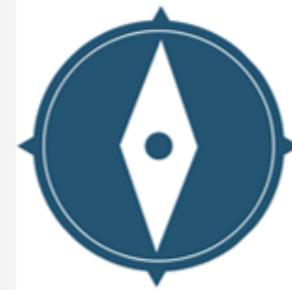


Marshed



Release-1 Presentation

Contents

- ◆ Introduction
- ◆ Problem
- ◆ Solution
- ◆ functional and non-functional requirements
- ◆ Scope Statement
- ◆ WBS Table
- ◆ WBS Chart
- ◆ Network Diagram
- ◆ Gantt Chart
- ◆ Development Cost
- ◆ Tools Cost
- ◆ Total Cost
- ◆ External and Internal Software Attributes

Introduction

Morshed is changing how people find and book guided tours. Our platform helps tour guides share detailed information about their tours, including itineraries and pricing. Travelers can easily communicate with guides and customize their search for the perfect tour.

Problem

Travelers often miss out on great experiences due to challenges in organizing and booking guided tours. They face confusion regarding itineraries, costs, and whether tours are private or public. Additionally, unanswered questions can lead to hesitation and dissatisfaction. For group tours, participants struggle to communicate without compromising their privacy.

Solution

- **Morshed** connects travelers with trusted guides, allowing them to easily find and book tours.
- Guides can share trip details like itinerary, price, and group size.
- The website provides a chat feature for direct communication with guides and a safe group chat for travelers.
- Travelers can filter tours by budget, destination, and type, making it easy to find the perfect trip.

Functional Requirements

- ◆ Tour Guide can advertise their tours with details
- ◆ Travelers can browse and book tours
- ◆ Traveler have search and customizable filter
- ◆ Travelers can send a private message to Tour Guides.
- ◆ Travelers can join a group chat with participants of the same tour.

Non-Functional Requirements

- ◆ Usability
- ◆ Availability
- ◆ Recoverability
- ◆ Response Time
- ◆ Maintainability

Scope Statement

Part One

Scope Description:

Morshed is a website that connects tour guides with travelers, provide a platform for guides to advertise tours and for travelers to browse, book and search.

Deliverables:

A functional website that is compatible with Google chrome, Firefox and Safari meets all functional and non-functional requirements.

Scope Statement

Part two

Constraints:

The project has a 6-month deadline and requires a scalable database and server, support real-time communication.

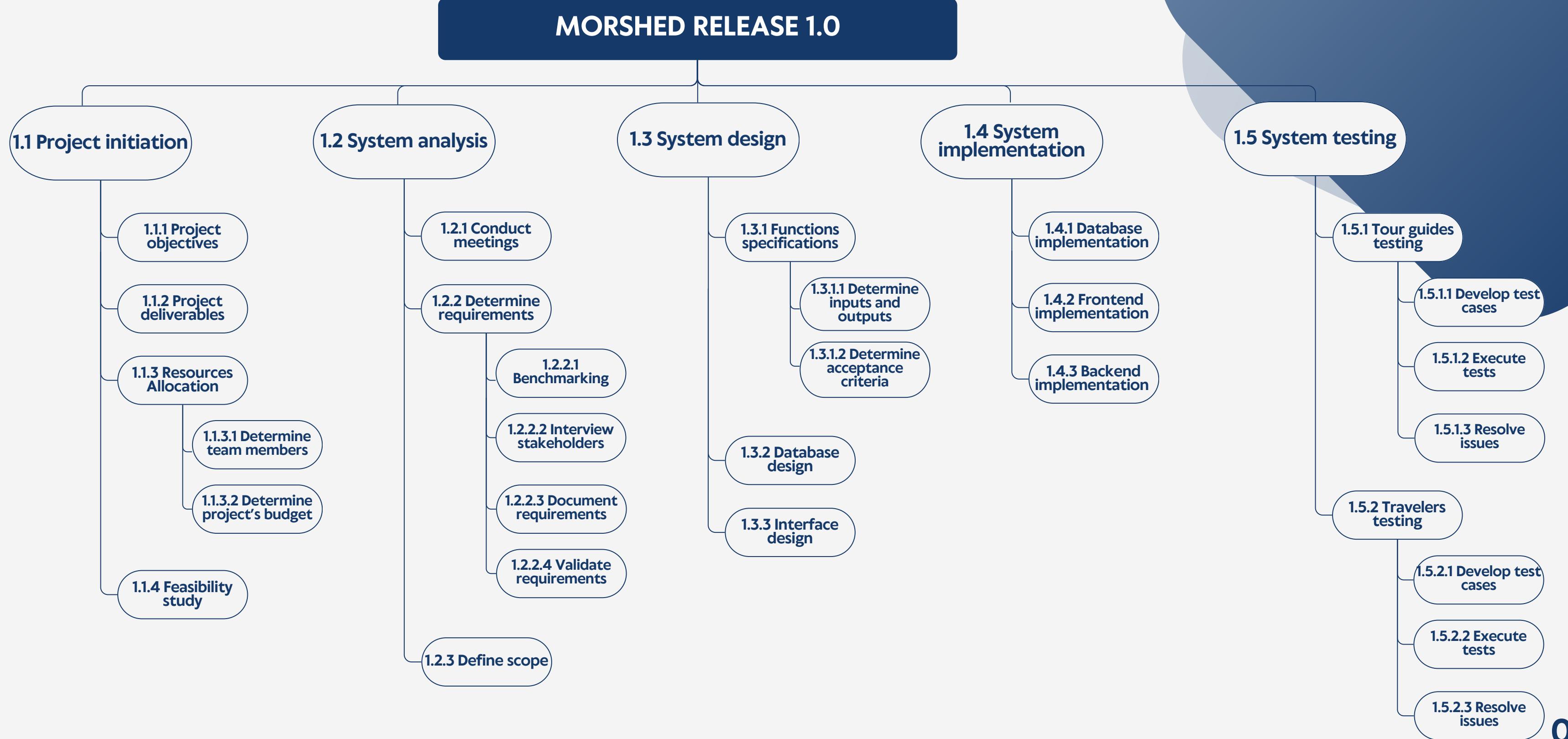
Assumptions:

The developers must have the knowledge in web development and real time communication

Acceptance Criteria:

All the functional and non-functional requirements are met within the scheduled timeframe.

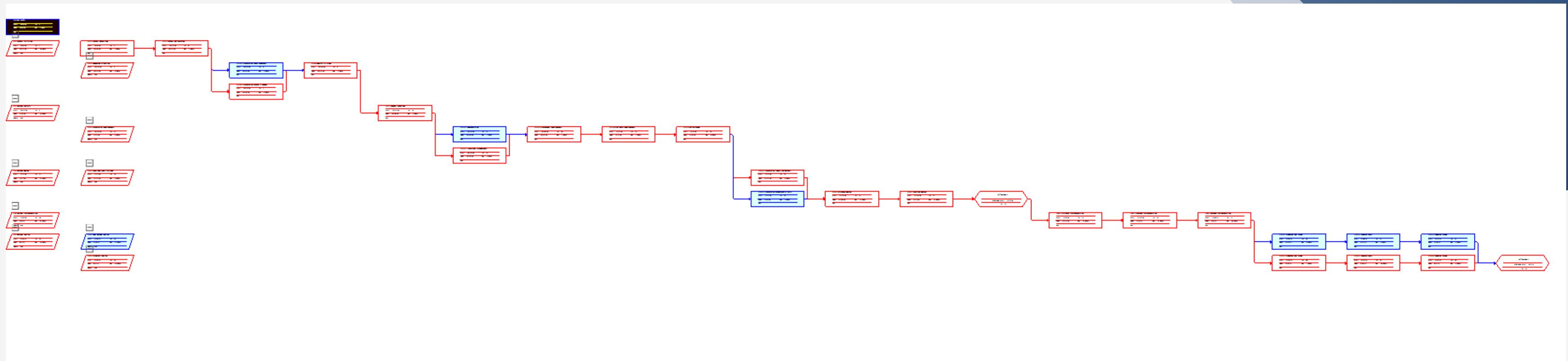
WBS



WBDS

Phase Name	Start Date	End Date	Duration	Cost (SAR)	Qualifications	Tools	Deliverables
Project initiation	1 Sep	14 Sep	14 days	8,678.33	• Project sponsor	• MS Word • Whatsapp • Project Plan 365	• Feasibility study • Proposal
System analysis	15 Sep	30 Sep	16 days	10,844.95	• System analyst • Stakeholder	• MS Word • Whatsapp • Project Plan 365 • JIRA	• Requirements documentation • scope definition
System design	1 Oct	31 Oct	31 days	50,638.28	• System architect • Database designer • UI/UX designer	• Whatsapp • Figma • Project Plan 365	• Function specs • Database design • Interface design
System implementation	1 Nov	31 Jan	92 days	106,356.87	• Software developer • Database administrator	• Github • Flutter • Firebase • Project Plan 365	• Implemented database • Website with all requirements implemented
System testing	1 Feb	1 Mar	28 days	28,560.52	• Tester • Developer	• MS Word • Whatsapp • Flutter • Project Plan 365	• Report of test results • Website after resolving all issues

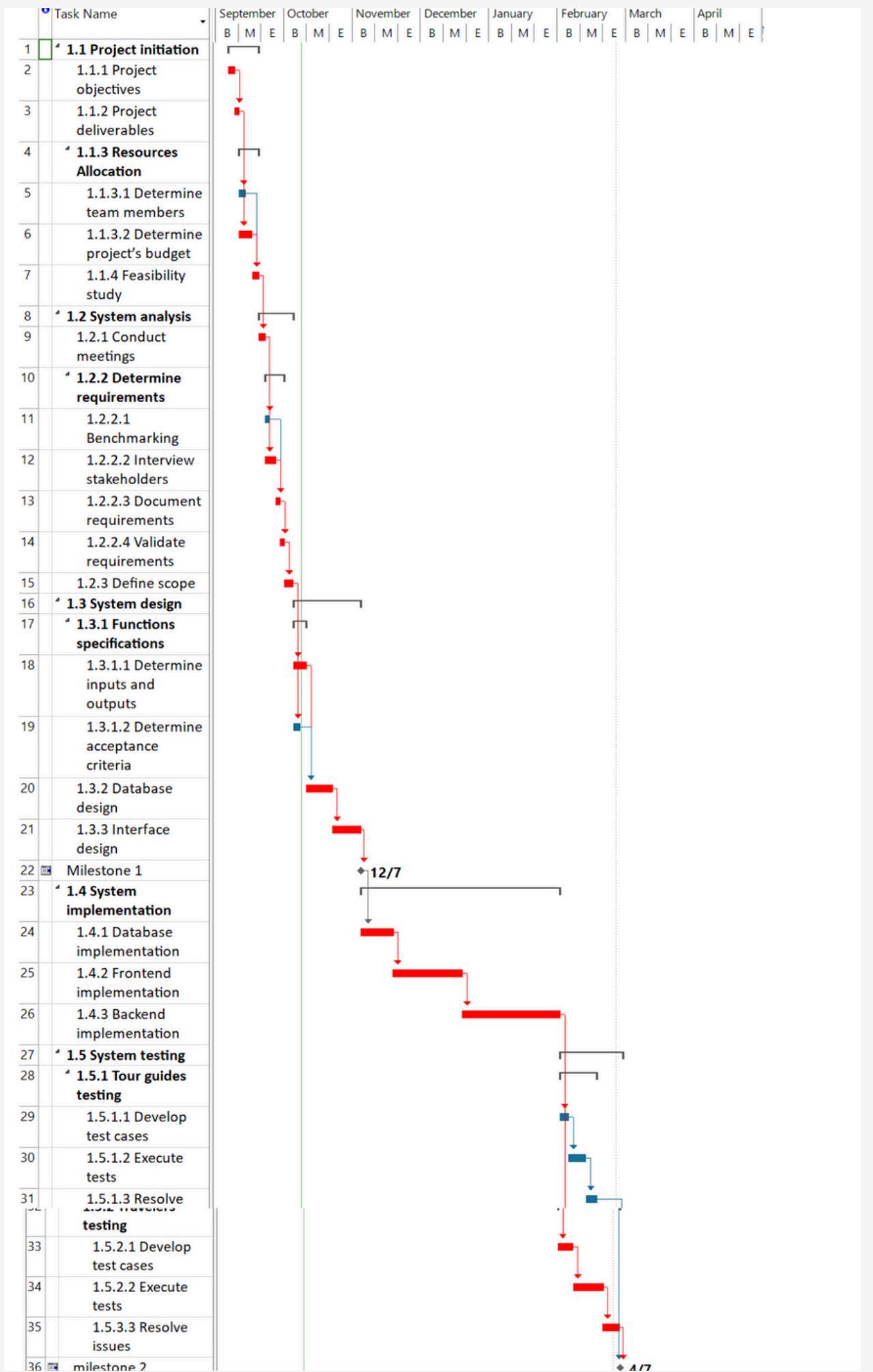
Network Diagram



for clear version:

<https://ibb.co/qj2KgjW>

Gantt Chart



for clear version:
<https://ibb.co/L0VzPfV>

Development Cost

Using AFP

01

Adjusted Function
Points

$$100 \times 1.2 = 120 \text{ FBs}$$

02

Adjusted Source Lines
of Code

$$120 \times 50 = 6000 \text{ LOC}$$

03

Number of staff -
Month

$$6000/400=15 \text{ Staff-Months}$$

04

Employee-Months
Calculation

$$15/6=2.5 \text{ Employee-Months}$$

Total Salary Cost = 3 employees \times 13,000 SAR \times 6 months = **234,000 SAR**

Development Cost

Using Detailed COCOMO

01

Effort Adjustment factor :

$$1.15 * 1.00 * 1.15 * 1.00 * 1.00 * 1.00 * 0.86 * \\ 1.00 * 0.86 * 1.00 * 0.95 * 0.91 * 1.00 * 1.00 = 0.846$$

02

Effort : $a * (\text{KLOC})^b$

$$3.0 * (6)^{1.12} = 22.32 \text{ Staff-} \\ \text{Months}$$

03

Adjusted effort : Effort * EAF

$$22.32 * 0.846 = 19 \text{ Staff-} \\ \text{Month}$$

Cost = Salary * Adjusted effort = 13,000 * 19 = **247,000 SAR**

Tools Cost

01

Software Cost

- Project plan 365
37.5 SAR x 6 months = 224.775 SAR
- 12 Free Tools

02

Hardware Cost

- 3 Asus VivoBook Laptops
 $3 \times 2549 \text{ SAR} = 7,647 \text{ SAR}$
- Lenovo ThinkSystem ST550 server
16,871 SAR

Total Tools Cost = $224.775 + 7,647 + 16,871 = 24,742.775 \text{ SAR}$

Total Cost

Development cost were assessed using two estimation methods:

1. The Function Point (FP) = 234,000 SAR
2. The COCOMO = 247,000 SAR

To calculate the percentage difference:

$$\frac{|247,000 - 234,000|}{247,000} \times 100 = 5.3\%$$

Since the difference is within our 20% tolerance threshold, we will adopt the higher estimate from the COCOMO model which is **247,000 SAR** to minimizing potential financial risks.

Tools Cost + Development cost = Total Cost

$$24,742.775 \text{ SAR} + 247,000 \text{ SAR} = \mathbf{271,742.775 \text{ SAR}}$$

External Quality Attributes

Usability

Available

Recoverability

Response Time

Maintainability

Internal Quality Attributes

Time-on-task

System Availability

Maximum Tolerable Downtime

Average response time(ART)

Maintainability index



Do you Have
Any Questions?

Thank you !

Prepared by:

Wiam Baalahatar (Leader) 443200416

Hind Alhijailan 443200971

Lamyia Aljaithin 442201857

Sarah Aldbasi 443200520

Khloud Aldoayan 443201002

Supervised by:

L.Nora Madi