Le'ajlekom

CCSW313
Section: EA6

PROJECT REPORT

PREPARED FOR

Dr. Muna Altherwi
College of Computer Sciences
and Engineering in Jeddah
 University

PRESENTED BY

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Raghad Althyabi 2006386
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1.1.INTRODUCTION/ BACKGROUND

Many of Jeddah's residents suffer from several problems including electricity cuts in some slums, sudden water cuts, as well as insects because Jeddah is a coastal city in which insects abound. All the issues mentioned has a negative impact on citizens' general quality of life. Also, the services provided to improve citizens' quality of life are scattered across different government agencies which makes it difficult and time consuming. For example, when the electricity is cut off, a citizen must contact the electricity company. Then, the electricity company will take the citizen's data to start resolving the problem. It may take more than 24 hours to resolve the problem, which causes citizens' unsatisfaction. Besides that, the process is manual and unprofessional. We have decided to build an application for Jeddah Municipality to provide all aspects of citizens' quality of life improvement directly and fast. This will be executed by linking every government agency that increases the citizen's quality of life to the application. Also, our application will be authorized by the government, which makes users' data highly secure and private

1.2.BUSINESS OBJECTIVE

- Our system aims to provide a comfortable and healthy environment for the residents of Jeddah.
- To resolve the largest possible number of problems faced by the residents of the city of Jeddah as soon as possible.
- Employing a large staff to interact with the largest number of problems as soon as possible and obtain citizens' satisfaction.
- To convert every manual process to a fully online service.

1.3.Current Situation and Problem/Opportunity Statement

The problems of electricity, water, environmental hygiene, and general quality of life are very relevant to citizens. Solutions to these problems are always through a manual process whether by making a phone call or visiting the headquarter of the government agency. These methods are unhandy, unprofessional, and unsatisfactory for the citizens that leads to a delay in responding to the problem and will eventually cause a delay in solving it, too. Therefore, there are several serious consequences for citizens. One of the consequences is that a citizen may be unable to perform their daily life tasks that electricity, water, and other essentials are based on. The system we are going to develop aims to provide all solutions and services to the residents of Jeddah directly, simply, and fast.

1.4.Competitive Advantage

Our application being the first platform that raises quality of life complaints professionally and easily. Our application uses technology instead of manually raising a complaint whether by a phone call or visiting a headquarter is one of our biggest competitive advantages.
Also, our application links some of the most important government agencies to improve the quality of life of Jeddah citizens unlike any other platform.

1.5.SWOT Analysis

Helpful

Harmful

Internal

STRENGTHS

- Owned by the government
- Easy to use
- Handy
- Portable (works in different operating systems)
- Controllable (confined to Jeddah citizens)

WEAKNESSES

- Weak security
- Unreliable cash flow
- Employees with limited skills
- Limited services

External

OPPORTUNITIES

- Government funding
- Strong cybersecurity base in Saudi Arabia
- High chance of success that leads to expansion to rest of the country
- Easy to promote since its owned by the government

THREATS

- Cyber Attacks
- Complaints pile up due to ease of use
- System breakdown due to high pressure
- Project over budget
- Project being behind schedule

1.6.Critical Assumption and Constraints

- The system should handle 40,000 users per day.
- The system shall be limited to Jeddah residents only.
- The system shall have regular maintenance.
- The system shall support Arabic and English languages.
- The system shall contain a section for suggestions and feedback for users.
- The system must be secure from unauthorized users and maintain privacy for all end users.
- The system shall allow no more than 5 complaints from a citizen per month.
- The system shall be linked to all government agencies that support quality of life
- The system shall provide accessibility services such as voiceover for visually impaired or elderly citizens.

1.7.Analysis of Option and Recommendation

- Do nothing. Quality of life issues are resolved manually.
- Create quality of life headquarters in every region in Jeddah that a citizen can visit to resolve issues.
- Build an application that resolves quality of life issues by linking it to every government agency that concerns about quality of life. (Best option).

After discussions with the stakeholders, we have decided that option 3 is the best option.

1.8.Preliminary Project Requirements

- User should be able to raise a complaint to the application that links to any sector that supports quality of life
- Users should be able to raise complaints easily and fast.
- User should be able to view a full report about their complaint status.
- The system must provide raising attachments with the complaints and recommendations.
- Time flexibility. Users should be able to raise complaints at any time.
- Users should be able to log in by using "Nafath" username and password.
- Users should be able to receive an assuring notification that the system received their complaint/recommendation.
- The system must have all the needed data about the users.
- The system must control and manage complaints from the municipality and other linked government agencies.

1.9.Schedule Estimate

- The CEO of Jeddah Municipality would like to receive the project fully executed by January 1, 2023, aligning through the Saudi vision of 2030. We assume that the system will be useful for at least 5 years.

1.10.BUDGET ESTIMATE AND FINANCIAL ANALYSIS

A preliminary budget for the entire project is 200,000SR. The estimate is based on the staff working a total of 50 hours per week. It also includes the manager working as a full-time job for building this application for three months. A staff would earn 20SR per hour while the project manager will earn by 50SR per year. It also includes 20,000SR for purchasing the software (off-the-shelf), adding and adapting the services to it, and linking the application with the other government agencies. The hourly rate for the developers of the project would be 55SR per hour. We need promotion and advertisement funds and that would cost around 50,000SR for the application to blow up. Also, we have included 20% as contingency funds. After the project is completed, periodical maintenance costs that the system will undergo will be added as 20,000SR annually. Technicians that run the maintenance tests would earn 100SR each time they call for maintenance, too.

Our projected benefits are based on a great increase in profit ratio which would be at least 100,000SR per year. Also, based on the paid partnerships profits with other government agencies. If we worked with at least two government agencies, and each government agency paid us 5,000SR per month, that would be 120,000SR. Also, the governmental financial support would be at least 80,000SR annually. Therefore, the total projected benefits are 300,000SR per year.
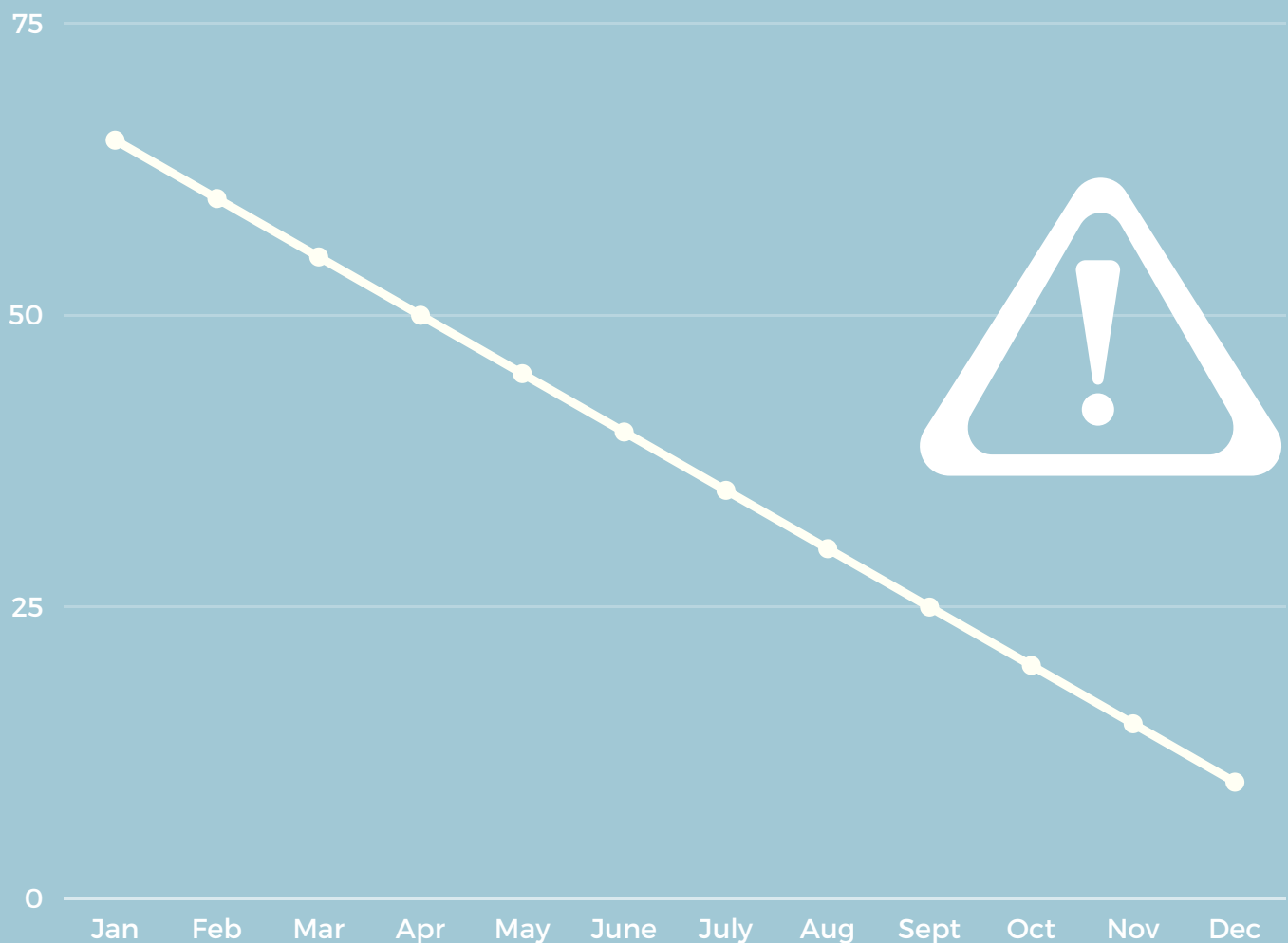
1.11.POTENTIAL RISKS

Citizens, our hand-on users, are the ones to determine whether the application will achieve its goals or not. Many citizens, especially the elderly, strongly dislike change in routines, even if it was to the better. Therefore, citizens may stick to the manual complaint process without knowing the great services the application can provide. There are risks in choosing the best advertising platform to help the application blow up. Also, there are risks in choosing the best "off-the-shelf" software that has the most similar needs to our application.

	0	1	2	3	4	5	Total
Discount rate	10%						
Assume the project is done in about 3 months		year					
Costs	200,000 SR	20,000 SR	20,000 SR	20,000 SR	20,000 SR	20,000 SR	
Discount factor	1	0.91	0.83	0.75	0.68	0.62	
Discount Costs	200,.000 SR	18,200 SR	16,600 SR	15,000 SR	13,600 SR	12,400 SR	275,800 SR
Benefits	0	300,000 SR	300,000 SR	300,000 SR	300,000 SR	300,000 SR	
Discount factor	1	0.91	0.83	0.75	0.68	0.62	
Discount benefits	0	273,000 SR	249,000 SR	225,000 SR	204,000 SR	186,000 SR	1,137,000SR
Discounted benefits - costs	200,000 SR	254,800 SR	232,400 SR	210,000 SR	190,400 SR	173,600 SR	
Cumulative benefits - costs	200,000 SR	54,800 SR	287,200 SR	497,200 SR	687,600 SR	861,200 SR NPV	
Payback in year 1							
Discounted life cycle ROI	((1,137,000SR - 275,800SR) / 275,800SR) * 100 = 312%						

Assumptions	
Costs	#Hours
PM (480 hours, 80SR/hour)	38,400SR
Staff (600 hours, 20SR/hour)	12,000SR
Developer (720hour, 55SR/hour)	39,600SR
Outsourced software and Services	20,000SR
promotion and advertisement funds	50,000SR
contingency funds.	40,000SR
Total project costs (all applied in year 0)	200,000SR
Benefits	
increase in profits ratio	100,000SR
Paid partnership profits	120,000SR
Governmental financial support	80,000SR
Total annual projected benefits	300,000SR
promotion and advertisement funds	50,000SR

2.INTRODUCTION

Municipality of Jeddah's main goal is the citizen's well-being. We have decided to build an application under the Municipality of Jeddah (MOJ) that cares about the citizens' quality of life. Since the MOJ does not cover water and electricity services, the application links the Electricity and Water Companies to it. The main approach to this application is to allow citizens of Jeddah to raise water, electricity, and MOJ-related complaints easily through the application. We filter the citizen's complaint to where it belongs (MOJ, Water Company, or Electricity Company) and send it to the concerned government agency. Our aim is to make a decrease in quality-of-life issues facing Jeddah citizens. Also, we aim to solve these issues as fast as possible due to the different links we have with other government agencies.

USE CASE DIAGRAM
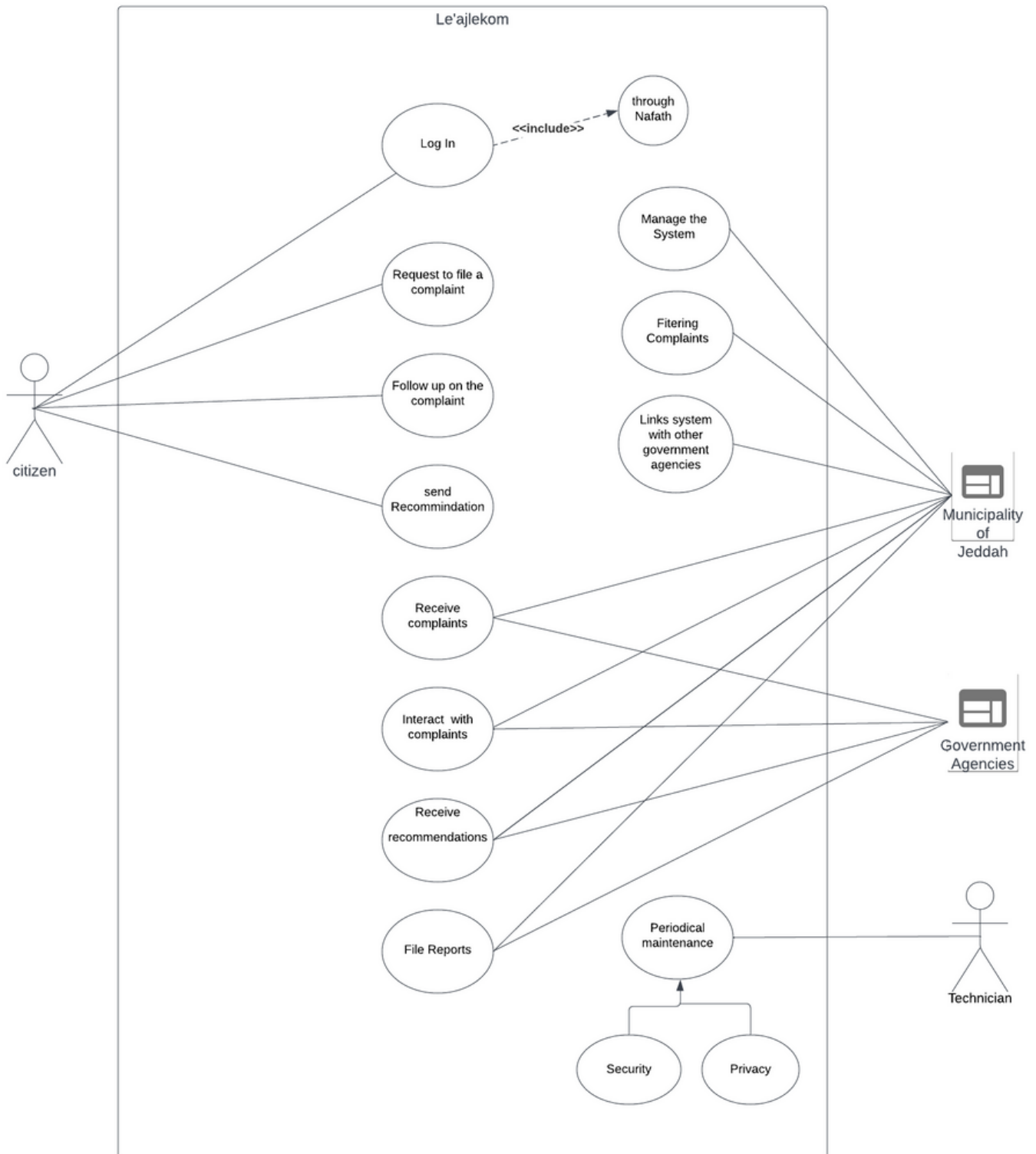
2.2. Functional Requirements

- FR1. Complaints
- FR1.1 The user should be able to raise complaints through the system.
- FR1.2 The user should be able to upload attachments if required.
- FR2. Follow Up on Complaints
- FR2.1 The user should be able to follow up on the raised complaints and check its status.
- FR2.2 The user should be able to dismiss the complaint request.
- FR3. Send Recommendations
- FR3.1 The user should be able to send improvement recommendations to the system.

2.3. Quality Specification

- NFR1. Log in
- NFR1.1 The user should log in through "Nafath"
- NFR2. The system shall allow the Municipality of Jeddah (MOJ) manage the system by linking its database to the MOJ's database.
- NFR3. The system shall be able to receive the complaints only from the citizens of Jeddah.
- NFR4. The system shall be able to filter at least 98% of the complaints without any system crash.
    - Filtering complaints will go through this process:
        - 1- Determine whether the complaint belongs to MOJ, Electricity, or Water Company.
        - 2- Preparing the filtered complaint to be sent to the concerned agency.
- NFR5. The system shall have an availability of 99.5% on average a year with a maximum downtime of 4 hours (Availability).
- NFR6. The system shall maintain data integrity by keeping backups of all updates to the database for every record transaction (data integrity).
- NFR7. The interface of the application should be user-friendly, and form-based (Usability).
- NFR8. The loading time of the application pages should not exceed 1 second for users (Performance).
- NFR9. The system shall maintain personal information reliability 99.4% of the time (Reliability).
- NFR10. The system shall maintain security by sending a code through SMS to verify one's identity (Security).
- NFR11. The system must limit the access to the citizen's information 100% of the time (Privacy).

3.Stakeholder register

Name	Position	Internal/External	Project Role	Contact Information
Khadeja Salem	CEO	Internal	Sponsor	KHADEJA22@GMAIL.COM
Fatima Ali	PMO Director	Internal	Investor	FAATIMALI5@HOTMAIL.COM
Waad Mokhtar	Senior Consultant	Internal	Team member	WAADMOR00@GMAIL.COM
Osamah Ahmed	PR Director	Internal	Advisor	OSAM7@OUTLOOK.SA
Gheada Omar	Tester Specialist	External	Advisor	GHADADMAS56@HOTMAIL.COM
Sarah Ahmed	Business Analyst	External	Advisor	SARAHMED@GMAIL.COM
Yousif Khaled	Programmer	Internal	Team member	YOSIFKHTHO@GMAIL.COM
Muna Altherwi	Course Instructor	Internal	Potential Investor	MMALTHERWI@UJ.EDU.SA
Rasha Alamri	Lab Instructor	Internal	Potential Investor	RMALAMRI@UJ.EDU.SA

4.Stakeholder management strategy

Name	Level of Interest	Level of Influence	Potential Management Strategies
Khadeja Salem	High	High	Khadeja is considered as the most important person who is fully interested in the financial gains of the project, manages the meetings, ensuring the successful management of the project and setting future strategy.
Muna Altherwi	Low	High	Muna is an investor in many projects who is not fully concentrated in this project, and she works in this project as a part-time job.
Osamah Ahmed	Low	High	Osamah has many projects to build public relationships with, and he has a huge influence impact on the project regarding his position in the company.

Project Charter

Project Title: Le'ajlekom
Project Start Date: 16th of April 2022   **Projected Finish Date:** 16th of July 2022

Budget Information: Due to the financial calculations, the expected budget for this project will cost 200,000SR. An initial estimate provides a total of 70 hours per week.

Project Manager: Fatma Ali, Project Manager, FAATIMALI15@hotmail.com

Project Objectives: "Le'ajlekom" aims to facilitate raising quality of life complaints to Jeddah citizens. Municipality of Jeddah manages this application, and it links the Electricity Company and the Water Company to expand the scope of the solutions of the citizens quality of life complaints. The Application provides continuous updates on citizens' complaints. It is also responsible for the monthly reports of the complaints that have been resolved by the concerned agencies. Our application is only authorized for Jeddah population so that it is entered through the national address "Nafath". One of main objectives that the users' personal data are 100% protected.

Main Project Success Criteria: A decrease in number of complaints raised in the one year due to the effectiveness of our application in solving citizens' problems.

Approach:
- Allow citizens to raise complaints through the application.
- Make the system reliable by linking it to the Municipality of Jeddah.
- Provide a backup of all data and the ability to restore in the event of failure or hacking.
- Allow citizens to send recommendations and feedback about the services provided.
- Provide log in with biometrics such as face ID and fingerprint.
- Update citizens on the raised complaints.

Roles and Responsibilities

Name	Role	Position	Contact Information
Khadeja Salem	Sponsor	Le'ajlekom Consulting, CEO	KHADEJA22@GMAIL.COM
Fatima Ali	Project Manager	Le'ajlekom Consulting, Manager	FAATIMALI5@HOTMAIL.COM
Raghad Mohammed	Team member	Le'ajlekom Consulting, IT department	RAGHADMOH99@GMAIL.COM
Shereen Anwar	Team Member	Le'ajlekom Consulting, IT department	SHEANZAK0@GMAIL.COM
May Omar	Team Member	Le'ajlekom Consulting, senior consultant	MAYOMARQ6@GMAIL.COM
Refal Ibrahim	Team Member	Le'ajlekom Consulting, consultant	REFALNAJMIBRA2@GMAIL.COM
Khaled Mohammed	Advisor	Client representative	KHMOH9@GMAIL.COM

Sign-off

Khadeja Salem
Fatima Ali
Raghad Mohammed
Shereen Anwar
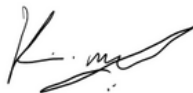
May Omar
Refal Ibrahim
Khaled Mohammed

Comments: Following the code of ethics, commitment, respecting time, and cooperating with the rest of the group members are the key to our project's success.

Just-In-Time Training Project
Kick-off Meeting
20th of April 2022

Project Name: Le'ajlekom

Meeting Objective: Get the project off to a great start by introducing key stakeholders, reviewing project goals, and discussing future plans

Agenda:
- Introductions of attendees
- Background of project
- Review of project-related documents (i.e. business case, project charter)
- Discussion of project organizational structure
- Discussion of project scope, time, and cost goals
- Discussion of other important topics
- List of action items from meeting

Action Item	Assigned To	Due Date
Develop and Manage Project Scope	Khadeja Salem	20/4/2022
	Fatima Ali	
Analyzing the interested companies	Osamah Ahmed	22/4/2022
Note taker	Refal Ibrahim	24/4/2022

Date and time of next meeting: 8th of May 2022 at 9:00 am.

7.1.PROJECT JUSTIFICATION

Project Title: Le'ajlekom

Date: 20 May, 2022

Prepared by: Fatma Ali, Project Manager, faatimali15@hotmail.com

Project Summary and Justification:

Based on the continuous complaints from the citizens of Jeddah about quality-of-life issues including electricity, water, and environmental hygiene, we decided to create this project. This project sheds light on facilitating raising complaints by citizens about water, electricity, and environmental hygiene. This will be done by creating an application that provides raising complaints services and feedback about citizens' complaints. The budget for this project is 200,000 SR. Also, an additional annual 20,000 SR will be required for maintenance costs that the system will undergo. Estimated benefits are 300,000 SR each year. It is important to focus on the system paying for itself within one year of its completion.

- **Templates and Tools:** The application will allow the citizens to upload attachments about their complaints including videos in mp4, images in PNG and JPG, and files in Microsoft Word, Excel and PDF.

- **User Submission:** Users will be encouraged to e-mail files with sample templates and tools on the application. The Municipality of Jeddah will forward the files to the appropriate agency to deal with the complaints.

- **Feedback:** The user receives updates and feedback and a full report about their complaints continuously. The user can also check their complaint status.

- **Recommendation:** The citizen can send recommendation and feedback about the services provided.

- **Links:** The application will be under the Municipality of Jeddah. It will be linked to some of the most important government agencies like The Water Company and Electricity Company.

- **User-friendly:** The application aims to be user-friendly in providing all solutions and services to citizens directly, simply, and fast. This will help solve as much quality-of-life issues as possible.

- **Security:** The application is owned by the government which will lead to a strong cybersecurity base. One of our strengths is that our application is secure from unauthorized users and maintain security for all end-users.

- **Availability:** The application can receive and interact with the complaints 24 hours a day, 7 days a week.

- **Complaint Count:** The citizen can file five different complaints per month.

- **Speed:** The application interacts with the complaints as fast as possible due to the different links we have with other government agencies.

- **Log in:** The log in will be through the Unified National Platform (Nafath) username and password. After the first log in, citizens can use different biometrics such as face ID and fingerprint.

7.3.Summary of Project Deliverables:

7.3.1.Project management–related deliverables:

Business case, project charter, team charter, scope statement, WBS, schedule, cost baseline, progress reports, final project presentation, final project report, lessons-learned report, and any other documents required to manage the project.

7.3.2.Product–related deliverables:

- **User tutorial:** learning journey for users about how to use the application.
- **Promotion:** A plan for promoting the application for Jeddah citizens by official agencies.
- **Code:** An off-the-shelf code for building the application with changes on it to meet the application needs.
- **Test plan:** The test plan will document how the application will be tested, who will do the testing, and how bugs will be reported.
- **Project benefit measurement plan:** A project benefit plan will measure the financial value of the application.
- **Database:** The log in database is linked with the location service so that only Jeddah citizens can file for complaints.
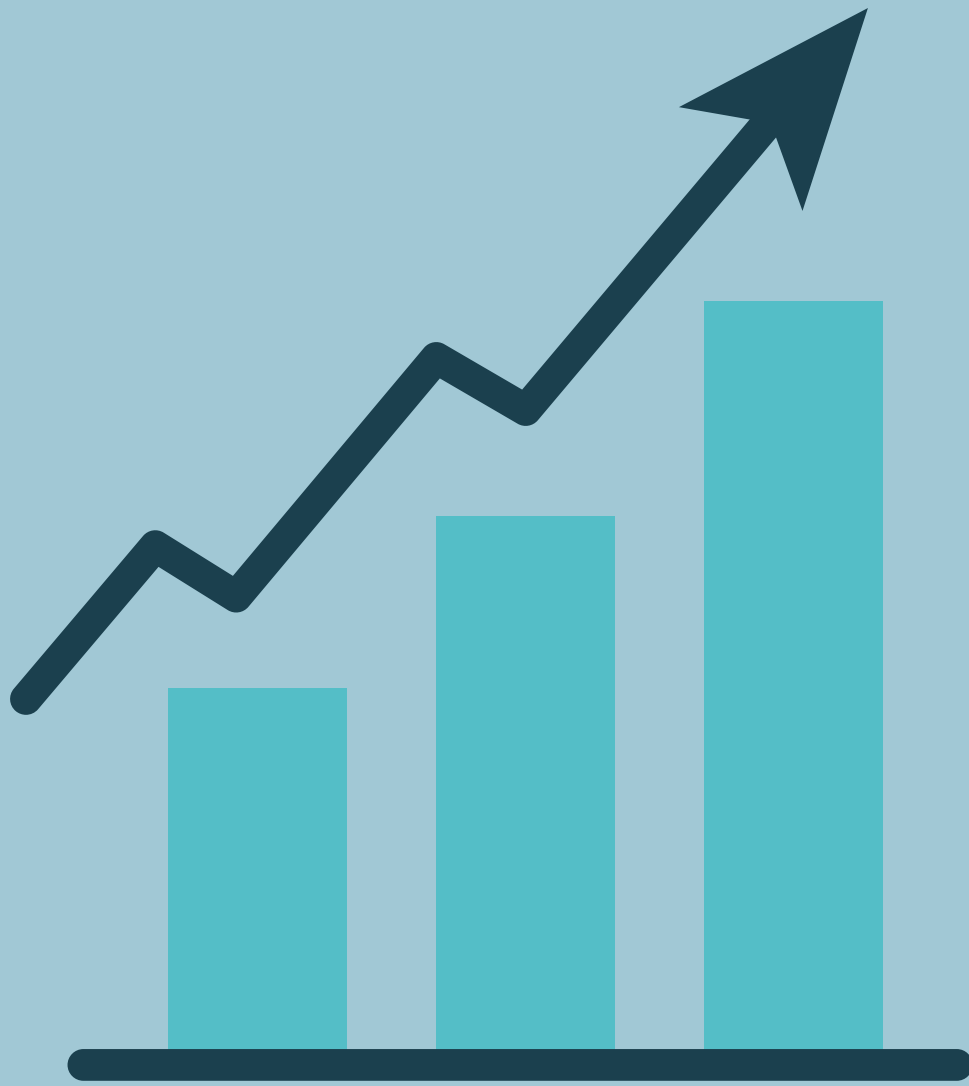
7.4.MAIN PROJECT SUCCESS CRITERIA

Our goal is to complete this project within four months with no more than 200,000 SR. The project sponsor, Khadija Salem, has emphasized the importance of the project paying for itself within one year after the application is complete. Also, we want to make a decrease in number of complaints raised in the one year due to the effectiveness of our application in solving citizens' problems.

8.Work Breakdown Structre

1.Initiating
   1.1 Stakeholder identification
   1.2 Project charter
   1.3 Kick-off meeting

2.Planning
   2.1 Team planning meeting
   2.2 Team charter
   2.3 Scope statement
   2.4 WBS
   2.5 Schedule and cost baseline
      2.5.1 Task recourses
      2.5.2 Task durations
      2.5.3 Gantt chart
   2.6 Risk prioritization

3.Executing
   3.1 User tutorial
   3.2 Promotion
   3.3 Code
   3.4 Test Plan
   3.5 Project benefit measurement plan
   3.6 database

4.Monitoring and Controlling
   4.1 Progress reports
   4.2 Change requests
   4.3 Product Deliverable

5.Closing
   5.1Final project report
   5.2Final project presentation
   5.3Lessons learned

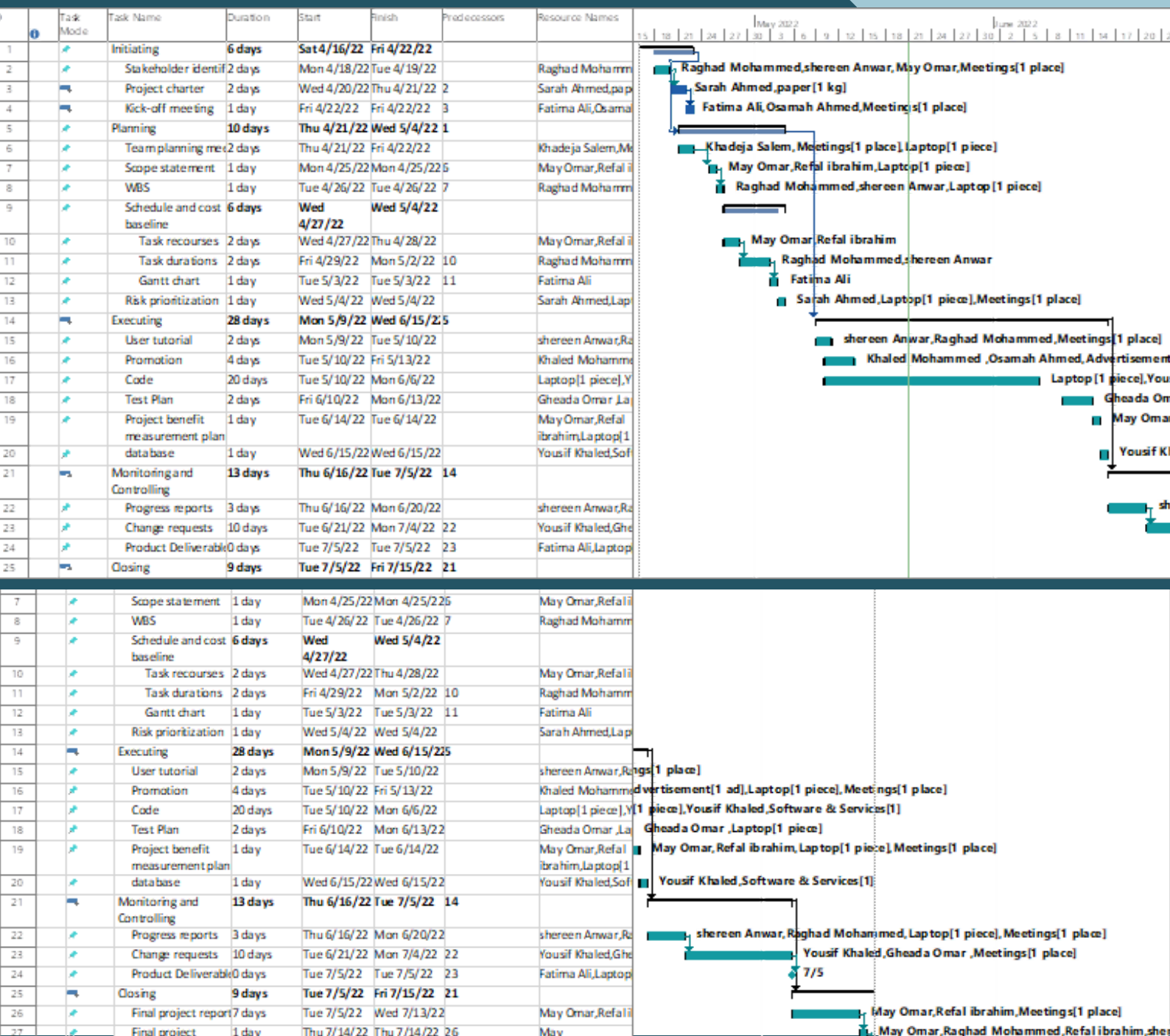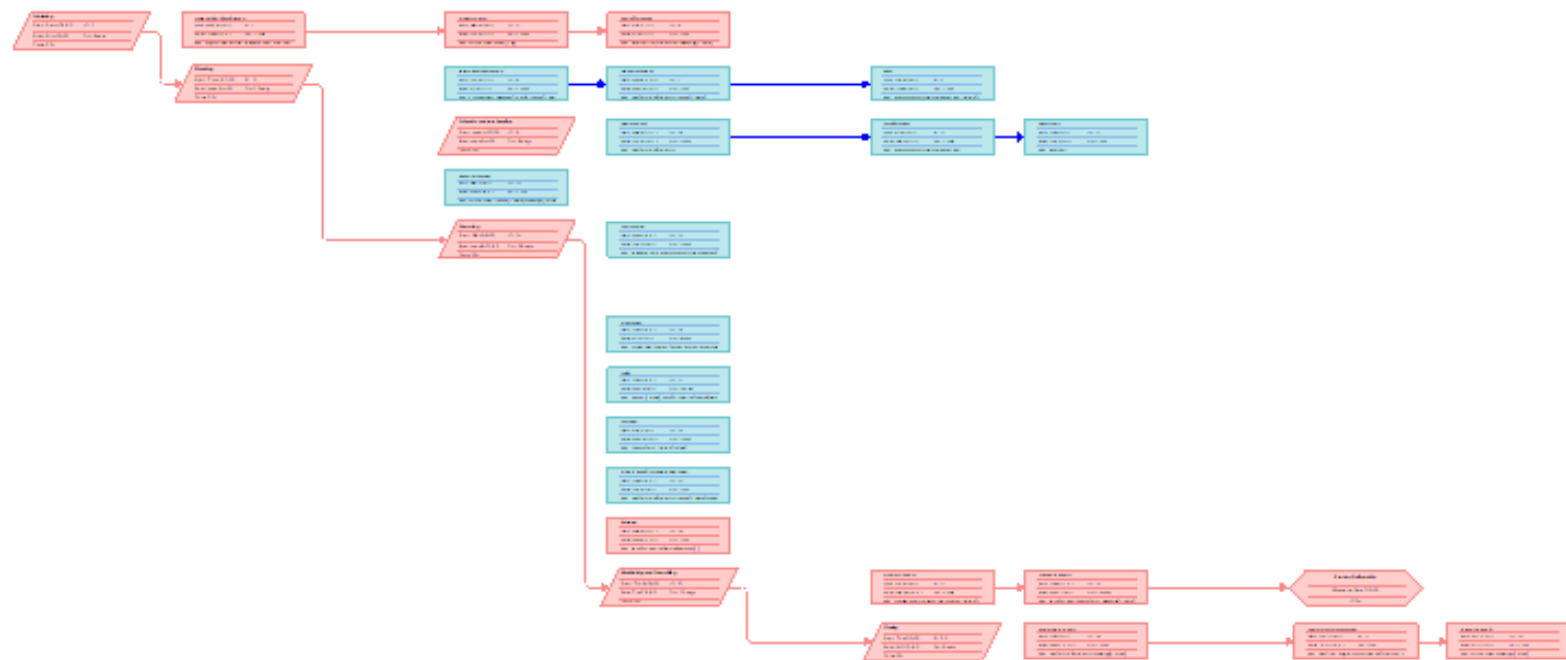|	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	
1	✔	Initiating	6 days	Sat 4/16/22	Fri 4/22/22			Raghad Mohammed,shereen Anwar, May Omar,Meetings[1 place]
2	✔	Stakeholder identif	2 days	Mon 4/18/22	Tue 4/19/22		Raghad Moham	Sarah Ahmed ,paper[1 kg]
3	◼	Project charter	2 days	Wed 4/20/22	Thu 4/21/22	2	Sarah Ahmed,pap	Fatima Ali,Osamah Ahmed,Meetings[1 place]
4	◼	Kick-off meeting	1 day	Fri 4/22/22	Fri 4/22/22	3	Fatima Ali,Osamal	
5	✔	Planning	10 days	Thu 4/21/22	Wed 5/4/22	1		Khadeja Salem, Meetings[1 place],Laptop[1 piece]
6	✔	Team planning me	2 days	Thu 4/21/22	Fri 4/22/22		Khadeja Salem,M	May Omar,Refal ibrahim,Laptop[1 piece]
7	✔	Scope statement	1 day	Mon 4/25/22	Mon 4/25/22	6	May Omar,Refal i	Raghad Mohammed,shereen Anwar,Laptop[1 piece]
8	✔	WBS	1 day	Tue 4/26/22	Tue 4/26/22	7	Raghad Mohamm	
9	✔	Schedule and cost baseline	6 days	Wed 4/27/22	Wed 5/4/22			
10	✔	Task recourses	2 days	Wed 4/27/22	Thu 4/28/22		May Omar,Refal i	May Omar,Refal ibrahim
11	✔	Task durations	2 days	Fri 4/29/22	Mon 5/2/22	10	Raghad Mohamm	Raghad Mohammed,shereen Anwar
12	✔	Gantt chart	1 day	Tue 5/3/22	Tue 5/3/22	11	Fatima Ali	Fatima Ali
13	✔	Risk prioritization	1 day	Wed 5/4/22	Wed 5/4/22		Sarah Ahmed,Lap	Sarah Ahmed,Laptop[1 piece],Meetings[1 place]
14	◼	Executing	28 days	Mon 5/9/22	Wed 6/15/22	5		
15	✔	User tutorial	2 days	Mon 5/9/22	Tue 5/10/22		shereen Anwar,Ra	shereen Anwar,Raghad Mohammed,Meetings[1 place]
16	✔	Promotion	4 days	Tue 5/10/22	Fri 5/13/22		Khaled Mohamm	Khaled Mohammed ,Osamah Ahmed,Advertisement
17	✔	Code	20 days	Tue 5/10/22	Mon 6/6/22		Laptop[1 piece],Y	Laptop[1 piece],You
18	✔	Test Plan	2 days	Fri 6/10/22	Mon 6/13/22		Gheada Omar ,La	Gheada Om
19	✔	Project benefit measurement plan	1 day	Tue 6/14/22	Tue 6/14/22		May Omar,Refal ibrahim,Laptop[1	May Omar
20	✔	database	1 day	Wed 6/15/22	Wed 6/15/22		Yousif Khaled,Sof	Yousif K
21	◼	Monitoring and Controlling	13 days	Thu 6/16/22	Tue 7/5/22	14		
22	✔	Progress reports	3 days	Thu 6/16/22	Mon 6/20/22		shereen Anwar,Ra	
23	✔	Change requests	10 days	Tue 6/21/22	Mon 7/4/22	22	Yousif Khaled,Ghe	sh
24	✔	Product Deliverable	0 days	Tue 7/5/22	Tue 7/5/22	23	Fatima Ali,Laptop	
25	◼	Closing	9 days	Tue 7/5/22	Fri 7/15/22	21		

		Task Name	Duration	Start	Finish	Predecessors	Resource Names	
7	✔	Scope statement	1 day	Mon 4/25/22	Mon 4/25/22	6	May Omar,Refal i	
8	✔	WBS	1 day	Tue 4/26/22	Tue 4/26/22	7	Raghad Mohamm	
9	✔	Schedule and cost baseline	6 days	Wed 4/27/22	Wed 5/4/22			
10	✔	Task recourses	2 days	Wed 4/27/22	Thu 4/28/22		May Omar,Refal i	
11	✔	Task durations	2 days	Fri 4/29/22	Mon 5/2/22	10	Raghad Mohamm	
12	✔	Gantt chart	1 day	Tue 5/3/22	Tue 5/3/22	11	Fatima Ali	
13	✔	Risk prioritization	1 day	Wed 5/4/22	Wed 5/4/22		Sarah Ahmed,Lap	
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15	✔	User tutorial	2 days	Mon 5/9/22	Tue 5/10/22		shereen Anwar,Ra	ngs[1 place]
16	✔	Promotion	4 days	Tue 5/10/22	Fri 5/13/22		Khaled Mohamm	dvertisement[1 ad],Laptop[1 piece], Meetings[1 place]
17	✔	Code	20 days	Tue 5/10/22	Mon 6/6/22		Laptop[1 piece],Y	[1 piece],Yousif Khaled ,Software & Services[1]
18	✔	Test Plan	2 days	Fri 6/10/22	Mon 6/13/22		Gheada Omar ,La	Gheada Omar ,Laptop[1 piece]
19	✔	Project benefit measurement plan	1 day	Tue 6/14/22	Tue 6/14/22		May Omar,Refal ibrahim,Laptop[1	May Omar, Refal ibrahim, Laptop[1 piece],Meetings[1 place]
20	✔	database	1 day	Wed 6/15/22	Wed 6/15/22		Yousif Khaled,Sof	Yousif Khaled,Software & Services[1]
21	◼	Monitoring and Controlling	13 days	Thu 6/16/22	Tue 7/5/22	14		
22	✔	Progress reports	3 days	Thu 6/16/22	Mon 6/20/22		shereen Anwar,Ra	shereen Anwar, Raghad Mohammed,Laptop[1 piece], Meetings[1 place]
23	✔	Change requests	10 days	Tue 6/21/22	Mon 7/4/22	22	Yousif Khaled,Ghe	Yousif Khaled ,Gheada Omar ,Meetings[1 place]
24	✔	Product Deliverable	0 days	Tue 7/5/22	Tue 7/5/22	23	Fatima Ali,Laptop	7/5
25	◼	Closing	9 days	Tue 7/5/22	Fri 7/15/22	21		
26	✔	Final project report	7 days	Tue 7/5/22	Wed 7/13/22		May Omar,Refal i	May Omar,Refal ibrahim,Meetings[1 place]
27	✔	Final project	1 day	Thu 7/14/22	Thu 7/14/22	26	May	May Omar,Raghad Mohammed,Refal ibrahim,sher

11.Activity Cost Estimation

WBS ID	Resource	Labor cost	Physical cost	Total estimate	Basis estimate	Range	Confidence level
1.1	May Raghad Refal Shereen Meetings	20 SR	2500 SR	3460 SR	Labor 20/hour Physical 2500/rent	Between -10% to +15%	70%
1.2	Sarah Paper	20 SR	50 SR	370 SR	Labor 20/hour Physical 50/kg	Between -5% to 0%	90%
1.3	Fatima Osamah Meetings	Fatima: 80 Osamah: 20 SR	2500 SR	3300 SR	Labor: Fatima: 80/hour Osamah: 20/hour Physical: 2500/rent	Between -5% to +5%	85%
2.1	Khadija Laptop Meetings	20 SR	Laptop: 5000 SR Meetings: 2500 SR	7820 SR	Labor 20/hour Physical Laptop 5000/piece Meetings: 2500/rent	Between -20% to +30%	70%
2.2	May Refal Laptop	20 SR	5000 SR	5320 SR	Labor 20/hour Physical 5000/piece	Between -5% to +5%	95%
2.3	Raghad Shereen Laptop	20 SR	5000 SR	5320 SR	Labor 20/hour Physical 5000/piece	Between -5% to +5%	95%
2.5.1	Refal May	20 SR		640 SR	Labor 20/hour	Between -5% to +5%	90%
2.5.2	Raghad Shereen	20 SR		640 SR	Labor 20/hour	Between -20% to +30%	70%

2.5.3	Fatima	80 SR		640 SR	Labor 80/hour	Between - 20% to +20%	90%
2.6	Sarah Laptop Meetings	20 SR	Laptop: 5000 SR Meetings: 2500 SR	7666 SR	Labor 20/hour Physical Laptop 5000/piece Meetings: 2500/rent	Between - 20% to +20%	70%
3.1	Shereen Raghad Meetings	20 SR	2500 SR	3140 SR	Labor 20/hour Physical Meetings: 2500/rent	Between - 5% to 0%	90%
3.2	Khaled Osamah Meetings Laptop Advertisement	20 SR	Laptop: 5000 SR Meetings: 2500 SR Advertisement: 50000 SR	58780 SR	Labor 20/hour Physical Meetings: 2500/rent Advertisement: 50000/ad	Between - 10% to +10%	85%
3.3	Yousif Software and services Laptop	55 SR	Software & services: 20000 SR Laptop: 5000 SR	33800 SR	Labor 55/hour Physical Software and services: 20000/software Laptop: 5000/piece	Between - 20% to +30%	70%
3.4	Gheada Laptop	20 SR	Laptop: 5000 SR	5320 SR	Labor 20/hour Physical Laptop: 5000/piece	Between - 10% to +5%	90%
3.5	May Refal Laptop Meetings	20 SR	Laptop: 5000 SR Meetings: 2500 SR	7820 SR	Labor 20/hour Physical Laptop: 5000/piece Meetings: 2500/rent	Between - 10% to +10%	85%

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3.6	Yousif Software and services	55 SR	Software & services: 20000 SR	20440 SR	Labor 55/hour Physical Software and services: 20000/software	Between - 20% to +20%	65%
4.1	Shereen Raghad Meetings Laptop	20 SR	Meetings: 2500 SR Laptop: 5000 SR	8460 SR	Labor 20/hour Physical Meetings: 2500/rent Laptop: 5000/piece	Between - 5% to +5%	95%
4.2	Yousif Gheada Meetings	Yousif: 55 SR Gheada: 20 SR	Meetings: 2500 SR	8500 SR	Labor Yousif: 55/hour Gheada: 20/hour Physical: 2500/rent	Between - 10% to +10%	95%
4.3	Fatima Laptop Meetings	80 SR	Meetings: 2500 SR Laptop: 5000 SR	7500 SR	Labor 80/hour Physical: Laptop: 5000/piece Meetings: 2500/rent	Between - 5% to 0%	95%
5.1	May Refal Meetings	20 SR	Meetings: 2500 SR	4740 SR	Labor 20/hour Physical: 2500/rent	Between - 5% to +5%	80%
5.2	Refal May Raghad Shereen Meetings	20 SR	Meetings: 2500 SR	3140 SR	Labor 20/hour Physical: 2500/rent	Between - 10% to +10%	90%
5.3	Sarah Meetings	20 SR	Meetings: 2500 SR	2660 SR	Labor 20/hour Physical: 2500/rent	Between - 5% to +10%	95%