

SALLEHA

Systems Analysis and Design
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Version Control

Version	Description
Version 1.0	Initial version for the software documentation. Added Project Initiation and Project Management Plan

Executive Summary

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1. Project initiation

1.1. Project Overview

Salleha is a platform designed for managing maintenance requests in facilities like offices or residential buildings, making maintenance and reporting more efficient and easier. Users can report issues, track progress, and get updates. Admins and technicians can assign, prioritize, and resolve tasks effectively.

1.2. Problem Definition

In many residential buildings, offices, and shared facilities people often face significant challenges in reaching authority of those In charge of maintenance managers and staff. In traditional methods such as : emails, paper forms, or phone calls, are typically inefficient, lack transparency and lead to delays. This often creates a communication gap between users and the authorities responsible, which results in frustration, unaddressed issues, and potential safety hazards.

1.2.1. Issues

Issue	weight
Users often struggle to reach the right maintenance personnel, resulting in delays or ignored requests. Without a centralized and accessible system, reporting issues becomes time-consuming and unreliable.	10
Maintenance teams often work without proper tools to prioritize, assign, and track tasks. This leads to missed or delayed repairs, no clear ownership of responsibilities, and no data to measure performance or improve operations.	9
Users often struggle to reach the right maintenance personnel, resulting in delays or ignored requests. Without a centralized and accessible system, reporting issues becomes time-consuming and unreliable.	7

1.2.2. Objectives

1. Simplify and centralize issue reporting through a user-friendly web/mobile interface that allows users to easily report maintenance problems and is available 24/7.
2. Enhance communication and transparency by providing real-time updates and notifications on request statuses
3. Create an analytics dashboard to provide administrators with insights and help them to identify trends and areas needing improvement.

1.2.3. Requirements

1. The system must ensure data security and protect the privacy of all users.
2. The system must be intuitive and user-friendly, allowing non-technical users to navigate and interact with it easily.
3. The analytics dashboard must be restricted to administrators only.
4. Maintenance reports must be submitted anonymously to ensure user comfort and honesty.

1.2.4. Constraints

1. Development costs must not exceed 45,000 JD
2. The project should be done by Sunday 4, Jan 2026

1.2.5. Vision Document

Not done yet.

1.3. Feasibility Studies

1.3.1. Technical Feasibility

The technical feasibility assesses the technological components necessary to develop and operate the SALLEHA platform. This includes evaluating the required hardware, software tools, and the technical skills essential for building and maintaining the system.

Technology: The SALLEHA website is built using basic and easy-to-use Web tools like HTML, CSS, JavaScript, Bootstrap, and jQuery. These Tools help create a clean and responsive design that works well on Different devices. We also use Canva to design simple and clear images and graphics, making the website easy for Seniors users to understand and use .

Cloud Hosting: We are using GitHub to store and manage the project online. It helps us work together, keep track of changes, and easily share the project with others.

1.3.2. Operational Feasibility

The proposed web and mobile application is operationally feasible, it designed to get maintenance requests in facilities like universities, offices, or residential buildings, enabling the users to report issues, track progress, and get updates. It's a web and mobile application, so the users can access it from any We expected that our system will gain a wide acceptance from users, admins And technicians because it solves a very needed problem and saves time and effort. It will have clear privacy guidelines and mechanisms to ensure that our users will be secured. it complies with the policies set by the country's laws and Institutions.

1.3.3. Economic Feasibility

Development Costs:

Expense Category	Amount
Salaries	20,000 JD
Equipment and installations	8,000 JD
Training	1,500 JD
Facilities	2,000 JD
Utilities	1,000 JD
Travel\Miscellaneous	2,000 JD
Total	39,500 JD

Table 1: Development Costs

Operational Costs:

Service	Annual Cost(Per year)
Operational maintenance	7,000 JD
Total Cost	7,000 JD

Table 2: Operational Costs

Intangible Benefits
Enhanced Institutional Trust and reputation
Increasing users satisfaction
Saving time and effort for both users and Institutions

Table 3: Intangible Benefits

Benefit and Payback Analysis:

Category	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Value of benefits	0	16,000 JD	17,000 JD	18,000 JD	19,000 JD	20,000 JD
Development costs	-39,500 JD	0	0	0	0	0
Annual expenses	0	-7,000 JD	-7,000 JD	-7,000 JD	-7,000 JD	-7,000 JD
Net Benefit / Costs	-39,500 JD	9,000 JD	10,000 JD	11,000 JD	12,000 JD	13,000 JD
Discount Rate (7%)	1	0.934	0.873	0.813	0.763	0.713
Net Present Value (NPV)	-39,500 JD	8,406 JD	8,730 JD	8,943 JD	9,156 JD	9,269 JD
Cumulative NPV	-39,500 JD	-31,094 JD	-22,364 JD	-13,421 JD	-4,265 JD	5,004 JD
Payback Period	4 years+	4.6 years				

Table 4: Benefit and Payback Analysis

$$\text{Lifetime ROI} = \frac{90,000 - 74,500}{74,500} = 0.208 \vee 20.8\%$$

$$\text{Annual ROI} = \frac{20.8\%}{5} = 4.16\%$$

1.3.4. Schedule Feasibility

Phase	Task	Estimated Time
Planning	Define Project Scope & Objectives	1 week
Analysis	Requirements Gathering, Process Analysis, and Document Delivery	2 weeks
Design	System Architecture and Interface Design	2 weeks
Implementation	Development of Core Features	2 weeks
Testing	System Testing and Quality Assurance	5 weeks
Deployment	System Deployment	1 week

Table 5: Project Development Schedule