Software Project Management Plan for "Online Food Ordering System"

1. Introduction

In the project, a system has to be designed to support an online food ordering system. The software application to be made consists of at least three main functions, which must interact using the internet. The application may involve basic e-commerce activities, such as customers' login, placing orders. The entire system has to be developed (in JAVA) in a way that is easy to maintain and extend.

I. Project Overview

This project is to create a prototype of an online food ordering system. It is an online application like a virtual system on the Internet where customers can order food and receive parcels delivered to their home steps. The customer can create their own user id for accessing this system frequently. The customer will be asked to fill in payment information for placing an order. A notification is sent to the customer's email as soon as the transaction will be done and every time notification will be sent to the users after a successful delivery.

II. Project Deliverables

1. Feasibility Study	10.01.2022
2. Requirement Analysis	20.01.2022
3. Requirements Specification	01.02.2022
4. Low Level Design	17.03.2022
4. High Level Design	16.05.2022
5. Coding and Unit Testing - Login Module	22.06.2022
6. Coding and Unit Testing - Admin Module	09.08.2022
7. Coding and Unit Testing - User Module	18.10.2022
8. Integration Testing	13.12.2022
9. Delivery	13.12.2022 - 27.12.2022

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	24.12.2021	Ayushi Dey	First Draft

IV. References

i. Project Report of Online Food Ordering System
ii. Online Food Ordering System - Advantages and Disadvantages
iii. Online Food Ordering - History and Types

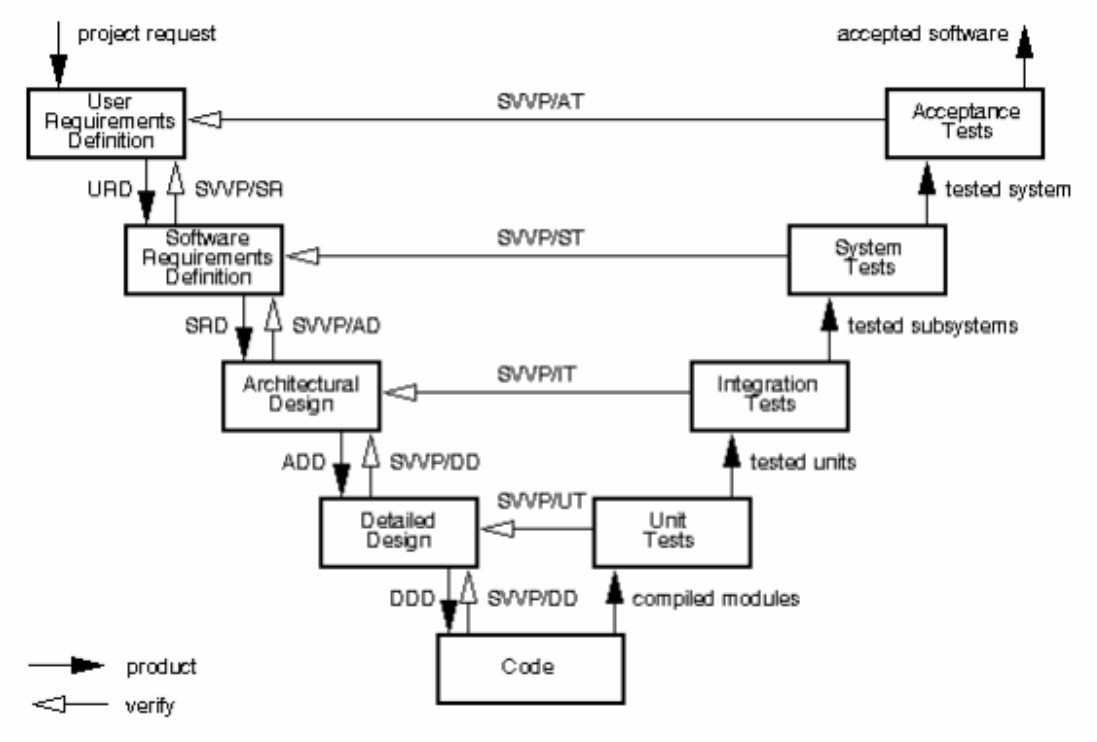
V. Definitions, Acronyms, and Abbreviations

i. UML - Unified Modeling Language
ii. DD - Detailed Design
iii. DDD - Detailed Design Document
iv. PM - Project Manager
v. QAM - Quality Assurance Manager
vi. SCMP - Software Configuration Management Plan
vii. SM - Senior Management SPMP Software Project Management Plan (this document)
viii. SQA - Software Quality Assurance
ix. SQAP - Software Quality Assurance Plan
x. SR - Software Requirements
xi. SRD - Software Requirements Document
xii. STD - Software Transfer Document
xiii. STP - Software Test Plan Submitter Application that submits jobs to dispatchers
xiv. SUM - Software User Manual
xv. SVVP - Software Verification and Validation Plan
xvi. TBD – To Be Decided
xvii. TR - Transfer Phase
xviii. UR - User Requirements
xix. URD - User Requirements Document
xx. UTP - Unit Test Plan
xxi. VPM - Vice Project Manager
xxii. VQAM - Vice Quality Assurance Manager

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 phases. Referring to the diagram below, each phase is tested after completion.



II. Organizational Structure

Name	Organization/ Position	Contact Information
Ayushi Dey	ITech Project Manager	ayushirakshitdey@gmail.com 9641099272
Ayushi Dey	ITech Business Analyst	ayushirakshitdey@gmail.com 9641099272

Days	Deliverable	Team Leader	Deliverable Description
10	1	Ayushi Dey	Feasibility Study
8	2	Ayushi Dey	Requirement Analysis
8	3	Ayushi Dey	Requirements Specification
32	4	Ayushi Dey	Low-Level Design
42	5	Ayushi Dey	High-Level Design
27	6	Ayushi Dey	Coding and Unit Testing (Login Module)
34	7	Ayushi Dey	Coding and Unit Testing (Admin Module)
50	8	Ayushi Dey	Coding and Unit Testing (User Module)
40	9	Ayushi Dey	Integration Testing
10	10	Ayushi Dey	Delivery

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 member, 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 – TBD
3. Analysis – TBD
4. Architecture Specification – TBD
5. Component/Object Specification – TBD
6. Source Code – TBD
7. Test Plan – TBD
8. Final Deliverable – Entire Team

Name	Organization/ Position	Role/Responsibilities
Ayushi Dey	ITech Project Manager	● 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.
Ayushi Dey	ITech Business Analyst	● 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.
Ayushi Dey	ITech Designer	● Propose effective design solutions to meet project goals. ● Prepare design layouts and sketches according to company design standards. ● Keeping of records and files.
Ayushi Dey	ITech Staff	● Documentation of daily activities. ● Making kick-off meeting reports. ● In-charge of materials needed for team building activities.

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 team budget of 3 persons x 365 hours = 1095 hours
• The project deadline of December 27th, 2022.
• The final presentation is on December 27th, 2022.
• Other days the weekends holiday is closed (June 5th, June 12th, June 19th, June 26th, July 3rd, July 10th, July 17th, July 24th, July 31th, August 7th).

NOTE: Due to the deadline of 27th December 2022, 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	3,00,000.00
Office Operations/Supplies/Equipment/Consumables	1,25,000.00
Miscellaneous	20,000.00
Total	**Rs. 4,45,000.00**

Schedule

Online Food Delivery Management System	**261 days**	**Mon 12/27/21**	**Tue 12/27/22**
Feasibility Study	10 days	Mon 12/27/21	Mon 1/10/22
Requirement Analysis	8 days	Mon 1/10/22	Thu 1/20/22
Requirement Specification	8 days	Thu 1/20/22	Tue 2/1/22
Design	**74 days**	**Tue 2/1/22**	**Mon 5/16/22**
Low Level Desgin	32 days	Tue 2/1/22	Thu 3/17/22
High Level Design	42 days	Thu 3/17/22	Mon 5/16/22
Coding and Unit Testing	**111 days**	**Mon 5/16/22**	**Tue 10/18/22**
Login Module	27 days	Mon 5/16/22	Wed 6/22/22
Admin Module	34 days	Wed 6/22/22	Tue 8/9/22
User Module	50 days	Tue 8/9/22	Tue 10/18/22
Integration Testing	40 days	Tue 10/18/22	Tue 12/13/22
Delivery	10 days	Tue 12/13/22	Tue 12/27/22