***Learning Management System***

Software Project Management Plan forLearning Management System

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6. ***Introduction***

Learning Management System deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details and other resource related details too.

* 1. **Project Overview**

It tracks all the details of a student from the day one to the end of his course which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters years, coming semester year curriculum details, exam details, project or any other assignment details, final exam result, etc.

* 1. **Evolution of the SPMP**

We plan to use C# under the direction of Oscar Garcia to accomplish our goals for this program. We work on the project at least twice a week after lectures, but we meet twice a month to ensure overall progress on all aspects of this project.

* 1. **Definitions and Acronyms**

**UML (Unified Modeling Language)**: This is a modeling language that helps visualize how a system is designed. This is NOT a programming language.

**SQL (Structured Query Language)**: This language helps communicate with a database & manage any data present in said database.

**C#**: A programming language created by Microsoft that uses the .NET Framework. It shares many similarities with C++, but also has its fair share of differences.

**GUI (Graphical User Interface)**: This allows the user to interact with the program with visual & audio indicators.

**SPMP (Software Project Management Plan)**: A document created by the project managers upon the completion of the project’s design. This lays out exactly what will be done in the project & how they’ll be done.

# *Project Organization*

For this project we used the democratic model where we all voted on how we wanted to proceed for the best result of the project. We used GitHub for communication, C# and Visual Studio for the code implementation.

//This section specifies the process model for the project and its organizational structure.

2.1 **Process Model**

Rapid prototyping

2.2 **Organizational Structure**

For this, project we met once a week to work on the project also, we used GroupMe app for communication and GitHub for the update of the codes and the evolution of the project.

This project helps give us insight on how the process of checking our classes & grades actually works from the technical side of things.

//Describe the internal management structure of the project, as well as how the project relates to the rest of the organization. It is recommended that charts be used to show the lines of authority.

[Image]

Figure F-2: Organization Chart

2.3 **Organizational Interfaces**

|  |  |  |
| --- | --- | --- |
| ORGANIZATION | LIASISON | CONTACT INFORMATION |
| DR. Chang | CS 3321 |  |

Describe the administrative and managerial interfaces between the project and the primary entities with which it interacts. A table may be a useful way to represent this information.

Organization Liaison Contact Information

Customer: <Dr Chang > <name> <phone, email, etc.>

Subcontractor: <name>

Software Quality Assurance

Software Configuration

Management

<etc.>

Table F-1. Project Interfaces

2.4 **Project Responsibilities**

We basically did not assigned any responsibility to each individual we all met once a week to work in specific material that we wanted to work on that specific day, but Oscar and Moise had huge impact for the success of this specific project because of their expertise with C#.

|  |  |
| --- | --- |
| Oscar Garcia | GUI, DATA BASE |
| Moises Morales | GUI, UML, CASE DESIGN |
| Nabil Mehari | GUI, SPMP |
| Florine Nswal | GUI, SPMP |

//Identify and state the nature of each major project function and activity, and identify the individuals who are responsible for those functions and activities. Tables of functions and activities may be used to depict project responsibilities.

Role Description Person

Project Manager leads project team; <name> responsible for project deliverables Technical Team Leader(s)<define as locally used> <name>

<etc.> <etc.>

Table F-2. Project Responsibilities.

# *Managerial Process*

This section of the SPMP specifies the management process for this project.

3.1 **Management Objectives and Priorities**

The goal of this project was to learn how to create a software that is similar to blackboard. Our first priority was to get the GUI done first followed by the database, the UML and the case design.

For this project we did not have any budget.

//Describe the philosophy, goals, and priorities for managing this project. A flexibility matrix might be helpful in communicating what dimensions of the project are fixed, constrained and flexible. Each degree of flexibility column can contain only one "X".

Project Dimension Fixed Constrained Flexible

Cost X

Schedule X

Scope (functionality) X

Table F-3: Flexibility Matrix

3.2 **Assumptions, Dependencies, and Constraints**

State the assumptions on which the project is based, any external events the project is dependent upon, and the constraints under which the project is to be conducted. Include an explicit statement of the relative priorities among meeting functionality, schedule, and budget for thi project.

3.3 **Risk Management**

Describe the process to be used to identify, analyze, and manage the risk factors associated with the project. Describe mechanisms for tracking the various risk factors and implementing contingency plans. Risk factors that should be considered include contractual risks, technological risks, risks due to size and complexity of the product, risks in personnel acquisition and retention, and risks in achieving customer acceptance of the product.

The specific risks for this project and the methods for managing them may be documented here or in another document included as an appendix or by reference.

3.4 **Monitoring and Controlling Mechanisms**

Define the reporting mechanisms, report formats, review and audit mechanisms, and other tools and techniques to be used in monitoring and controlling adherence to the SPMP. Project monitoring should occur at the level of work packages. Include monitoring and controlling mechanisms for the project support functions (quality assurance, configuration management, documentation and training).

A table may be used to show the reporting and communication plan for the project. The communication table can show the regular reports and communication expected of the project, such as weekly status reports, regular reviews, or as-needed communication. The exact types of communication vary between groups, but it is useful to identify the planned means at the start of the project.

Information From To Time Period

Communicated

Status report Project Team Project Manager Weekly

Status report Project Manger Software Manager, Project Weekly

Team

Project Review Project Team Software Manager Monthly

<etc>

Table F-4: Communication and Reporting Plan

3.5 **Staffing Approach**

Describe the types of skills required for the project, how appropriate personnel will be recruited, and any training required for project team members.

# *Technical Process*

This section specifies the technical methods, tools, and techniques to be used on the project. It also includes identification of the work products and reviews to be held and the plans for the support group activities in user documentation, training, software quality assurance, and configuration management.

4.1 **Methods, Tools, and Techniques**

We used the following programs to achieve the results needed for this project.

* **Program Creation Application**: Visual Studio 2017 & 2019
* **Programming Language**: C#
* **Database Type**: SQL

4.2 **Software Design Description (SDD)**

This product is capable of log-in input, with the ability to reset the password if you forgot it. Likewise, the product can discern between students & administrators. The former can look at their classes & grades as well as update their own personal information, while the latter can edit the students’ classes & grades.

4.3 **User Documentation**

We mostly used GitHub for all user documentation, including the program itself & the SPMP file. And while it’s not actually part of the product, the presentation for the product is in PowerPoint form, which was saved to Google Drive rather than GitHub.

# *Work Packages, Schedule, & Budget*

Specify the work packages, dependency relationships, resource requirements, allocation of budget and resources to work packages, and a project schedule. Much of the content may be in appendices that are living documents, updated as the work proceeds.

5.1 **Resource Requirements**

The main resources we needed were time & a place to work. Most of the time we used was the class time allotted to us. But within the last month of the time we had, we began to use the library’s resources to work in their rooms to get the product finished.

5.2 **Budget and Resource Allocation**

Due to the lack of money necessary for the project, we didn’t have a budget for this project. Most of the resources necessary to complete the program were either already provided to us by the school or were free to begin with.

5.3 **Schedule**

We didn’t really have a set schedule for the project. As mentioned in Section 5.1, we mainly worked in class or in the reserved library rooms over the course of the semester. We used GitHub as well as a group chat to keep in contact as well as documenting our progress.