**Software Project Management Plan (SPMP)**

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* 1. Initial Document Release for Comment

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1. **Introduction**

* 1. **Project Overview**

This document has the purpose of describing all the technical aspects concerning the development of a Learning Management System for the Software Engineering class at the University of Houston Downtown. All the content is directed to the members of the group for planning and scheduling purposes, serving as a summary document about the evolution of the project and member’s activities.

* 1. **Project Deliverables**

The project will develop an LMS software which will have three different kind of users: professors, students, and administrators. The system will allow professors to include theirs classes, manage their content, include learning material and assignments, and track student’s progress. The students will be able to enroll on classes, explore the content, submit the assignments, and check their grades. The administrator will be able to manage all aspects of the system.

* 1. **Evolution of the SPMP**

The software development utilizes the GitHub version control system available online. Proposed changes and new versions will be available on GitHub, and this document will be properly updated.

* 1. **Reference Materials**

The project is still on initial phase, so there is no reference material available yet.

* 1. **Definitions and Acronyms**

LMS – Learning Management System

GUI – Graphics User Interface

UML - Unified Modeling Language

1. **Project Organization**
   1. **Process Model**

The project initiated on August 26th, 2019 and it will terminate on the end of the Fall Term on December 11th, 2019. The major milestone is the final presentation which is to be confirmed.

The project uses an object-oriented design methodology and it is based on the Democratic Life-Cycle model. At this initial phase, each member of the team has one activity that has to be submitted to the platform GitHub. Later on, the members will interact with each other and produce the software prototype utilizing the GitHub as a version control tool.

* 1. **Organizational Structure**

The client:

Dr. Yuchou Chang.

The Project managers are:

Diana Rodarte, Eva Ruiz

The infrastructure team consists of:

Luis Llanas, Rafael Navarro

* 1. **Organizational Interfaces**

Meetings times:

09/04/2019 – 2:30PM till 4:00PM

09/11/2019 – 2:30PM till 4:00PM

09/18/2019 – 2:30PM till 4:00PM

10/09/2019 – 2:30PM till 4:00PM

10/16/2019 – 2:30PM till 4:00PM

10/23/2019 – 2:30PM till 4:00PM

11/13/2019 – 2:30PM till 4:00PM

* 1. **Project Responsibilities**

Diana Rodarte: Software Development, and documentation.

Eva Ruiz: UML, Software Development, and documentation.

Luis Llanas: GUI, Software Development, and documentation.

Rafael Navarro: Software Development, and documentation.

1. **Managerial Process**
   1. **Management Objectives and Priorities**

The initial objective is to define all entities and its attributes. It will help the project team to develop the objects (classes) and prepare a database. This is set as a high priority since this is a necessary information, understand the data flow, in order to proceed with further steps.

Along the project we have been facing many difficulties in developing the user interface on the initial idea proposed. However, in order to overcome it, we decided to research more for an alternative way to develop the GUI.

* 1. **Assumptions, Dependencies, and Constraints**

In progress.

* 1. **Risk Management**

Since the project is being developed for a class project, there is no risk involved.

* 1. **Monitoring and Controlling Mechanisms**

In progress.

* 1. **Staffing Approach**

In progress.

1. **Technical Process**
   1. **Methods, Tools, and Techniques**

The initial idea for the project was to develop the LMS using Django as web framework. It would allow the group to utilize two popular programming languages: Python, HTML, and CSS. However, due to difficulties and the learning process of the Django framework, we decided to use the software QT Creator to develop our GUI and then convert the “user interface” file to python code.

Using this method and application, we can create a visual design and then convert it into python code that can be easily manipulated and changed in order to adapt the screens to the system requirements. The QT Creator is a visual design tool which allows us to design the windows and its components on the exactly way we want, and then use a command line to convert the XML file into Python code.

* 1. **Software Documentation**

In progress.

* + 1. **Software Requirements Specification (SRS)**

The software being developed is a Learning Management System. Thus, this system should allow faculty to create their classes/courses, include its content, include the assignments, and track students’ progress. From students’ perspective, the system should allow them to visualize the classes’ content, submit their assignments, and follow their grades posted.

* + 1. **Software Design Description (SDD)**

In progress.

* + 1. **Software Test Plan**

The testing is being done while coding. Every piece of code is created and tested multiple times in order to ensure that all desired functionalities are properly working.

* 1. **User Documentation**

In progress.

* 1. **Project Support Functions**

In progress.

1. **Work Packages, Schedule, and Budget**
   1. **Work Packages**

In progress.

* 1. **Dependencies**

In progress.

* 1. **Resource Requirements**

In progress.

* 1. **Budget and Resource Allocation**

Since this project is being developed in a form of class project, there is no budget.

* 1. **Schedule**

In progress.

1. **Additional Components**
   1. **Index**
   2. **Appendices**