# Software Project Management Plan

1. **Introduction**

This introduction provides background information for the rest of the document. It briefly describes the project, the client deliverables, the project milestones, and expected document changes.

* 1. **Project overview**

This project develops a learning management system (LMS) to help a university IT department schedule their activities and improve their services. It can also be used by the management to track a student’s basic information. Typical LMS’s include Blackboard or Moodle. [Ref 2]

* 1. **Project deliverables**

1. Preliminary Project Plan 2017.10.06

2. Requirements Specification 2017.10.13

3. Analysis [Object model, Dynamic model, and User interface] 2017.10.20

4. Architecture Specification 2017.11.02

5. Component/Object Specification 2017.11.11

6. Source Code 2017.10.18 - 2017.10.26

7. Test Plan 2017.10.18 - 2017.10.25

8. Final Product w/ Demo 2017.10.18 - 2017.10.27

* 1. **Evolution of this document**

This document will be updated as the project progresses. Updates should be expected in the following sections:

1. ***References*** - updated as necessary
2. ***Definitions, acronyms, and abbreviations*** - updated as necessary
3. ***Organizational Structure*** will be updated as the team leaders are assigned for each phase.
4. ***Technical Process -*** this section will be revised appropriately as the requirements and design decisions become clearer
5. ***Schedule –*** as the project progresses, the schedule will be updated accordingly

**Revision History**

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Updated By** | **Update Comments** |
| 0.1 | 2017.11.06 | Omar Laymoun | First Draft |
| 0.2 | 2017.11.11 | Omar Laymoun | Update Comments |
| 0.3 | 2017.11.20 | Omar Laymoun | Update Requirements |
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* 1. **References**
     1. Team Website
     2. Project Scope-https://tinyurl.com/y72zmt8h
     3. Course Home Page
  2. **Definitions, acronyms, and abbreviations**
     1. UML – Unified Modeling Language

1. **Project organization**
   1. **Process model**
2. The process used for this project will be a chief programming team organized around a "chief" role, granted to the software engineer who understands the system's intentions the best. Other team members get supporting roles.
3. We will use UML tools to create the system model and the subsequent breakdown of the design. For this project, we will be using UML version 1.x.
   1. **Organizational structure**

Team Members –

* + 1. Omar Laymoun
    2. Richard Zheng
    3. Akash Sharma
    4. Dara Rancifer

|  |  |  |
| --- | --- | --- |
| Week/Deliverable | Team Leader | Deliverable Description |
| 1 | Omar Laymoun | Project Plan |
| 2 | Akash Kant Sharma | Requirements Specification |
| 3 | Richard Zheng | Analysis |
| 4 | Richard Z., Dara Rancifer | Architecture Spec |
| 5 | Omar L., Akash S. | Component/Object Specification |
| 6 | Dara Rancifer | Source Code |
| 7 | Dara Rancifer | Test Plan |
| 8 | Dara Rancifer | Final Deliverable |

## Organizational boundaries and interfaces

Team leaders during each phase will be responsible for coordinating team meetings, updates, communications, and team deliverables

* 1. **Project responsibilities**

For primary responsibilities per phase, please refer to section 2.2. Ultimately the entire project team is responsible for the successful delivery of the product.

Team member assignments per deliverable according to expertise

1. Project Plan
2. Requirements Specification
3. Analysis
4. Architecture Spec
5. Component/Object Specification
6. Source Code
7. Test Plan
8. Final Deliverable
9. **Managerial process**
   1. **Management objectives and priorities**

The objective of the project is to develop a learning management system within allocated budget, time, and specified quality. The project is highly prioritized due to high benefits to the organization. The benefits will be further discussed in CBA (Cost benefit Analysis).

* 1. **Assumptions, dependencies, and constraint**  
     The project assumptions are as follows
     1. Team of 4 resources
     2. Equipment and software availability
     3. Approval on funding
     4. Organized traffic system

The project dependencies are as follows

* + 1. Finish To Start
    2. Start To Start
    3. The project constraints are as follows
    4. Time
    5. Tools
    6. Man hours
    7. Availability of existing software
  1. **Risk management**
     1. Market risk
     2. Financial risk
     3. Technology risk
     4. People risk
     5. Structure/process risk
  2. **Monitoring and controlling mechanisms** 
     1. Weekly project status meetings
     2. Shared document repository
     3. Project tracking by MS project plan
     4. Tracking utilizing baselines in MS project

1. **Technical process**
   1. **Methods, tools, and techniques**  
      The project will be implemented utilizing the Chief programmer methodology, and tools such as Visual Studio and Visual Basic. The object oriented analysis technique will be used to successfully complete the project.
   2. **Software documentation**
      1. Documentation such as project charter, Business Requirement Document, Functional Specification document, Cost Benefit Analysis, Technical Specification document, detail design document, 2X2 Metrics, Test Plan, Implementation Plan, and Benefit Realization document.
   3. **Project support functions** 
      1. All project support documents will be completed in applicable phases
2. **Work elements, schedule, and budget**
   1. The project is budgeted for 4 resources, and equipment needed to complete analysis, implementation, and test the application.
   2. The project lead will be rotated for each phase out of 4 team members.
   3. The document for all phases will be revised in subsequent phases if applicable.
   4. The chief programmer will communicate with the other team leads to follow a plan that is suitable.
   5. The programming secretary will outline a plan for future work.

**6. Project Metrics**

I. Every week, the work done by the members, needs to be administrated.

II. Each team member has to communicate their hours to the Programming Coordinate

III. This log needs to be completed in every Sunday Evening

IV. A week starts at Monday and ends at Sunday

**7. Project Support Functions**

I. Configuration Management

II. Verification and Validation

III. Quality Assurance