Rockgym

**Sample Only**

This document was submitted by students in a previous class. Their requirements were different from yours. We offer it only as a sample of what a project was for that class. Copying this document, in whole or in part, and submitting the result as your own work, would be a violation of the honor code.

Midpoint Status Report

Version 1.0

**1. Problem definition**

Our learning goal for this project is to gain experience modeling a complex business situation with multiple input streams, parameters, and output streams. With a complex model, we can simulate the needs of an actual business. We also want to practice meeting standards and detailed specifications. Through the Word and Excel checklists, there is a long list of specifications that we must meet.

More specifically, we want to learn how to use convolution and the other methods discussed in class in complex situations. The solutions to business problems are often not always simple, so we want to have enough changing factors and adjustable parameters to make the calculations complicated but still easy to adjust and easy to understand. In our model, because both the type of advertising and the type of attendee affect attendance increases, the situation is somewhat complex.

Since we wrote our initial proposal, there have been a number of changes to the overall concept of our model. Most of these changes have added to the overall complexity of the model. Previously, increases in attendance occurred automatically and varied by the type of month (winter vs. non-winter). Now, attendance increases are based on the type of advertising Rockgym uses. Each type of advertising has different effects on students and adults. In addition, the advertising is most effective at first, and gradually decreases as the months pass. We also made the quit rate depend on the type of attendee. According to specifications, we added a definition of the modeling period. Finally, we added expansion costs to the model. Rockgym requires a certain amount of cash in reserve to expand, and when they choose to expand that specified amount is removed from their total.

We feel that all of these additions ensure our project is a model, rather than a tool.

**2. Who does what**

We have defined a task list to include the following items: (1) inputting the model into Excel, (2) making calculations based on the two scenarios, (3) error-checking the model, (4) ensuring the model meets internal and external specifications, (5) writing a reference guide, (6) writing a user guide, (7) proofreading reference and user guides and ensuring they meet specifications, (8) writing the final report, and (9) proofreading the final report. \*\*\* will be responsible for tasks 1, 2, 3, 7, and 9. \*\*\* will be responsible for tasks 4, 5, 6, and 8.

**3. Refined schedule and budget**

Refined schedule:

|  |  |  |
| --- | --- | --- |
| Schedule | Due Date | Page requirement |
| Word Document Checklist | 10/08/09 | No requirement |
| Course Project Proposal | 10/08/09 | 2-3 pages |
| Start working on Model | 10/15/09 |  |
| Review and request computational capabilities, if needed | 10/29/09 |  |
| Excel Document Checklist | 10/29/09 | No requirement |
| Mid-Point Status Report | 10/29/09 | 1-2 pages |
| First Scenario Discussed | 11/05/09 |  |
| Second Scenario Discussed | 11/12/09 |  |
| Project Completed | 11/26/09 |  |
| Testing Model | 11/30/09 |  |
| Reference Guide Draft | 12/03/09 |  |
| User Guide Draft | 12/03/09 |  |
| Project Report Draft | 12/07/09 |  |
| Reference Guide Completed | 12/12/09 | 4-6 pages |
| User Guide Completed | 12/12/09 | 3-4 pages |
| Project Model Completed | 12/12/09 | 10 worksheets or less. Less than 1MB |
| Final Report | 12/17/09 | 6-8 pages |
| Project Completed and Submitted | 12/17/09 |  |

Refined budget:

|  |  |
| --- | --- |
| Stage | Hours Per Team |
| Planning: defining model and project ideas | 10 |
| Modeling: inputting data, performing calculations | 30 |
| Writing Midpoint Status Report  Writing Final Report  Writing User Guide  Writing Reference Guide | 3  12  5  5 |
| Execution: error-checking and ensuring documents meets specifications | 30 |
| Total Estimated Hours Required | 95 |