AC 2011-1124: USING A TEAM-BASED SERVICE LEARNING PROJECT TO SUPPORT TO COMMUNITY BUSINESS IN A PROJECT MANAGEMENT COURSE

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Using a Team-Based Service Learning Project to Support to Community Business in a Project Management Course

Abstract

Preparing students to be more competitive in the in the workforce, Information Technology (IT) Project Management was developed at the Penn State University as a junior-level course. It was designed to present Information Sciences and Technology (IST) students who have a background in networking design and development, database design and development, and computer programming, and no prior knowledge in IT project management, with management skills. A main component of this project was the emphasis of soft skills, especially formal continuous communication with the client.

This paper will discuss the design and methodology of the team based service learning project, the purpose of emphasis on communication with team and client, and share the project grading tools. Individuals who teach information systems and project management may be interested in this paper.

Introduction

The need for Informational Technology (IT) project management education is important to the economy. The number of failed IT projects is growing in number[1]. It has been estimated the cost of IT project failures worldwide has an estimated annual cost of $6.2 trillion dollars[2]. The Department of Information, Sciences and Technology (IST) at The Pennsylvania State University recognized the importance of project management and problem based learning as a necessary component required to support the needs of the business community. Employers and Human Resource recruiters have communicated to us that their organizations are interested in employing IST graduates that have studied project management and systems integration and design. A course in project management was developed and first offered in the Fall semester 2003 at the Penn State Hazleton Campus. Students in the integration option of IST have been required to take the IT project management course and software development courses. Cooperatively undergraduate students must have mastery in systems integration theory and concepts.

Employers tell us that it is important that IT candidates have teamwork skills and the ability to communicate systematically with other IT professionals and business professionals, allocate and assign resources and problem solve to be successful in the workforce[3]. In order to prepare students for a career in the IT industry, it is important for the students to experience and understand real world challenges and problems. Pedagogically, students learn best when they can apply theory to practice in a challenging peer learning environment[4]. In the current course, team projects require the development of an integrated database driven website and social network system for a real world client, this assignment enables students to experience working on a collaborative environment within the constraint of a client.[5] The scope, timeframe and complexity of most IT projects require the effort of a team of experts in some aspects of IT practice working in coordination with other experts[5].

Typically information, sciences and technology courses are taught in conjunction with computer science and business programs.[6, 7] Since students in those majors have strong backgrounds in computer programming languages, networking, and integration, the projects focus mostly on designing and creating complex websites which require a high level of knowledge and experience in programming, integration and project management. The prerequisite courses require students to work in small teams of three to four members. These courses required the faculty to contact local businesses and industries to furnish problems for the students to solve by developing network designs, design and development of databases for deployment, and commercial websites. This approach provided the students with a more real-world experience that promoted the concept of community service rather than fictitious simulations of in-class projects.

In order to make the projects more stimulating and challenging to students the project required two additional constraints of working with a real world client and the requirement of meeting specific business requirements.[7] In order to develop the IT project management course for students within the major with focus on other aspects beyond computer programming, such as business marketing, systems analysis, networking and hardware, other approaches needed to be integrated into the course because of the limited background and experience in computer language programming. This provided the rationale for the evolution of the course in its current state.

The teaching method for the first two years of the course was mainly based on the class lectures, homework, exams and a case study. In the Fall of 2005 the project evolved to integrate IT/business needs of a local area non-profit group or small business. The clients provided the bases for the case studies, but the students did not have interaction with the clients. Then in the fall of 2007 the added constraint of working directly with a real world client was integrated into the student projects. The focus of the course was giving students experience in managing a project in a team environment. The innovation of adding a strong and primary emphasis on formal communication with the client and the team makes this management project exemplary as a teaching innovation.

The students worked in teams of five, with each team member assigned a the task to complete one of the phases of the management process, e.g., initiating (systems analysis), planning, design and development, testing and closing phases. These groups coordinated their efforts to form a functional development unit that integrated information technology and business team students. The number of students in the class necessitated the use of development teams which shared the same set of software and hosting services systems.

The objectives of this course are to provide hands-on experience in project management using a real-world project with a client to simulate the real working environment within the structure of the course. The content emphasized communication, collaboration, risk management, documentation, scheduling, development, implementation, testing, change management, budgeting and closing skills. “The main benefit is that students feel proud of their projects and gain confidence in their practical abilities.”[6] These objectives were achieved utilizing a variety of active learning methods, including lecture, demonstration, problem solving, collaborative work, formal team work, and peer learning. The assessment was done as formative assessment via oral

and written reports and tests; and summative assessment with the completion of the implementation of the website for the final grade. Interviews were conducted to acquire feedback from the students on their perception of the learning experience using the Lesson's Learned approach.

Course Description

IT Project Management was designed with two pedagogical approaches to learning: the traditional mode of instruction lecture/test coupled with team/peer based learning. The course was designed to introduce the basic concepts and practices of IT project management. The design of this course is to help the students understand how to plan and manage IT projects successfully and requires the prerequisites of IST 110 - Information, People and Technology, IST 210 - Organization of Data, IST 220 - Networking and Telecommunications, CmpSc 101 - Introduction to C++ Programming and IST 240 - Introduction to Computer Languages. The students are introduced to methodologies that are standard industry practices and tools to aid them in successfully managing a project; and they are required to utilize these techniques and tools throughout the project.

The traditional method used in the classroom consisted of lectures based on the text book written by K. Schwalbe, reading assignments, reports, and exams. The lectures included standard illustration, case studies and short video clips. The video clips were found on YouTube.com by the students and demonstrated key concepts found in the reading material. Students were then required to work with their real class client to define project scope, create workable timeline, and budget, and manage team members and work flow, while navigating through the key phase of a project lifecycle. The students were required to develop a project charter that addressed scope, quality, schedule, cost, configuration, change, communication, human resource, procurement and risk management.

The real world project was implemented within the course to reinforce the use of the IT management concepts in practice and to assist the students in developing the soft skills, especially communication and organization, required of a manager. The project was started in the third week of the course and the project tasks were executed in conjunction with the content in the class lectures.

Project Description

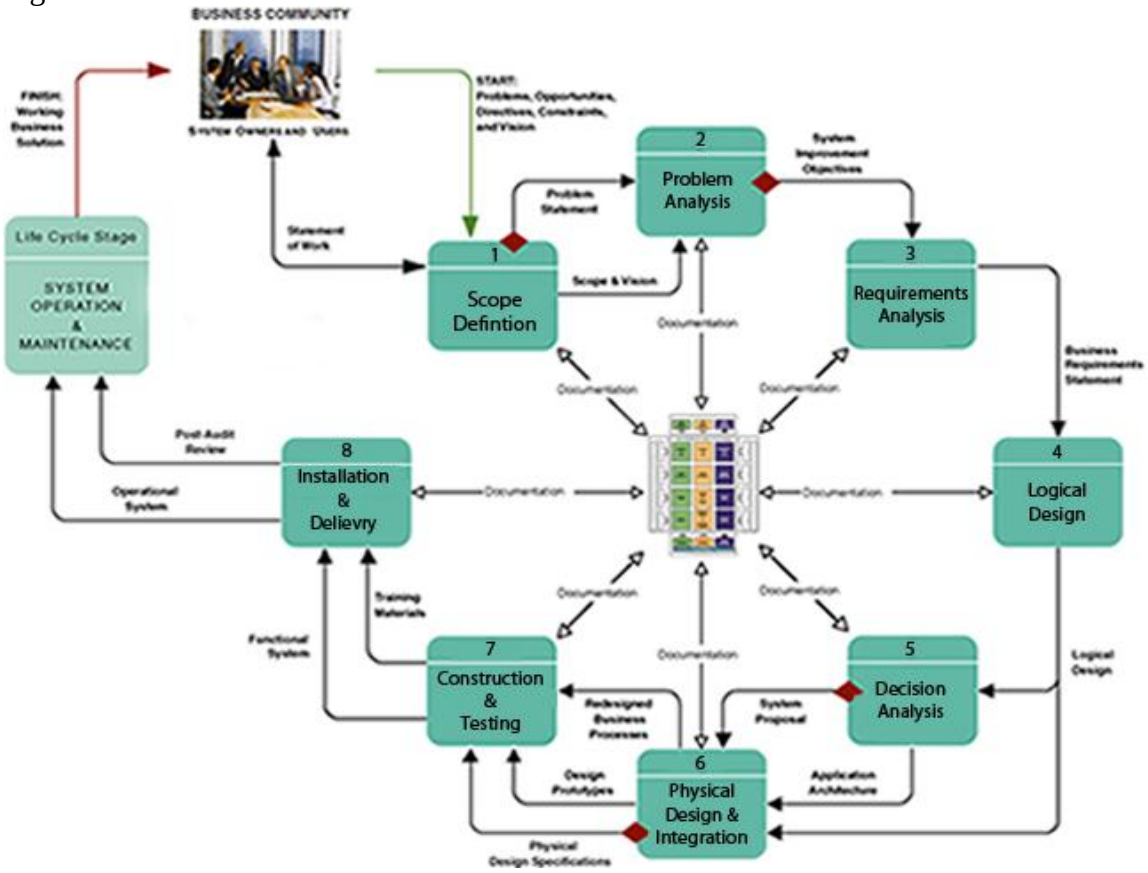
The team project required the development of a database driven website for a local non-profit organization or a small business with the client actively involved. The project required the identification of business needs of the client and limitations of the existing hosting service. Based on the client's needs and requirements the student implemented a content management system or developed a website using straight programing. Each team was required to design, develop and implement a data base that would support the functionality and design of the website. The hosting service that was chosen by the clients was GoDaddy.com. Each client chose a different content management system. The content management systems utilized for these projects were Drupal and WordPress. At the end of the semester, the two teams presented their project to the client in a formal presentation within a 90 minute class period.

Methodology of Development the Team Based Project

This is a junior-level course with 12 students from diverse ethnic and socio-economic backgrounds (9 male, 3 female of which 4 were international students). Students elected two group leaders that were to act as liaisons to the instructor to communicate any difficulties that had arisen between group members or client. These leaders then met with the faculty to review resumes of students for selection into appropriate teams. Students were divided into two web design teams. Each student within the different teams was required to act as a manager at least once during the semester. Teams were subdivided and assigned responsibilities based on team member's resumes by a group leader in the areas of requirements, discovery, design, coding, testing, validation, and verification, according to the Fast Track/Phased Construction (Figure 1) software model. The role of each group was defined in the model method[10]. Each group had two to three people to execute the task.

The Fast Track model was chosen as the courses project management model because the model demonstrates a non-linear development process to the students. The model further identities the deliverables required for each project phase and the structure of the model indicates that all documents need to be stored in a central repository to provide easy access to all team members. The requirement of this centralized document repository emphasizes how important interactive communication and availability of documentation shared between all stakeholders is critical for the success of the project.

Figure 1: Fast-Track/Phased Construction[8]



Activities

The students were divided into two software engineering teams which were then divided into sub teams. Initially the requirement groups met with the instructor and the client to discuss the system needs. The group developed a charter that had to be signed off by all group members, the faculty, and the client before development could begin. This document included the formal definition of the projects requirement and management practices. The management format is defined in a charter and the project requirements were turned over to the acting manager for implementation.

The manager made assignments to the design group. The role of the design group was to design architectural and interactive flow charts, storyboards, entity relationship diagrams, logical schemas, and a Boyce-Cod normalized structure database, which had to be signed off by the client and instructor. These documents were then passed off to the next scheduled manager and assigned to the programming and development group. The programming and development group would acquire images and optimize the images for web display, while other group members coded the web space structure and SQL data base to send the codes to the testing groups. The testing group then tested the codes on the hardware system and on the three browsers specified by the client – Internet Explorer, Mozilla Firefox and Safari. When the website passed the testing group, which tested the functionality of the website with potential end users, the verification groups, in consultation with requirement groups, then confirmed the site was performing to the requirements that had been stipulated by the clients.

Throughout the execution of the projects, each group had to communicate with all others as regular communication was critical to successful development. The groups set up private communication space in the course management system or chose to use Google Wave. In addition to these asynchronous means of communication, regular meetings were scheduled with the groups and their clients. Results of each phase of design, development and testing had to be formally reported to their clients to be signed-off by the client.

Using a real world team based service learning project in a project management course is a regular process in IST and Engineering programs. However this course, stresses the active role of communication with the client. Students were required to conduct biweekly meetings with their clients. During this time period the students reviewed managerial and progress reports and design documentation with the client; shared beta test results with end users and conducted scope verification with the client. The integration and interaction with the client was paramount and critical to the scope verification and successful closure of the project. If scope verification, in the form of a client sign off, was not achieved, the students were forced to return the current phase of the project and make necessary modification to the deliverables that reflected the requirements as stipulated and reiterated by the client at the meeting. Communication and access to the client by the students was a critical and guiding force in the successful implementation of the final product and implementation of the Fast Track Process Phase Construction process.

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Presentations

Each team was required to give a brief oral presentation to the current managers. The manager and key group members met with the clients every two weeks to report the progress of their project and to verify that milestones were achieved through document sign off. A formal Lessons Learned report, signed by all group members, was submitted for grading after each presentation. The Lessons Learned document was to be included in the submission to the document repository. The repository included the charter, logs, managerial reports, performance evaluation of both teams, including individual members and managers, design documentation, all of the codes of the website, original and edited graphics, and all group, faculty and client communications. The website demonstration occurred during the final presentation. Each team had twenty minutes to present their websites and defend their designs to a board of evaluators and potential end users who are the clients' representatives.

Assessment of Team Project Effectiveness

Both formative and summative assessment techniques were utilized to assess the effectiveness of the project. Formative assessment included the bi-weekly managerial report see Appendix A , managerial and team members' performance evaluations see Appendix B and C, timelines and group member's logs see Appendix D. In addition the instructor conducted interviews with the students on their perceptions of learning, collected by student performance and managerial reports and a Lessons Learned report. These instruments were used to obtain feedback on the team project. Summative assessment focused on the grading of the final project including all supporting materials of the project, the tasks of managing the project and the development of the websites. An informal focus group was used for both formative and summative purposes conducted with the students after their projects were submitted and graded.

The students completed a Managerial Reports and Team Members Performance evaluation, Status Reports, Logs and a presentation of their Lesson's Learn Document. The presentation focused on students' perceptions and attitudes about working in a team environment. Students were asked to rate whether they felt the course objectives were met.

The students' perceptions of the team project were positive. Students gave honest and constructive feedback regarding the team experience and client working relationships. Approximately 83.3% of the students stated in their Lessons Learned document that the team project experience helped them to have a better understanding of project management in practice and its importance in the successful development of a project. In the Lessons Learned documents the students made recommendations to providing more examples of quality managerial reports, timelines and budgets to help them be more successful as a manager of the project and structuring the project.

The students unanimously stated that communication between team members was a critical part in the success of project. The students reported that the asynchronous communication management system, Angel, was ineffective in the early attempts to co-ordinate the members with the time line and resolve issues surrounding programming. The introduction of Google Wave provided a means of real-time communication with the context of the project that was viewed as superior by the students. The students stated that they viewed this communication

system as a superior means of collaboration, documentation of communication and as a repository for version of the code developed for the execution of the website.

Students reported that they actively engaged in peer tutoring through the use of Google Wave because it provided real time responses to the code relevant to issues regarding design, coding, and graphical editing. Students reported that they liked the feature that they could go online at pre-ordained times to discuss and review code and each member could provide input on the problem with a transcript being provided by the system. The students stated that the fact that they were able to jointly edit a document or code in real-time immensely helped them to stay on schedule. Students reported that the immediate feedback provided helped in keeping track of the progress of all group members, since all students reported having a variety of work and class schedules. The face to face meetings outside of class were considered exceedingly difficult by the students. All students stated that using Google Wave was a superior means of developing a repository for their documentation because every meeting between group members and changes to documents were recorded by the system.

All students indicated in the Lessons Learned documents that their normal approach to development of the website was impacted by the introduction of a real world client. Students stated that dealing with individuals who did not understand the technology or have a background in programing had a great impact on their approach. They all stated in their documents that their development and design process was significantly impacted by and sometimes limited by the client. Students often indicated that the client limited what they wanted to do in their designs and development. The students stated that the clients' plan to maintain the website on his/her own accord limited what they were able to do when programing and deterred the students from fully exploiting the capabilities of the technology they were deploying. The majority of the students indicated that they felt restricted by the business requirements set forth by the client and this limited their creativity.

Accountability of students for their actions or inaction on signed tasks has always been a problem with group projects. Students reported that the use of performance evaluations by managers throughout the project was very informative and eye opening. Students did not realize how much skipping a class or choosing not to log on to Google Wave impacted the timeline of the project and the ability of the others to compensate for their inactions. As such students stated that they rarely thought about the perceptions of group members to their work ethic, attitudes and competency prior to this course. A few of the students noted that after the first couple of reviews by their peers they became more actively engaged as a direct result of evaluations provided throughout the project. See Appendix B for the Student Performance Evaluation Form.

Prior to being evaluated by the manger the students were required to perform a self-evaluation using the Student Performance Evaluation Form, which is then reviewed with the manager for his/her input. Students were evaluated a minimum of four times during the course of the project.

Students also noted in their Lessons Learned report that the fact that they were forced to take on the role of manager was a first for many of them. Approximately 90% of the students indicated in their Lessons Learned report that they had never taken on the role of a leader during any of their previous team projects completed within the IST program. The managerial evaluation form,

Appendix C, was surprising in results, because many of the students indicated that they were not aware they could function as a leader and they found that it was surprising that their team mates thought they were effective in this position of manager. For some of the participants in the project, the manager performance evaluation was a confirmation that they were weak in leadership skills, but they stated that they preferred the role of employee. However to a few students they felt that this project introduced them to a career avenue that they would have never thought to pursue after graduation.

Key themes noted in all the students' Lessons Learned documents were communication, performance of group members, and managing the client. All students indicated that maintaining active communication was important among all group members. The students all noted how the client's business requirements had a serious impact on their approach and implementation to the site's development. They felt they no longer had free creative range in the design and development process. That the emphasis went from making something cool and high tech as in other course's projects within the curriculum to a focus on ease of use and maintenance by the client. As some students referred to the process of development and design as being 'dumb down' for the client, but the introduction of the client as a constraint was a reality check for the students in the evolution of their soft skills, particularly communication and organization, in dealing with each other and the client.

The authors posit that based on the students' responses in the focus groups of having to be sensitive and responsive to the business needs of the client and recognition that their desire to design something cool and trendy was not acceptable is an indication that the course content was enhanced beyond being a strictly project management course focused on documentation. The fact that the students had to communicate with a client from a nontechnical background in a manner that was not condescending, but informative to client demonstrates the successful acquisition of soft skills developed by the student in a learning environment. This was stated by the clients during their exit interviews with the instructor.

Establishing a Community Service Learning Project

The key factor in designing a successful Community Service Learning Project is finding the right client. Generally, this requires an outreach to the business community through various avenues, such as, the Chamber of Commerce, Program Advisory Boards, College Board of Governors, Schools Public Relations Department, or campus community. This outreach for a client needs to take place two to three months prior to the semester of project execution. This preliminary period of project design is necessary to determine the needs of the client, the client's level of IT and project management expertise, and the client's expectations.

The level of client's IT and project management expertise will impact the amount of up front preliminary project development time that must be invested by the instructor. The instructor may have to educate the client on design documentation their type of proposed project, the management process and project management documentation that will submitted to the client for evaluation, and the need for the construction of a Request for Proposal (RFP) documentation and process.

The construction of RFP is basis of the entire project. Because many of the clients had never written an RFP or had limited experience with technology it was necessary for the instructor to work with the clients to assist in the creation of this document, therefore a tool had to be developed to aid and guide the client in the development of the RFP. See RFP Guide found in Appendix E. Consultation had to occur between the faculty member and the client to ensure that all technical requirements of the project had to be addressed and identified prior to release of the document to the students.

As the project moved forward throughout the semester periodic interviews were conducted with the client to validate the success of the project and the project management process implemented by the student. Upon project closer a face to face exit interview was conducted by the faculty member with the client. The purpose of this interview was to identify successes and failures that occurred within the context of scope management, communication management, and closure of the project by the students. Assessment on success of the course was based on the results of the exit interview. The results will be used for changes in the course structure and process; overall the project was successful in meeting the objectives of both the client and the instructor

Conclusion and Reflection

The Fall 2010 semester was the second time the instructor integrated a client within the project management portion of the team project in the IT Project Management course. This method was chosen because the instructor believed there is a need for students to experience the practice of managing a client and the constraints of working within business requirements during the design and development process. The results from the client interviews and the lessons learned documents indicated that the team project was very effective in teaching the concepts of project management to students and clients alike. In the future, the course team project will be improved upon based on the students' and the clients' feedback. A major change will be to devote more class time to the project and meeting with the client. The project scenario will be changed based on the needs of clients and the projects being presented to the students. As the course continues to evolve the instructor will incorporate current and timely project management activities to show the students the value in working with a client, and utilizing project management techniques within a course project. What made this project innovative is twofold. The project and client's business needs were integrated into the total course, along with the learning and practice of soft skills, (communication, organization, etiquette) as such allowing students to be immersed in working on a design team which was a real project, an actual team in the format of a web design company!

Conversations with students that have interviewed for positions in the IT industry stated that they had listed the IT Project Management course experience on their resumes. Each student reported that this project became the focal point of discussion during the interviewing process. They stated the employers were impressed with the student's methods of organizing and coordinating time lines of different departments. The employers were most impressed with the management of clients and understanding and responding to the business requirements of their projects. The students have shared that they think this course and the way it is structured gives them a heads up over the competition in an already tight employment market.

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Appendix A: Managerial Report Rubric

	Earned Pts.	Poss. Pts.
Identifies reviewer.	0	1
Identifies author.	0	1
Provides beginning/ending dates of managerial period	0	1
Provides a title for report.	0	1
Project Overview:		
Tries to get the report on one page.	0	1
Limit the report to the status of the major areas of your project plan	0	1
Define scope of what you are currently working on	0	1
How what you are doing will impact the schedule?	0	1
How what you learn or are doing will impact cost if applicable?	0	1
Identifies individual affecting progress on project timeline.	0	1
Include project issues and changes based on your research, work and success or failures.	0	1
Focus on the variances from the project plan, because of your work.	0	1
Identifies upcoming deadlines and deliverables you are held responsible for in this project.	0	1
Explain the reasons for variances plan of action.	0	1
Work completed:		
Record the dates and report specific information	0	1
Include research conducted,	0	1
Assignments made to you and group members that have impact on your work	0	1
Group work done that has impacted your work.	0	1
Appearance material -- description of layout and designs.	0	1
Work Awaiting Completion:		
Include all work that needs completion that has been assigned to you.	0	2.5
Provide a brief description and expected date of completion.	0	2.5
Complications:		5
Identifies complications that have occurred	0	
States that no complications have occurred in project.	0	
Spelling	0	10
Grammar	0	10
APA style	0	5
Used 5 personal pronouns	-10	
Used 10 personal pronouns	-20	
Used 15 personal pronouns	-30	
Used 20 personal pronouns	-40	
GRADE (Total/Possible)	?/59=?	

Appendix B: Manager Evaluation Form
Team Name

Evaluator Information

Department:

☐ Design ☐ Graphic Design

☐ Programming ☐ Database

Manager's Name: _____

Team Member's Name: _____

Feedback About Management

	Management:	Disagree 0 pt.	Neither Agree Nor Disagree	Agree 1 pt.
1.	Brings out the best in team members	☐	☐	☐
2.	Treats team with fairness and respect	☐	☐	☐
3.	Develops appropriate solutions with respect to client	☐	☐	☐
4.	Identifies root causes of problems within project	☐	☐	☐
5.	Demonstrates that employees are important to the success of the project	☐	☐	☐
6.	Provides a clear timeline of where the project is headed	☐	☐	☐
7.	Can be trusted to make decisions for the team	☐	☐	☐
8.	Inspires team members for success	☐	☐	☐
9.	Encourages team members development	☐	☐	☐
10.	Shows an willingness to improve	☐	☐	☐
11.	Sets a good example	☐	☐	☐
12.	Develops innovative solutions	☐	☐	☐
13.	Communicates effectively	☐	☐	☐
14.	Understands our needs	☐	☐	☐
15.	Is committed to project goals	☐	☐	☐
16.	Effectively resolves group conflicts	☐	☐	☐
17.	Evaluates all options before acting	☐	☐	☐

	Management:	Disagree 0 pt.	Neither Agree Nor Disagree	Agree 1 pt.
18.	Sets performance goals	☐	☐	☐
19.	Holds members accountable for the work that they do	☐	☐	☐
20.	Provides me with adequate feedback	☐	☐	☐
21.	Accepts constructive criticism	☐	☐	☐
22.	Establishes clear expectations	☐	☐	☐
23.	Enables me to be more effective in my position	☐	☐	☐
24.	Thinks through alternatives	☐	☐	☐
25.	Makes good use of my skills and abilities	☐	☐	☐
26.	Provides the necessary resources to perform my assignment	☐	☐	☐
27.	Sets high standards for others	☐	☐	☐
28.	Sets high standards for themselves	☐	☐	☐
29.	Encourages creative and innovative solutions	☐	☐	☐
30.	Effectively settles disciplinary problems	☐	☐	☐
31.	Is well informed	☐	☐	☐
32.	Handles disruptive employees effectively	☐	☐	☐
33.	Is open-minded	☐	☐	☐
34.	Communicates decisions with confidence	☐	☐	☐
35.	Gives good, practical advice	☐	☐	☐
36.	Asks for input to help make decisions	☐	☐	☐
37.	Explores new opportunities	☐	☐	☐
38.	Expects and demands superior performance	☐	☐	☐
39.	Fosters loyalty in group members	☐	☐	☐
40.	Is fair in evaluating group members	☐	☐	☐

Manager's Signature: _____

Team Members Signature: _____

Appendix C: Team Members Performance Review

Team Name

Team Members Performance Review

Employee Information

Team Members Name: _____ User ID: _____

Job Title: _____ Date: _____

Department: _____

Manager: _____

Review Period: _____ **to** _____

Review Guidelines

At least 3 days week prior to this review student being evaluated are to have submitted logs, and a self-review to manager as well as an employee peer review. All assignments should be reasonable, observable and specific to the project.

Assignments

Briefly describe the assignments of the employee. Were the goals achieved? If no, then why not?

Assignment #1:

Assignment #2:

Assignment #3:

Evaluation

Use this rating key for the following evaluation:

1 = Unsatisfactory
Does not perform required tasks. Requires constant supervision

2 = Marginal
Needs improvement in quality of work. Completes tasks, but not on time.

3 = Meets Requirements

Meets basic requirements. Tasks are completed on time.

4 =Exceeds Requirements

Goes above and beyond expectations.

5 =Exceptional

Always gets results far beyond what is required.

	(5) = Exceptional	(4) = Exceeds Requirements	(3) = Meets Requirements	(2) = Marginal	(1) = Unsatisfac
Achieves Set Objectives	☐	☐	☐	☐	☐
Open To Constructive Criticism	☐	☐	☐	☐	☐
Open To Constructive Criticism	☐	☐	☐	☐	☐
Demonstrates Required Job Skills And Knowledge	☐	☐	☐	☐	☐
Demonstrates Effective Management And Leadership Skills	☐	☐	☐	☐	☐
Completes All Assigned Responsibilities	☐	☐	☐	☐	☐
Meets Attendance Requirements	☐	☐	☐	☐	☐
Takes Responsibility For Actions	☐	☐	☐	☐	☐
Recognizes Potential Problems And Develops Solutions	☐	☐	☐	☐	☐
Demonstrates Problem Solving Skills	☐	☐	☐	☐	☐
Offers Constructive Suggestions	☐	☐	☐	☐	☐
Generates Creative Ideas And Solutions	☐	☐	☐	☐	☐
Provides Alternatives When Making Recommendations	☐	☐	☐	☐	☐

Additional Comments:

Provide Suggestions For Self-Improvement:

Verification of Review

By signing this form, you confirm that you have discussed this review in detail with your supervisor. Signing this form does not necessarily indicate that you agree with this evaluation.

I, _____ acknowledge receipt of review, and my signature does not necessarily indicate agreement.

Employee Signature Date

Manager Signature Date

Appendix D: Example Log Rubric

Date	Start - Finish	Activity	Point Value Earned	Possible
09/07/02	8.00 - 9.00	Surf the net to locate graphics for web site	1	3
09/08/02	9.10 - 9.20	Worked on Goal statement for paper		
09/12/02	9.20 - 10.20	Composed and email to contact client Participated in a group IM chat about project Facilitator: Gerhard Wiedemann, Other participants: Ian Averiss, Federico Antoni Molina, David Weisenstern,	2	3
09/13/02	10.30 - 11.00	Discussion Group: Advances in online reporting Publishing Jean Giannelli, Jim Docherty, Peter Pekar,	2	3
09/14/02	11.10 - 12.10	Surfed for and posted statistic findings for Audience Analysis on Angel. Atbout 50% done with research.	3	3
		Total	8	12
		Grade 75		

Criteria for Grading

0 no log entries made for the week
1 date and time entries - minimal details
2 date and time entries - details description on work completed
3 date and time entries - details description on work completed, and percentage of completion on status of project

Appendix E: Request for Proposal Guide

Project Title

Company Background:
Provide a paragraph outlining your company's background. Four to five sentences is a typical length.

Project Description:
Provide a summary of your project, including the problem/opportunity, goals/objectives and any information that will help the vendors understand the need for the project. Be sure not to outline specific requirements in this section. A small project may consist of eight to10 sentences while a larger project could be several pages in length.

Design Requirements:
Provide a list of any requirements that pertain to the design of the project. This could vary depending on the type of project. For example, a website or network-related project may include information regarding existing hardware or hosting services. Length varies widely based on the type of project.

Technical and Infrastructure Requirements:
(contact instructor for assistance if necessary)
Provide a list technical or infrastructure-related requirements, such as a server or database configuration. Length varies depending on the type of project.

Functional Requirements:
(contact instructor for assistance if necessary)
Provide an list of all the functional requirements you would like your project to have . For example, an e-commerce project may include a catalog, shopping cart, order history and a related products page. Length varies widely based on the type of project.

Estimated Project Duration:
Provide an estimated duration of the project or the required start and end date.

Assumptions and Agreements:
Provide a list of any assumptions or agreements with existing vendors that must be maintained. Indicate budget limits cannot exceed - length varies depending on the type of project.

Submission Information
Provide the deadline for submission and accepted format of document i.e., Style – font, font size, margins, APA or MLA Style and extensions -- .doc , .docx, .wps or print.

Additional Information or Clarification:
Provide a list of contacts who will be available to clarify any questions regarding the RFP. IF possible, have separate contacts for specific disciplines; for example, one contact for technical questions and another for marketing questions.

Basis for Award of Contract:
Provide a list that outlines your evaluation criteria – please rank in order of importance**.**

Anticipated Selection Schedule
Provide a timeline for meetings, submission of proposal, presentation and announcement of award.