

Software Project Management Plan for “Online Hospital Management System”

1. Introduction

This Software Project Management Plan (SPMP) outlines the comprehensive strategy for the development and implementation of an advanced online hospital management system. This system aims to revolutionize healthcare management by streamlining various processes, enhancing patient care, and optimizing resource utilization. This product offers a comprehensive solution for managing a hospital and help users.

I. Project Overview

The online hospital management system is a state-of-the-art software solution designed to address the complex requirements of modern healthcare facilities. It encompasses a range of functionalities, including patient registration, appointment scheduling, medical records management, billing, and reporting. The system's primary objective is to provide healthcare practitioners and administrators with a unified platform that enhances operational efficiency and patient experience.

II. Project Deliverables

1. Preliminary Project Plan	28.08.2023
2. Requirements Specification	15.09.2023
3. Analysis [Object model, Dynamic model, and User interface]	07.10.2023
4. Architecture Specification	16.11.2023
5. Component/Object Specification	05.12.2023
6. Source Code	15.12.2023 - 15.01.2024
7. Test Plan	15.01.2024 - 13.02.2024
8. Final Product Demo	13.02.2024 - 01.03.2024

III. Evolution of this document

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

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

Revision History

Revision	Date	Updated By	Update Comments
0.1	28.08.2023	Ayush Dev	First Draft
0.2			Second Draft/Final Draft

IV. References

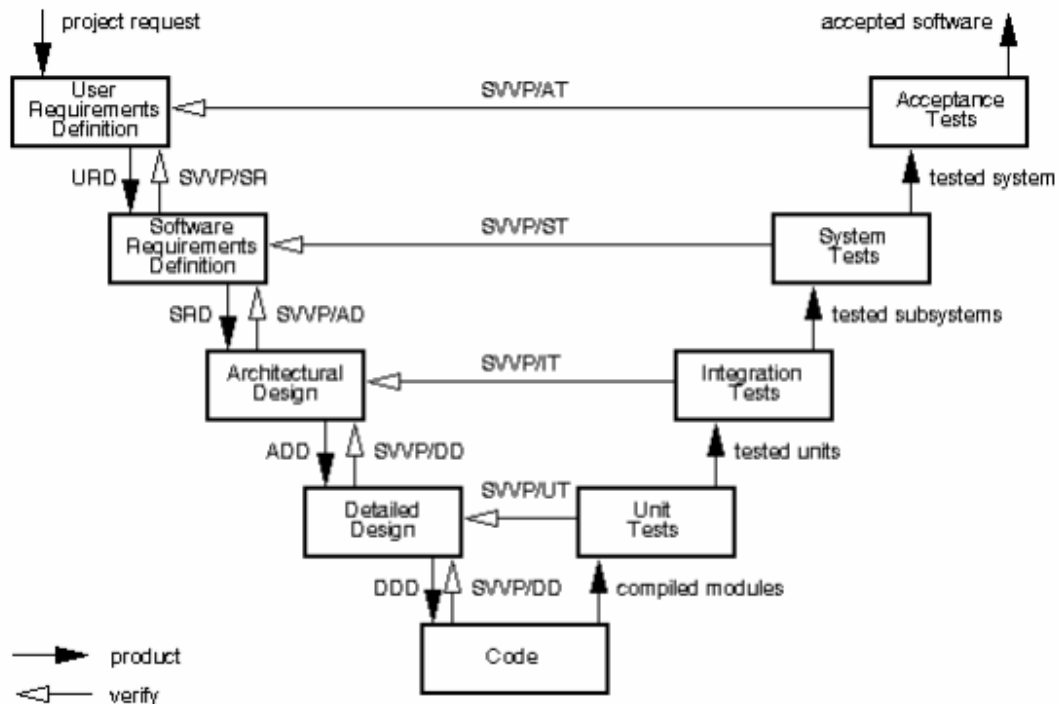
- i. <https://www.studocu.com/>
- ii. <https://www.academia.edu/>

V. Definitions, Acronyms, and Abbreviations

- i. UML - Unified Modeling Language
- ii. DBMS: Database Management System
- iii. DD - Detailed Design
- iv. OHMS: Online Hospital Management System
- v. TBD: To Be Decided

2. Project Organization**I. Process Model**

The process used for this project will be a V-model such that each stage of the model allows us to do testing after completing a phase. Referring to the diagram below, each phase is tested after completion.



II. Organizational Structure

Team Members –

- i. Ayush Dev
- ii. Stuti Singh

Name	Organization/ Position	Contact Information
Ayush Dev	Project Manager	devayushya@gmail.com 09051001800
Stuti Singh	Business Analyst	stutisingh@gmail.com 09468847142

Days	Deliverable	Team Leader	Deliverable Description
17	1	Ayush Dev, Stuti Singh	Project Plan
22	2	Ayush Dev	Requirements Specification
39	3	Stuti Singh	Analysis
20	4	Ayush Dev	Architecture Specification
15	5	Stuti Singh	Component/Object Specification
30	6	Ayush Dev	Source Code
27	7	Stuti Singh	Test Plan
16	8	Ayush Dev	Final Deliverable

III. Organizational Boundaries and Interfaces

Team leaders throughout each development of the phases will be responsible for coordinating team meetings, updates, communications, and team deliverables.

IV. Project Responsibilities

For the most vital responsibilities per phase of each team members, please refer to segment 2.2. Ultimately the project team is responsible for the successful delivery of the product. The team member tasks per deliverable according to expertise and the phases are as given below:

1. Project Plan – Whole Team
2. Requirements Specification – Ayush Dev
3. Analysis – TBD
4. Architecture Specification – Stuti Singh
5. Component/Object Specification – TBD
6. Source Code – Ayush Dev
7. Test Plan – TBD
8. Final Deliverable – Entire Team

Name	Organization/Position	Role/Responsibilities
Ayush Dev	Project Manager	<ul style="list-style-type: none"> • Managing and leading the project team. • Developing and maintaining a detailed project plan. • Monitoring project progress and performance. • Managing project evaluation and dissemination activities. • Develop corrective actions when necessary.
Stuti Singh	Business Analyst	<ul style="list-style-type: none"> • Prepare reports on project plans, status, progress, risks, deadlines and resource requirements. • Develop and perform work flow analysis to find out the difficulties in reaching goals. • Provide project cost estimates.

3. Managerial Process

I. Management Objectives and Priorities

The management objective is to deliver the product in time and of high quality. The PM and QAM work together to achieve this by respectively checking that progress is made as planned and monitoring the quality of the product at various stages.

II. Assumptions, Dependencies, and Constraints

In this project plan, a number of factors are taken into account. The following list shows the way milestones on various project phases have been scheduled:

- The project time of 2 persons x 4440 hours = 8880 hours
- The project deadline of March 01st.
- The final presentation is on Feb 27th.
- The peer evaluation deadline is on Feb 20th.

- Other days the weekends holiday is closed (September 5th, September 12th, September 19th, October 26th, November 3rd, November 10th, November 17th, December 24th, December 31st, January 7th, January 21st, January 28th, February 5th, February 12th, February 19th, February 27th).

NOTE: Due to the deadline of 01st March 2024, running out of time will have its reflection on the product, and not on the duration of the project. By assigning a priority to every user requirement, a selection can be made of user requirements that may be dropped out if time runs out.

III. Risk Management

This section mentions any potential risks for the project. Also, schedules or methods are defined to prevent or to reduce the risks as below:

- i. Technology risk
- ii. People risk
- iii. Financial risk
- iv. Market risk
- v. Structure/process risk

The following are the possible risks to be encountered during the development of the project and how they can be prevented.

1. Miscommunication

Prevention: Team members should not hesitate to ask and re-ask questions if things are unclear. Team members should have a written copy of the tasks assigned to them every meeting.

Correction: When it becomes clear that miscommunication is causing problems, the team members should gather in a meeting to clear things up.

2. Time shortage

Prevention: Care is taken to plan enough spare time. *Correction:* When tasks fail to be finished in time or when they are finished earlier than planned the project planning is adjusted

3. Illness or absence of team members

Prevention: Team members should warn their team leader or the PM timely before a planned period of absence.

Correction: Work can be taken over quickly by someone else or be distributed among the team members if a person gets ill.

Monitoring and Controlling Mechanisms:

The monitoring of progress is done by the PM using the following means:

Project Kick-off Meetings

The project group meetings take place within the class room or through chat. These meetings are meant to inform each other of the progress made on various tasks and to assign new tasks.

Progress Report

Progress report is done every Friday. This is meant to inform and show the progress in the development of the project and how things are going.

IV. Monitoring and Controlling Mechanisms

The monitoring of progress is done by the PM using the following means:

- i. Weekly project status meetings
- ii. Shared document repository
- iii. Project tracking by MS project plan
- iv. Tracking utilizing baselines in MS project

4. Technical Process**I. Methods, Tools, and Techniques**

The project will be implemented utilizing V-model methodology, and tools such as Dreamweaver, Microsoft Project, Star UML, Java, MySQL, QTP, and Load Runner will be utilized. The risks for each category are listed to complete the project successfully. For each risk, a description, a probability of occurrence, the associated action and the impact of the risk are given.

II. Software Documentation

Documentation such as Project Charter, Business Requirement Document, Functional Specification document, Cost Benefit Analysis, Technical Specification document, Detail Design Document, Test Plan, Implementation Plan, Detailed Project Report, and Benefit Realization document.

III. Project Support Functions

All project support documents will be completed in applicable phases.

5. Work Elements, Schedule, and Budget

- I.** The project is accounted for project resources, technologies and tools required to whole analysis, implementation, and test of the application.
- II.** The project lead will be rotated for each phase within 5 team members.
- III.** The document for all phases will be revised in subsequent phases if applicable.

Budget and Resource Allocation

Salary	2,00,000.00
Office Operations/Supplies/Equipment/Consumables	50,000.00
Miscellaneous	<u>55,582.00</u>
Total	Rs. 3,05,582.00