus	0	\$2,500	View
One-on one Chat	0	\$0	View
Pizza Party	0	\$10	View
Verbal Warning	0	\$0	View

Figure 28 Managerial Actions

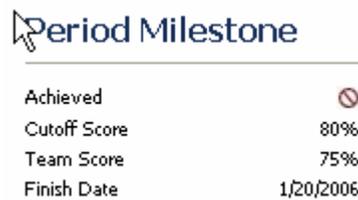
You may also assign managerial actions during the period processing as shown in Figure 28. Note that the managerial actions also have individual and team impacts and may not have an impact immediately. The impact may dissipate quickly or slowly. Think of these events as you would in a real project. A pizza party has a good short-term impact. However, if you have too many such parties, the impact is lost.

2.11 Period Results

There are a number of results that the simulation teams will generate each decision period. After the instructor has processed the decision round, you will be able to access the Period Results screen (see Figure 7 as an example). Each team is ranked in relation to the other simulation teams in terms of their performance on metrics of time, cost,

functionality, and stakeholder satisfaction. There is also an overall score that reflects the manner in which the instructor weighted the importance of each of these measures of project performance.

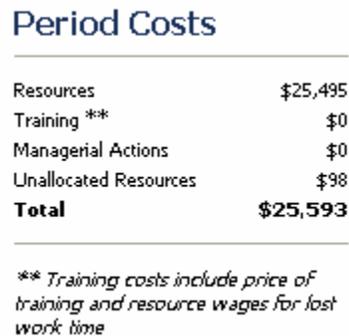
The Period Milestone table below shows whether the milestone for this period was achieved or not. The cutoff score set by instructor. The Team Score is the average % completed for all period tasks in the estimated time as explained above. The Finish Date is the date that the current period was completed.



Period Milestone	
Achieved	<input type="checkbox"/>
Cutoff Score	80%
Team Score	75%
Finish Date	1/20/2006

Figure 29 Period Milestone

The Period Costs table shows the period's resource cost, training costs, and managerial actions. Additionally, as explained above, the unallocated resources are also shown in this table. The training and managerial actions costs port to MSProject into the Milestones.



Period Costs	
Resources	\$25,495
Training **	\$0
Managerial Actions	\$0
Unallocated Resources	\$98
Total	\$25,593

*** Training costs include price of training and resource wages for lost work time*

Figure 30 Period Costs Table

The Financial and other Statistics shown below are a recap of the project to date in the left column. Adjustments are the financial impact of the unplanned events put in by the instructor. The right column shows the various calculated factors. For example, if the Team Longevity percentage is low, the implication is that the player is “churning” resources.

Financials & Statistics

Beginning Budget	\$254,942	Team Efficiency	86%
Period Costs	\$25,593	Team Cohesion	65%
Adjustments	\$0	Team Composition	91%
Remaining Budget	\$229,349	Team Longevity	39%

** Adjustments are due to financial impact of events*

Figure 31 Financials & Statistics Table

If the Team Cohesion factor is low, various managerial actions should help to remedy the situation.

The Task Results are shown below:

Task Actuals

Sod and complete plantings - back yard

Resource Name	Category	Effective	Allocated	Efficiency	Hours	Cost
Larita Garoner	Landscaper	100%	100%	61%	9	\$585

Figure 32 Task Actuals

In this case, the Effectiveness means that the best resource category was assigned to this task. They were assigned at 100% or 8 hours per day until the task was done. However, this specific landscaper was only 61%, which is a reflection of their individual attributes.

The total billable hours for this task were 9.

2.11.1 MS Project Results

The results from SimProject™ are sent to MS Project. Players can evaluate the project by using a number of views and reports. For example, there is a baseline Budget and Variance report that can be viewed by: View | Reports | Costs | Budget. This will show the initial or baseline that that was generated when the simulation was established. It will also record the actual costs by task. In this version of SimProject™, a baseline project is established allowing the use of budget vs. actual, earned value, and a variety of other reports from MS Project. A sample report from MS Project is shown in Figure 33.

Budget Report as of Sat 12/3/05
69200544547PM4671044

ID	Task Name	Fixed Cost	Fixed Cost Accrual	Total Cost	Baseline	Variance
8	Finalize plans and develop estimates	\$0.00	Prorated	\$10,560.32	\$10,000.00	\$560.32
88	Project Management Period 1	\$0.00	Prorated	\$7,915.36	\$7,500.00	\$415.36
3	Grading and clearing	\$0.00	Prorated	\$6,383.04	\$3,400.00	\$2,983.04
110	Milestone 1	\$0.00	Prorated	\$5,880.00	\$3,125.00	\$2,755.00
2	Surveying	\$0.00	Prorated	\$5,642.56	\$4,800.00	\$842.56
89	Project Management Period 2	\$0.00	Prorated	\$5,574.89	\$7,500.00	(\$1,925.11)
4	Roadway development	\$0.00	Prorated	\$5,114.24	\$2,400.00	\$2,714.24
5	Apply first coat of asphalt	\$0.00	Prorated	\$2,948.40	\$2,040.00	\$908.40
6	Apply second coat of asphalt	\$0.00	Prorated	\$1,965.60	\$1,360.00	\$605.60
111	Milestone 2	\$0.00	Prorated	\$1,820.00	\$3,125.00	(\$1,305.00)
11	Install temporary power service	\$0.00	Prorated	\$1,486.80	\$720.00	\$766.80
12	Install underground utilities	\$0.00	Prorated	\$1,486.80	\$720.00	\$766.80
10	Apply for all permits	\$0.00	Prorated	\$1,459.92	\$2,000.00	(\$540.08)
9	Sign contract and notice to proceed	\$0.00	Prorated	\$812.56	\$1,000.00	(\$187.44)
14	Excavate for foundation	\$0.00	Prorated	\$2,040.00	\$2,040.00	(\$2,040.00)
15	Form basement walls	\$0.00	Prorated	\$0.00	\$8,840.00	(\$8,840.00)
16	Pour concrete for foundation	\$0.00	Prorated	\$0.00	\$8,160.00	(\$8,160.00)
17	Waterproof/insulate basement walls	\$0.00	Prorated	\$0.00	\$1,360.00	(\$1,360.00)
18	Perform foundation inspection	\$0.00	Prorated	\$0.00	\$1,000.00	(\$1,000.00)
19	Backfill foundation	\$0.00	Prorated	\$0.00	\$1,360.00	(\$1,360.00)
21	Lay 1st floor decking	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
22	Frame 1st floor walls	\$0.00	Prorated	\$0.00	\$1,800.00	(\$1,800.00)
23	Frame 2nd floor decking	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
24	Frame 2nd floor walls	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
25	Complete roof framing	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
26	Conduct framing inspection	\$0.00	Prorated	\$0.00	\$1,000.00	(\$1,000.00)
28	Install 1st floor sheathing	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
29	Install 2nd floor sheathing	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
30	Install roof decking	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
31	Install felt, flashing and shingles	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
32	Hang 1st floor exterior doors	\$0.00	Prorated	\$0.00	\$400.00	(\$400.00)
33	Install 1st floor windows	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
34	Install 2nd floor windows	\$0.00	Prorated	\$0.00	\$1,200.00	(\$1,200.00)
36	Complete exterior brickwork	\$0.00	Prorated	\$0.00	\$9,600.00	(\$9,600.00)
37	Complete exterior siding	\$0.00	Prorated	\$0.00	\$1,800.00	(\$1,800.00)
39	Place wall insulation - 1st floor	\$0.00	Prorated	\$0.00	\$400.00	(\$400.00)
40	Place wall insulation - 2nd floor	\$0.00	Prorated	\$0.00	\$400.00	(\$400.00)
41	Place ceiling insulation - 2nd floor	\$0.00	Prorated	\$0.00	\$400.00	(\$400.00)
42	Conduct insulation inspection	\$0.00	Prorated	\$0.00	\$1,000.00	(\$1,000.00)
44	Install drywall - 1st floor walls	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
45	Install drywall - 1st floor overhead	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
46	Install drywall - 2nd floor walls	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
47	Install drywall - 2nd floor overhead	\$0.00	Prorated	\$0.00	\$800.00	(\$800.00)
48	Tape and sand 1st floor drywall	\$0.00	Prorated	\$0.00	\$400.00	(\$400.00)

Figure 33 MS Project Budget Report Sample

2.12 Playing a Simulation

2.12.1 Overview of Simulation Play

Figure 34 depicts an overview of simulation play and sequence of events. Understanding this flow will help to understand the following sections.

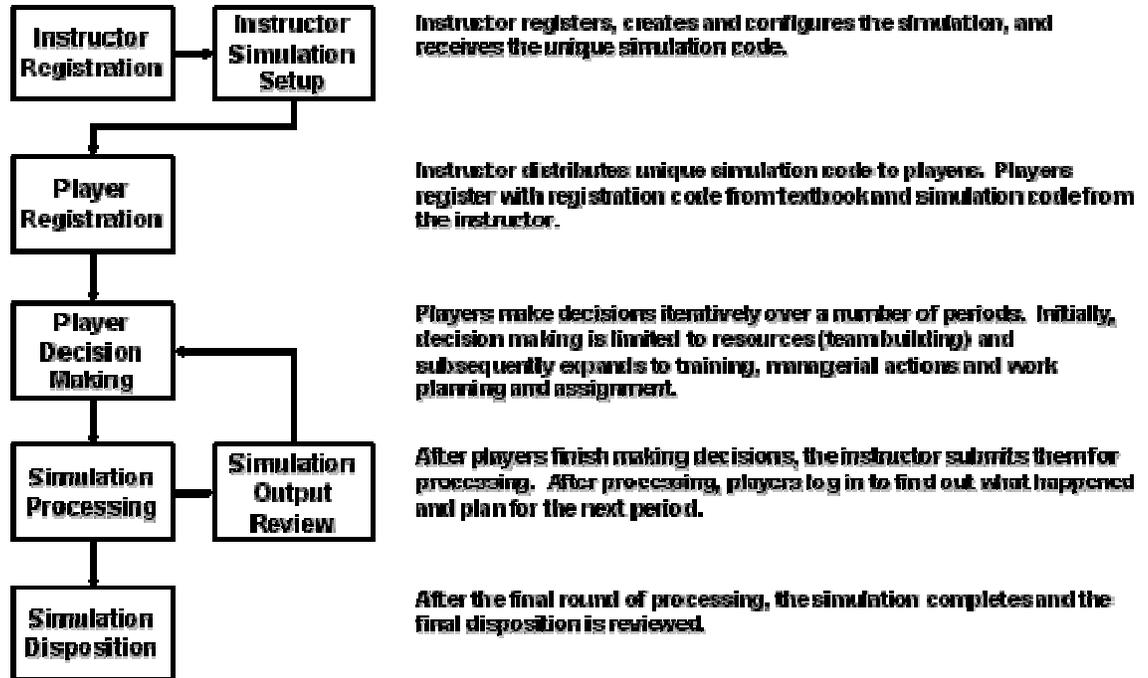


Figure 34 Simulation Overview

2.13 My Profile

The My Profile area is where instructors and players manage their individual profile, including their name and other information, as well as changing their password or email address.

2.13.1 Viewing Your Profile

To view your profile:

- 1) Log in to SimProject™. See “Logging In and Out of SimProject™”.
- 2) Select **My Profile** as shown in Figure 35.



Figure 35 Selecting My Profile

- 3) Your profile will be displayed (see Figure 36). Select **Edit Profile** to make changes to your individual information or **Change Password** to change your password.

User Profile

User Name	Spike1
First Name	Mike
Last Name	Ensby
Address 1	BH Snell Hall Box 5740
Address 2	
City	Potsdam
State\Province	NY
Zip Code	13699
Phone	3152686571
Email	mhensby@clarkson.edu

Your user name cannot be changed.

Your user information so that your instructor can identify and contact you.

This is used by the **simulation** to send you messages.

OK Edit Profile Change Password

Figure 36 View User Profile Screen

2.13.2 Editing Your Profile

To edit your profile:

- 1) Log in to SimProject™. See “Logging In and Out of SimProject™”.
- 2) Select **My Profile**.
- 3) Select **Edit Profile**.

SimProject Central | Messages | FAQ's | My Team | My Profile | Logout

* Required field.

Contact Information

First Name *	Mike
Last Name *	Ensby
Address 1 *	BH Snell Hall Box 5740
Address 2	
City	Potsdam
State\Province	NY
Zip Code	13699
Phone	999-999-9999
Email *	BC@UNIVERSITY.edu

Enter your contact information so that your instructor can identify and contact you.

This is used by the **simulation** to send you messages.

Cancel Save

Figure 37 Edit Profile

- 4) Your profile will be displayed in an editable form (see Figure 37). Make any changes you would like and click **Save**. To exit without making any changes, press the **Cancel** button.

2.13.3 Changing Your Password

To change your password profile:

- 1) Log in to SimProject™. See “Logging In and Out of SimProject™”.
- 2) Select **My Profile**.
- 3) Select **Change Password**.
- 4) The Change Password screen will be displayed (see Figure 38).

SimProject Central | Messages | FAQ's | My Team | My Profile | Logout

* Required field.

Security Information

User Name	Spike1	<p>Your user name cannot be changed. Enter your existing password for validation.</p> <p>Enter a new password with 6 to 12 characters using only letters (a-z), numbers (0-9), underscores (_), and no spaces.</p> <p>Create a hint or reminder in the form of a question, and provide the answer. This will assist you in remembering your password if you ever forget or lose it.</p>
Existing Password *	<input type="text"/>	
New Password *	<input type="text"/>	
Confirm Password *	<input type="text"/>	
Password Question *	<input type="text"/>	
Password Answer *	<input type="text"/>	

Cancel Save

Figure 38 Change Password

- 5) Enter your **Existing Password** (current).
- 6) Enter the **New Password** you would like to use.
- 7) Enter the **New Password** again (confirm) to ensure that you have not mistyped it.
- 8) Enter a **Password Question** and **Password Answer**. This should be a private question to which only you would know the answer. You may need to provide this later if you forget your password.

- 9) Click the **Save** button to change your password or the **Cancel** button if you decide not to change your password.

2.14 Reading and Posting Messages

The Messages area is a message board where the instructor and players can collaborate on simulation play or class information.

To view messages:

- 1) Log in to SimProject™. See “Logging In and Out of SimProject™”.
- 2) Select **Messages** (see Figure 39).

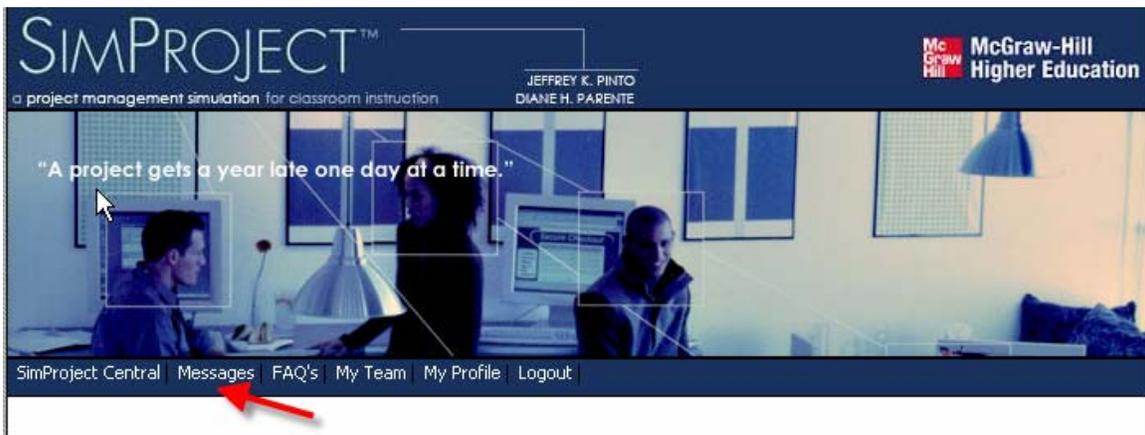


Figure 39 Messages Selection

- 3) The Messages screen is displayed (see Figure 40).

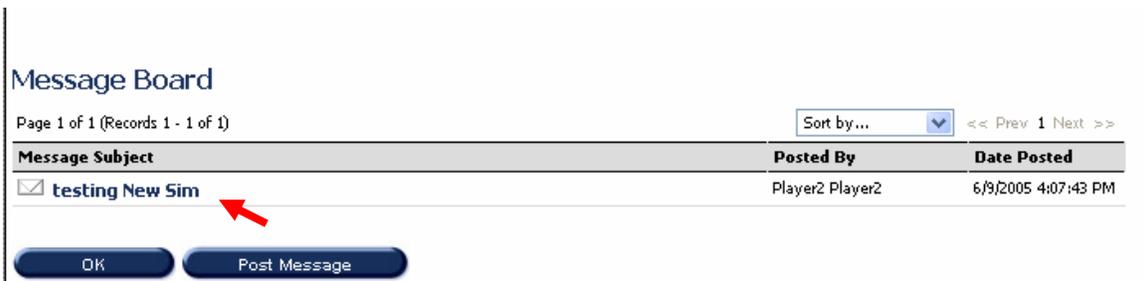


Figure 40 Message Board

- 4) Click on a Subject to view the message (see Figure 41).

Message Detail

From	Player2 Player2 (Player2@hotmail.com)	Message From
Posted	6/9/2005 4:07:43 PM	Date message was posted
Subject	testing New Sim	Message subject
Message	ahsjdhasgdb	Message content

Post Reply

Message Thread

Message Subject	Posted By	Date Posted
☐ testing New Sim	Player2 Player2	6/9/2005 4:07:43 PM

OK

Figure 41 Message Detail

- 5) Post a reply to the message (See Figure 42) by typing in the response (1) and clicking Post (2).

*Required field

Message Reply

From	Mike Ensby (mhensby@clarkson.edu)	This information cannot be changed.
Posted	12/3/2005	
Subject *	RE: testing New Sim	Subject for the message must be 50 characters or less.
Message *	Testing replies	Body for the message must be 1000 characters or less.

Cancel Post

Figure 42 Posting Reply

2.15 About SimProject™

The About SimProject™ area is where information about the simulation product and McGraw-Hill are located.

To view About SimProject™:

- 1) From the SimProject™ Home Page, select **About SimProject™**.
- 2) The About SimProject™ screen is displayed (see Figure 43).

SIMPROJECT™
a project management simulation for classroom instruction

JEFFREY K. PINTO
DIANE H. PARENTE

McGraw-Hill Higher Education

"There is no such thing as scope creep, only scope gallop."

Home | About SimProject | FAQ's | Register | Password Recall

Welcome to SimProject! Can you master the personnel, management and technical issues to deliver your project on time and on budget? Compete and collaborate with players in your class, your university and around the world to become the next great project manager!

No registration code? [See Frequently Asked Questions](#)
Forgot your password? [Click here](#)
Not registered yet? [Register now!](#)

About SimProject

SimProject is the new project management simulation developed by Dr. Jeffrey Pinto and Dr. Diane Parente of The Pennsylvania State University. SimProject provides virtual experience in managing projects. Through the use of multiple scenarios and competitive and collaborative project teams, "first hand" experience as a successful project manager is acquired.

[Click Here](#) to be taken to a demo of SimProject

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Founded in 1888, The McGraw-Hill Companies is a global information services provider meeting worldwide needs in financial services, education and business-to-business information through leading brands such as Standard & Poor's, BusinessWeek and McGraw-Hill Education. The Corporation has more than 300 offices in 33 countries. Sales in 2000 were \$4.3 billion.

Additional information is available at <http://www.mcgraw-hill.com/>.

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Sign In

User Name
Password

*** User name and password are not case sensitive*

News

June 24, 2005
SimProject Redesign:
SimProject gets a new look and feel which will become the standard for all future simulations.
[read more...](#)

Figure 43 About SimProject Screen

2.16 Frequently Asked Questions

The Frequently Asked Questions area, or FAQ, is where the most frequently asked questions and their answers are found.

To view Frequently Asked Questions:

- 1) From the SimProject™ Home Page, select **Frequently Asked Questions**.
- 2) The Frequently Asked Questions screen is displayed (see Figure 44).

Frequently Asked Questions

Close

1. What is a registration code and how do I get one?

A registration code is a unique code providing with every textbook copy. It is required to register with and play the simulation. You will find your 9-digit registration code in the back cover of your textbook. Each code is good for ONE simulation experience. Used books will have used, and therefore nonfunctional, codes.

2. How do I register?

In order to register, return to the home page and click on the "Register Now!" link. You will then be prompted to enter the 9-digit registration code that came with your textbook and the 7-digit simulation code provided by your instructor. Complete your personal information, and submit.

3. What web browsers does SimProject support?

SimProject was designed to be used with Internet Explorer 5.0 or higher. If you are experiencing problems with SimProject using a different browser, please **download** the latest version of Internet Explorer.

4. Where do I find my Registration Code?

Students will find their individual Registration Code on the inside front cover of the Players' Manual. Your instructor will provide you with the Simulation Code. Instructors will find their individual Registration Code in the Instructor's CD for SimProject. Instructors need only this code to register; the Simulation Code will be generated when you create your simulation.

5. What do I do if I forget my password?

From the Simulation Home Page, click the "Password Recall" link. You will be prompted to provide your username. You'll then be prompted to answer the password question you set up during the registration process, and your password will be displayed. Your instructor also has access to the usernames and passwords of all registered students.

6. How can I see the project plan, or what I am supposed to do next?

On several of the screens within the simulation, you will see the "View Project Plan" button. When you click that button, Microsoft Project will come up within the Internet Explorer window. The menu bar will allow you to have full functionality within MS Project.

7. Do I absolutely need MS Project?

You will not be able to see the project plan without it, which will severely limit your success in the simulation.

8. The Gantt Chart for my project that appears in Internet Explorer doesn't let me make changes. How can I plan my project?

When you view your project plan, you may go to File, Save As, and save the file to a floppy disc or a directory on your hard drive. You may then experiment with changes and plan your project including personnel assignments on your own version of the file.

9. Will the changes I make on my saved version of the project file be uploaded into the next round of SimProject?

No. You must enter the decisions for each round as discussed in the manual. Uploading is not a feature of this version of the simulation.

10. Will MS Project 98 work?

It will work, but many functions were not available in Project 98. We strongly recommend later versions such as Project 2000 or 2002. A 120-day trial version of Microsoft Project 2002 is available free on both the Player's and Instructor's CDs.

11. I made good decisions. Why did I have such poor results?

Attempt to critically evaluate your decisions. Did you overassign people? Did you have rework and penalties? Why do you think you had rework? Did you meet the milestone? Why not?

12. How should I "play" the game?

Our best advice is that you make decisions that would be logical and also fit the theories that you are learning in Project Management. You will find that if you attempt to "beat" the system, your results will not be very good. If you make decisions that you would make as if you were running this project in the workplace, you will probably do well.

13. Can I use Netscape for the browser?

Microsoft Internet Explorer will provide full functionality for SimProject.

14. How long is a period?

A period, in terms of time, will be different for every team. At the end of the period, the required tasks will be complete. Each team will take a different amount of time to complete them depending on the skill of the resources and the assignment of resources. If the tasks are not completed with the decisions made, the simulation will assign an appropriate amount of time and money to complete the tasks. If the percent completion does not fall within the range set by the instructor, penalties and rework will be assigned. The end result is that all teams will start the next period of play at the same point in the project and, for the period, will work on the same tasks.

15. Where do I go to find technical support?

For software support, please visit the McGraw-Hill Higher Education Helpdesk or call 1-800-331-5094, option 3, between the hours of 8:00am to 4:30pm CST, Monday-Friday. For additional support you may contact our technical support via their website: www.mhhe.com/support. Please be prepared to share the following information: Instructor name, School, UserName, Password, Simulation Name/Number, Email address and/or phone

Figure 44 Frequently Asked Questions

FREQUENTLY ASKED QUESTIONS

Most frequently asked questions are available online. This is a partial list only.

Question: What do I do if I forgot my password?

Answer: From the Simulation Home Page, click the “Forgot your password? Click here.” link. Here you will be prompted to provide your user name, respond to a question and retrieve your password.

Question: How can I see the project plan, or what I am supposed to do next?

Answer: On several of the screens within the simulation, you will see the “View Project Plan” button. When you click that button, Microsoft Project will come up within the Internet Explorer window. The menu bar will allow you to have full functionality of MS Project within Internet Explorer or to save the file to your local drive and manipulate your MS Project file.

Question: Do I absolutely **need** MS Project?

Answer: You will not be able to see the project plan without it, which will severely limit your success in the simulation.

Question: The Gantt Chart for my project that appears in Internet Explorer doesn't let me make changes. How can I plan my project?

Answer: When you view your project plan, you may go to File, Save As, and save the file to a floppy disc or a directory on your hard drive. You may then experiment with changes and plan your project including personnel assignments on your own version of the file.

Question: Will the changes I make on my saved version of the project file be uploaded into the next round of SimProject?

Answer: No. You must enter the decisions for each round as discussed in the manual. Uploading is not a feature of this version of the simulation.

Question: Will MS Project 98 work?

Answer: It will work, but many functions were not available in Project 98. We strongly recommend later versions such as Project 2000 or 2002. A 120-day trial version of Microsoft Project 2002 is available free on the CD that accompanies this manual.

Question: I made good decisions. Why did I have such poor results?

Answer: Attempt to critically evaluate your decisions. Did you overassign people? Did you assign the wrong people to the tasks? Did they need training? Did you meet the milestone? Why not?

Question: How should I "play" the game?

Answer: Our best advice is that you make decisions that would be logical and also fit the theories that you are learning in Project Management. You will find that if you attempt to "beat" the system, your results will not be very good. If you make decisions that you would make as if you were running this project in the workplace, you will probably do well.

Question: Can I use Netscape for the browser?

Answer: Microsoft Internet Explorer will provide full functionality for SimProject. Netscape may not.

Question: How long is a period?

Answer: A period, in terms of time, will be different for every team. At the end of the period, the required tasks will be complete. Each team will take a different amount of time to complete them depending on the skill of the resources and the assignment of resources. If the tasks are not completed with the decisions made, the simulation will assign an appropriate amount of time and money to complete the tasks. If the percent completion does not fall within the range set by the instructor, the team will be reported as not achieving its milestone. The end result is that all teams will start the next period of play at the same point in the project and, for the period, will work on the same tasks.

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