



ADDIS ABABA
**SCIENCE AND
TECHNOLOGY**
UNIVERSITY
UNIVERSITY FOR INDUSTRY

ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY
COLLEGE OF ELECTRICAL AND MECHANICAL ENGINEERING
DEPARTMENT OF SOFTWARE ENGINEERING

Software Project Management

Group Assignment

Section B

Group Members

1. Elsahaday Dereje
2. Eyobed Mesfin
3. Fatima Abayneh
4. Jalal Addisu
5. Keti Yohannes

Submitted to: Mr. Merid

Submission date: May 24, 2023

*Software Project Management Document for a Hotel
Management Website*

Table of Contents

1.	Introduction	4
1.1.	Purpose of the project management plan.....	4
1.2.	Problem Statement	4
1.3.	Objectives	5
2.	Project Organization	5
3.	Risk Analysis.....	6
4.	Resource Requirements.....	7
5.	Work Breakdown Structure	8
6.	Project Schedule.....	9

1. Introduction

The hotel management website project aims to provide an online platform for hotel managers and guests to manage their reservations, improve efficiency in booking processes, and enhance customer experience. The project will involve the development of a web-based application that will allow users to access information about the hotel and booking schedules in real-time.

1.1. Purpose of the project management plan:

This is a formal document that aims to outline all the components of the project and describe how the project activities are to be executed, monitored, controlled and concluded.

1.2. Problem statement:

Traditional hotel management methods have a number of inefficiencies that can minimize guest pleasure and the hotel's profitability. These issues consist of:

- Manual labor and paper-based procedures are used extensively in traditional hotel management systems to complete duties including check-in, check-out, ordering room service, and billing. Delays, mistakes, and the loss of crucial information may result from this.
- Lack of automation: Automated procedures for activities like data analysis, inventory management, and automated space allocation are absent from traditional systems. Reduced effectiveness, productivity, and profitability follow from this.
- Traditional systems aren't always able to keep up with the changing client wants and preferences due to the increasing need for online bookings, mobile-friendly interfaces, and personalized services.

In summary, the traditional hotel management system suffers from inefficiencies that can lead to customer dissatisfaction and reduced profits. The new Hotel management website aims to solve these problems by introducing automation, streamlining processes, offering online booking and payment options, and providing personalized services.

1.3. Objective:

A new website for hotel management is being created to solve these issues and offer a modern, automated platform for hotel administration. The new system seeks to address the issues of the old system by:

- Introducing automation processes: To increase productivity and efficiency, the new system will automate procedures for assignments of rooms, inventory control, and data analysis.
- Simplifying procedures: To avoid manual paperwork, cut down on mistakes, and enhance the overall guest experience, the website will consolidate all hotel-related procedures onto a single platform.
- Offering online booking and payment options: The new website will have an integrated online booking and payment system that will allow visitors to book lodging, place service orders, and make payments from the comfort of their homes.

2. Project Organization

The project organization of the hotel management system website can be comprehensively described by detailing the project team, roles and responsibilities of the team members, and a communication plan.

A. Project Team:

- Project Manager
- Business Analyst
- UI/UX Designer
- Developers
- Quality Assurance (QA) Analysts

Each member of the team will be assigned specific tasks as indicated in the project schedule. And they will be following a specific communication plan.

B. Roles and Responsibilities:

- Project manager: Responsible for overall project management, communication with stakeholders, and ensuring that the development process stays on track and within budget.

- Business analyst: Responsible for gathering and managing requirements from stakeholders, analysis of business processes, and defining user stories.
- UI/UX designer: Responsible for designing the visual component and user interface of the website.
- Developers: Responsible for coding and testing the website based on the requirements and design specifications provided.
- Quality Assurance (QA) Analysts: Responsible for ensuring the quality of the website by performing testing and other quality checks.

3. Risk Analysis

There are several potential risks that could have an impact on the success of the project. The following are some of the risks that have been identified:

- a. Security Risk** - As the hotel management system will handle confidential customer information, there is risk of data breaches or hacking attempts. To mitigate this risk, the project team will need to invest in strong security measures such as secure socket layer encryption (SSL) and secure login systems.
- b. Functional risk** - There could be instances where the website does not meet all of the requirements outlined in the project scope. This is a functional risk that can be mitigated through thorough testing and quality assurance processes.
- c. Resource risk** - Project resources may become scarce, resulting in delays in the delivery schedule. This risk can be mitigated by creating contingency plans that allocate backup resources where necessary.
- d. Technical risk** - Various technical difficulties may arise during the development process which could result in system failures, impairments, or delays. This risk can be mitigated by hiring qualified developers and following industry best practices in coding.
- e. Budget risk** - The actual cost of the project may exceed the estimated budget, or financial challenges could arise during the delivery phase resulting in overall project delays. This risk can be mitigated by tracking expenses, creating a realistic budget and identifying efficient work methodologies.

- f. Time risk** - The deadline for the project completion is a top priority, scheduling human resources during peak seasons maybe challenging

4. Resource Requirements

To complete this project, we will require the following resources:

A. Hardware Requirements:

- A server capable of hosting the website that meets the minimum hardware requirements such as sufficient RAM, processing power, and storage
- A computer desktop or laptop suitable for the project development
- A reliable internet connection to ensure uninterrupted access to the website

B. Software Requirements:

- An operating system that supports the necessary software components for the website, such as a web server, database system, and programming language
- A web browser that is compatible with the website's programming language
- A content management system (CMS) to add, modify and remove website content

C. Development Team:

- Experienced web developers who are proficient in the programming language and content management system required for the website's development
- Quality assurance personnel for conducting testing and ensuring that the website is working properly on all relevant devices and browsers
- Project managers for tracking progress, coordinating with team members, and ensuring project milestones are met

D. Financial Resources:

- A budget an essential resource to purchase the hardware and software resources, pay salaries to staff, and cover other expenses that are vital to the success of a project.

5. Work Breakdown Structure

Breaking work into smaller tasks is a common productivity technique used to make a project work more manageable and approachable. A phase-based approach is used to decompose the work of this project. The six broken down phases are follows:

- A. Project Planning Phase:** This phase involves gathering requirements from stakeholders, defining the scope of the project, establishing project goals, selecting team members, and developing a project plan.
- B. Design Phase:** This phase involves designing the user interface, database schema, architecture, and functionality of the application.
- C. Development Phase:** This phase involves coding, testing, debugging, and integrating different modules of the application according to the design specifications.
- D. Testing Phase:** This phase involves testing the application's functionality, performance, and security to ensure that it meets the requirements and quality standards.
- E. Implementation Phase:** This phase involves deploying the application to the production environment and validating its functionality and performance.
- F. Maintenance Phase:** This phase involves providing ongoing support, fixing bugs, and enhancing the application's features based on user feedback.

6. Project Schedule

This project schedule is a timeline that outlines the key tasks and milestones for completing the software development project within the allocated time frame. Here is an overview of the project schedule for the hotel management system website:

		PROJECT NAME	PROJECT DURATION	PROJECT START DATE	PROJECT END DATE																															
		Hotel Management System	26-Jul	9-Apr	3-Nov																															
						April				May				June				July				August				September				October				November		
Phases	Activities ID	Activities Description	Activities Duration	Start Date	End date	9-Apr	16-Apr	23-Apr	30-Apr	7-May	14-May	21-May	28-May	4-Jun	11-Jun	18-Jun	25-Jun	2-Jul	9-Jul	16-Jul	23-Jul	30-Jul	6-Aug	13-Aug	20-Aug	27-Aug	3-Sep	10-Sep	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct	29-Oct	5-Nov
Project planning	1	Selecting team members and	1	9-Apr	10-Apr																															
	2	Defining the scope of the project	2	9-Apr	11-Apr																															
	3	Gathering requirements from stakeholders	4	23-Apr	27-Apr																															
	4	Establishing project goals	2	30-Apr	2-May																															
Design	5	Developing a project plan	3	7-May	10-May																															
	6	Functionality of the application	3	14-May	17-May																															
	7	Architecture	4	21-May	25-May																															
	8	User interface	7	28-May	4-Jun																															
Development	9	Database schema	6	14-May	20-May																															
	10	Coding	21	21-May	11-Jun																															
	11	Testing	22	28-May	19-Jun																															
	12	Debugging	21	4-Jun	25-Jun																															
Testing	13	Integrating modules	14	4-Jun	18-Jun																															
	14	application's performance	3	18-Jun	21-Jun																															
	15	security	4	25-Jun	29-Jun																															
	16	requirement and quality standards	7	25-Jun	2-Jul																															
Implementation	17	Deployment	4	2-Jul	6-Jul																															
	18	Validating functionality and	7	9-Jul	16-Jul																															
Maintenance	19	Providing ongoing support	110	16-Jul	3-Nov																															
	20	Fixing bugs	60	6-Aug	5-Oct																															
	21	Enhancing application's features	90	16-Jul	14-Oct																															