



جامعة جدة
University of Jeddah

UJ PATHFINDER

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UJ PATHFINDER
powering success



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Project Review

Background:

UJ PathFinder is an innovative platform for the University of Jeddah community, connecting students, alumni, faculty, and employers. It addresses gaps like recommendation requests, job connections, and document management to streamline academic and professional growth.

Project Motivation

Business Goals :

The primary objective of UJ PathFinder is to create an efficient and user-friendly platform that:

- Connects students with internship and job opportunities.
- Facilitates the academic recommendation process.
- Provides a means for tracking internship experiences and accessing employment statistics.
- Enhances communication among users, thereby improving networking and support.

Business Case Analysis

Assumptions:

- **User Adoption:** Students will actively adopt UJ PathFinder to manage their academic and professional needs, utilizing its features to enhance their career prospects.
- **Employer Engagement:** Companies will participate by actively posting job and internship opportunities, facilitating connections with students.
- **Institutional Support:** The University of Jeddah will support the integration of UJ PathFinder with existing systems and processes, ensuring seamless functionality.

Constraints:

- **Budget Limitations:** The development budget will require careful planning and resource allocation to meet project goals.
- **Project Timeline:** The project must be completed within seven months, necessitating efficient project management and adherence to deadlines.
- **Change Resistance:** There may be resistance from faculty and staff who are accustomed to existing processes, highlighting the need for effective change management strategies to encourage adoption of the new platform.

SWOT ANALYSIS

● STRENGTH

- Centralized Platform for students, faculty, and employers, streamlining access to resources and information.
 - Comprehensive features addressing multiple needs (job matching, academic recommendations, internship tracking).
 - integration with university systems enhances usability.
 - Enhance networking, which helps students build professional networks.

● OPPURTUNITIES

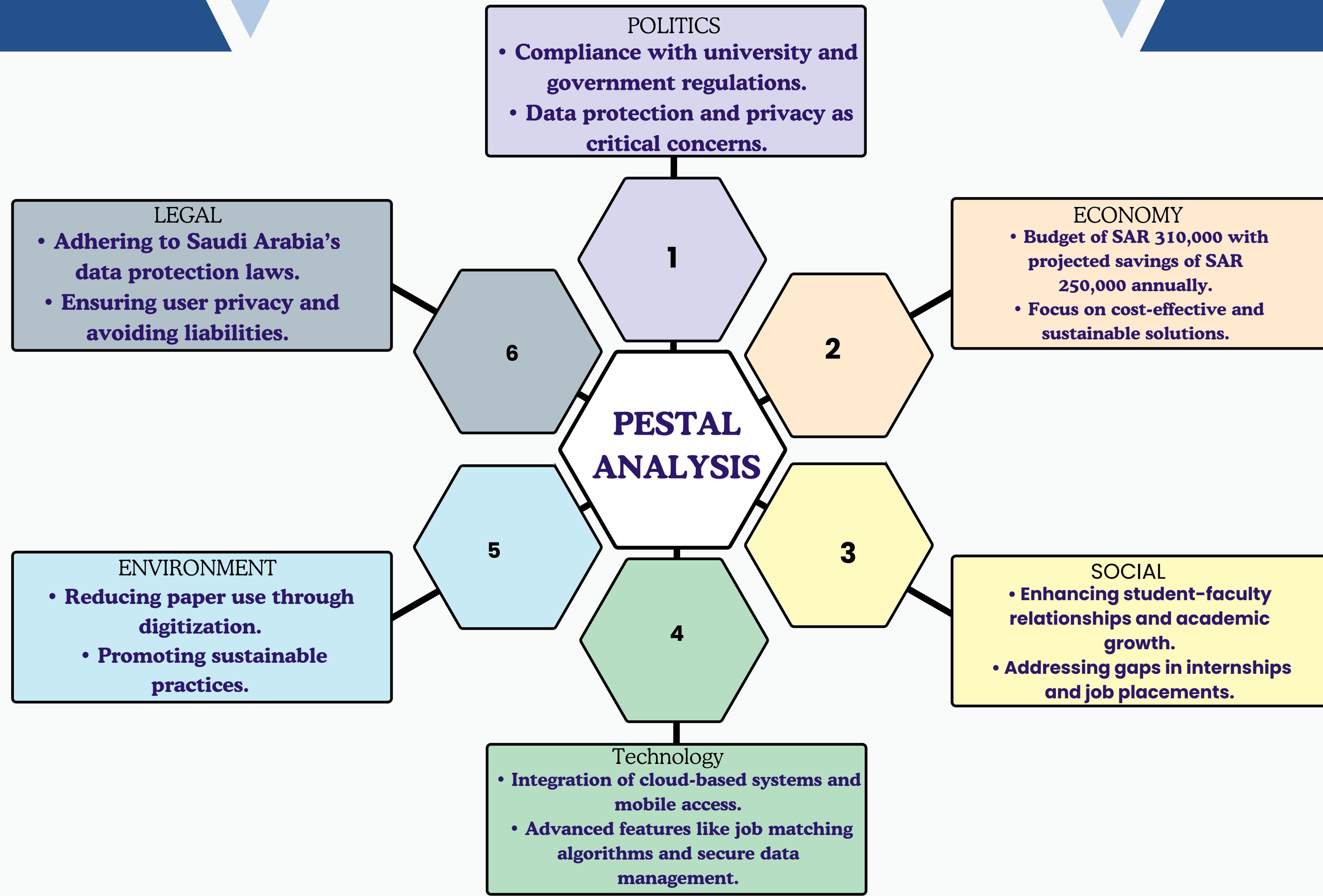
- Partnerships with local businesses, employers, and professionals to enhance job placement and internships.
- Expanding platform features based on user feedback to better serve university students and alumni.
- Growing demand for integrated digital solutions for career services in universities.

● WEAKNESS

- Dependence on user adoption: Convincing students, faculty, and employers to switch from traditional systems or existing platforms.
- Limited brand recognition: The platform is new and needs visibility to compete with established systems.
- Resistance to change from faculty accustomed to manual or existing systems.

● THREATS

- Competition from established job placement and recommendation platforms.
- Technological advancements may require continuous updates and improvements to stay competitive.
- Regulatory challenges related to data security and privacy may limit some features



PM Charter

PROJECT CHARTER

Project Title: UJ Pathfinder

Project Start Date: 6/11/2024

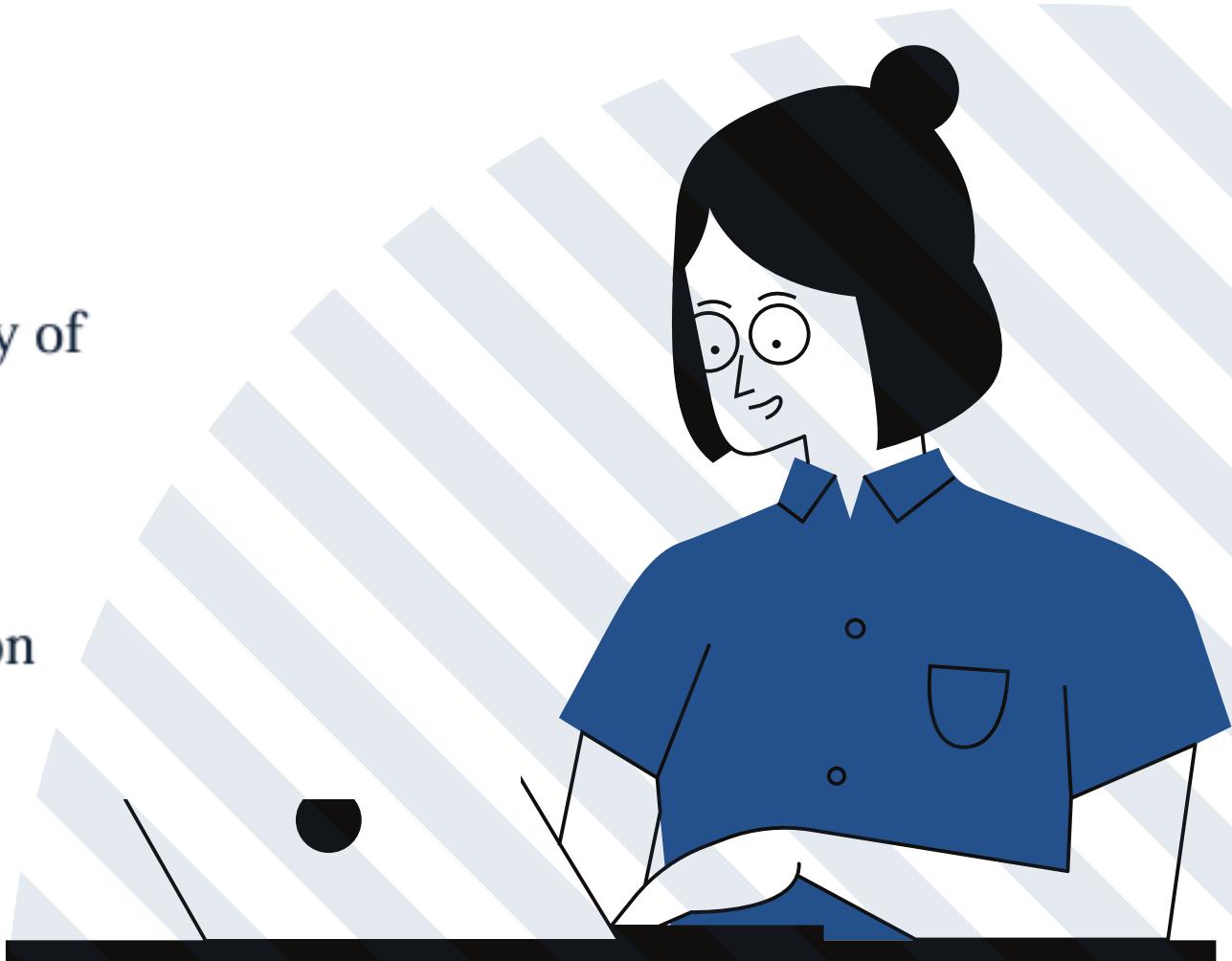
Projected Finish Date: 27/7/2025

Budget Information: The project budget is set at 150,000 SAR primarily allocated for software development, marketing, and promotional activities.

Project Manager: Layan Kandil ,0557859333, layanKandil@UjPathFinder.edu.sa

Project Objectives:

Develop and launch the UJ PathFinder application, enabling students at the University of Jeddah to manage their profiles, request academic recommendations, access training opportunities, and connect with potential employers. The app aims to enhance communication within the University of Jeddah community and facilitate the transition from academic to professional life.



Main Project Success Criteria: The project should achieve a user adoption rate of at least 70% among target users within three months post-launch and generate measurable engagement metrics, such as the number of recommendations processed, and job placements facilitated.

Approach:

- Conduct comprehensive market research to assess the needs and preferences of students and employers.
- Develop prototypes and perform user testing to refine features based on feedback.
- Collaborate with university faculty, career services, and industry partners to ensure the app meets educational and professional standards.
- Implement strong security protocols to protect user data and privacy.



Roles and Responsibilities

Role	Name	Organization/ Position	Contact Information
Project Manager	Layan Kandil	UJ PathFinder, Project Manager	layanKandil@UJPathFinder.edu.sa
Sponsor	Dr. Wed Abu- zanadah	UJ PathFinder, Investor	Waz@UJPathFinder.edu.sa
Team Member	Deema	UJPathFinder, Senior Developer	Deema@UJPathFinder.com
Advisor	Dr. Omniya Wajeeh	UJ PathFinder, University Faculty, Client representative	omniyawajeeh@UJPathfinder.edu.sa
Advisor	Aryam Alotaibi	UJ PathFinder, Graduated Student , Client representative	Aryam@UJPathFinder.com

Sign-off:    

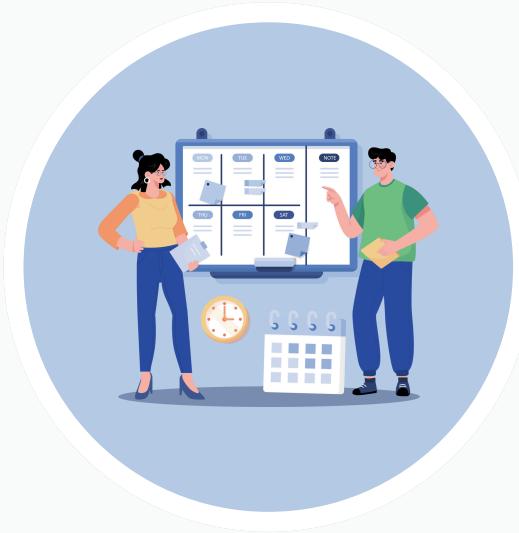
Comments: "Please note that the scope excludes any modifications to existing backend systems. Any changes to backend functionality will require separate approval and budget allocation."

Project Scope Processes

Project scope processes

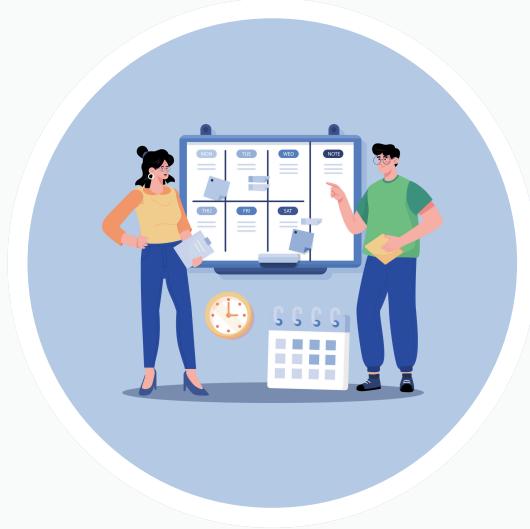
Project Justification

- Issue Addressed: Lack of a centralized platform connecting students, alumni, faculty, and companies at Jeddah University.
- Goals:
 - Streamline academic recommendations.
 - Connect students with job prospects.
 - Manage graduation documents efficiently.
 - Bridges the gap between students, alumni, faculty, and companies.



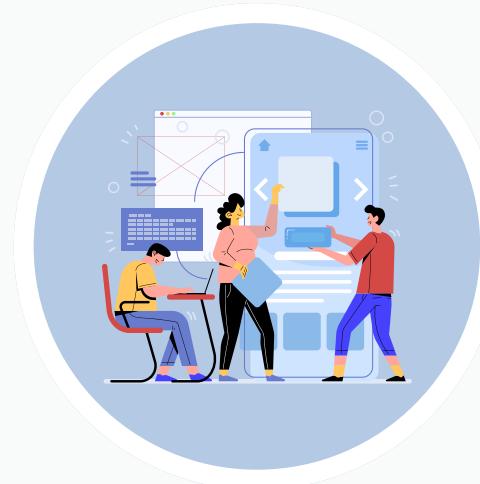
Product Characteristics

- A unified platform that connects students, alumni, faculty, and companies, facilitating seamless communication and collaboration.
- Streamlined academic recommendation process.
- Automated graduation document management.
- Integration with local industries and training opportunities.
- Advanced analytics for user engagement tracking.
- Secure, mobile-accessible, and operational 24/7.

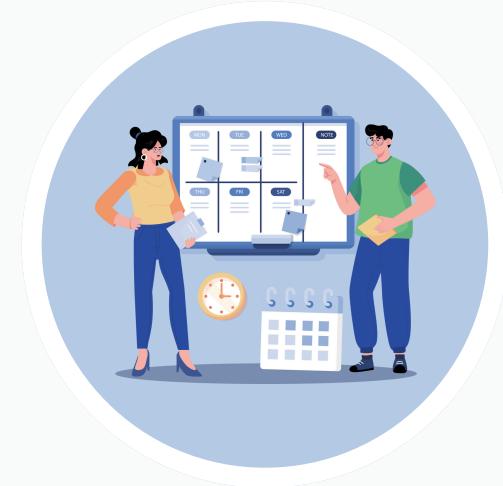


Product-related deliverables:

- User Research Report: Identify the needs and preferences of users to inform design.
- Software Development: Build and integrate the UJ PathFinder application.
- UX Prototypes: Develop interactive prototypes to gather user feedback.
- Job Matching Feature: Implement a system for connecting students with job opportunities.
- Analytics Dashboard: Track user engagement and measure platform effectiveness.
- Marketing Strategy: Plan promotional activities to boost user adoption.



Success Criteria



- Timeline: Complete the project within seven months.
- Budget: Stay within the allocated budget.
- User Engagement: Effectively meet the needs of both students and faculty.
- Reputation: Enhance the university's reputation and improve job placement rates.

Project Schedule Processes

Work break down structure (WBS)

Planning

- 1.1 Budget Planning
 - 1.1.1 Estimate Costs of App Development
 - 1.1.2 Develop Cost Baseline
- 1.2 Risk Management Planning
 - 1.2.1 Identify Risks
 - 1.2.2 Develop Risk Mitigation Strategies
- 1.3 Develop Testing Plan



Design and Development

- 2.1 Conduct User Research
 - 2.1.1 Surveys and Interviews
 - 2.1.2 Data Analysis
- 2.2 Platform Design
 - 2.2.1 Create Wireframes
 - 2.2.2 Develop UI/UX Prototypes

Design and Development

- 2.3 Prototypes Creation
 - 2.3.1 Develop Front-end Prototype
 - 2.3.2 Develop Back-end Prototype
 - 2.3.3 Prototypes Creation Complete
- 2.4 Software Development
 - 2.4.1 Implement Front-end Functionality
 - 2.4.2 Implement Back-end Functionality
 - 2.4.3 Integrate Front-end and Back-end

Design and Development

2.4.4 Develop Using Node.js

2.4.5 Implement Core Application Features

2.4.6 Optimize and Integrate Database

2.5 Testing and Quality Assurance

2.5.1 Conduct User Acceptance Testing

2.5.2. Conduct Unit Testing

2.5.3. Perform Integration Testing

Operational Management and Maintenance

3.1 Set up Customer Support for App Users

3.2 Plan for Regular App Updates

Implementation

- 4.1 Deploy Platform
- 4.2 Conduct Training Sessions
- 4.3 Launch Marketing Campaign

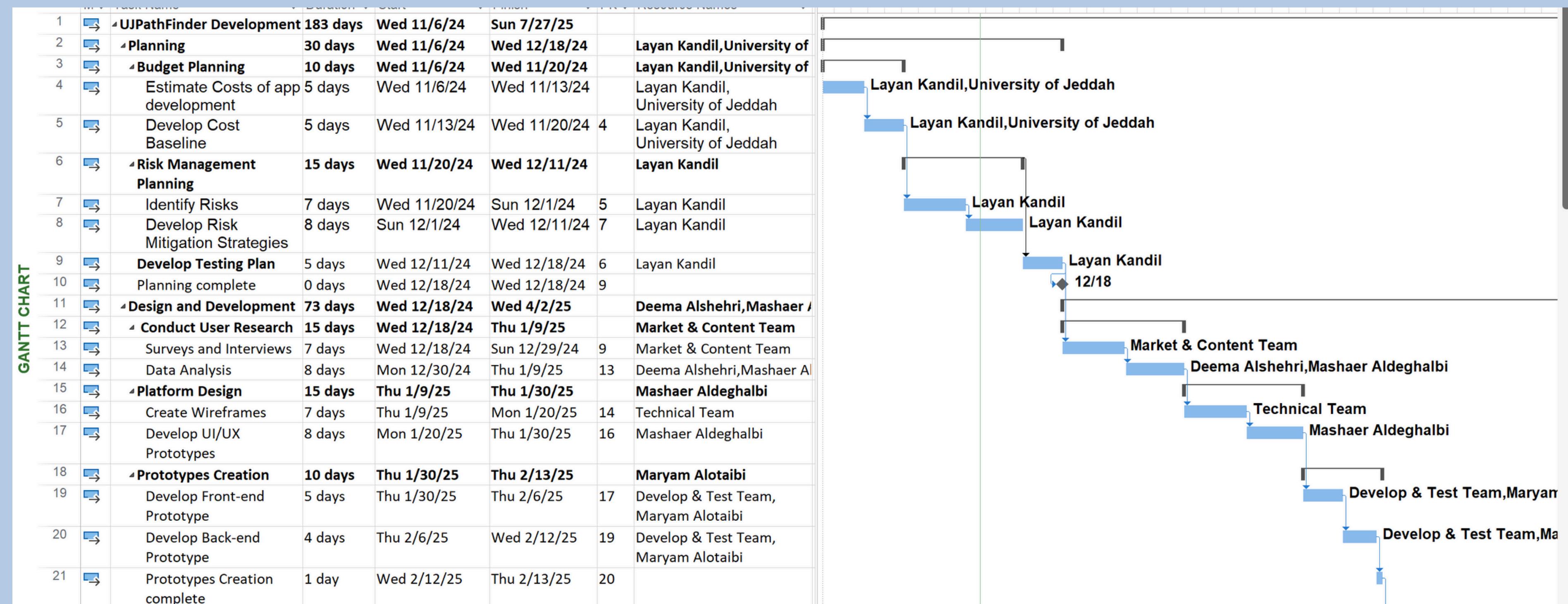
Monitoring and Control

- 5.1 Track Project Progress
 - 5.1.1 Update Status Report
 - 5.1.2 Hold Regular Team Meetings
- 5.2 Manage Risks
 - 5.2.1 Monitor Risk Mitigation
- 5.3 Gather User Feedback
 - 5.3.1 Analyze Feedback for Improvements

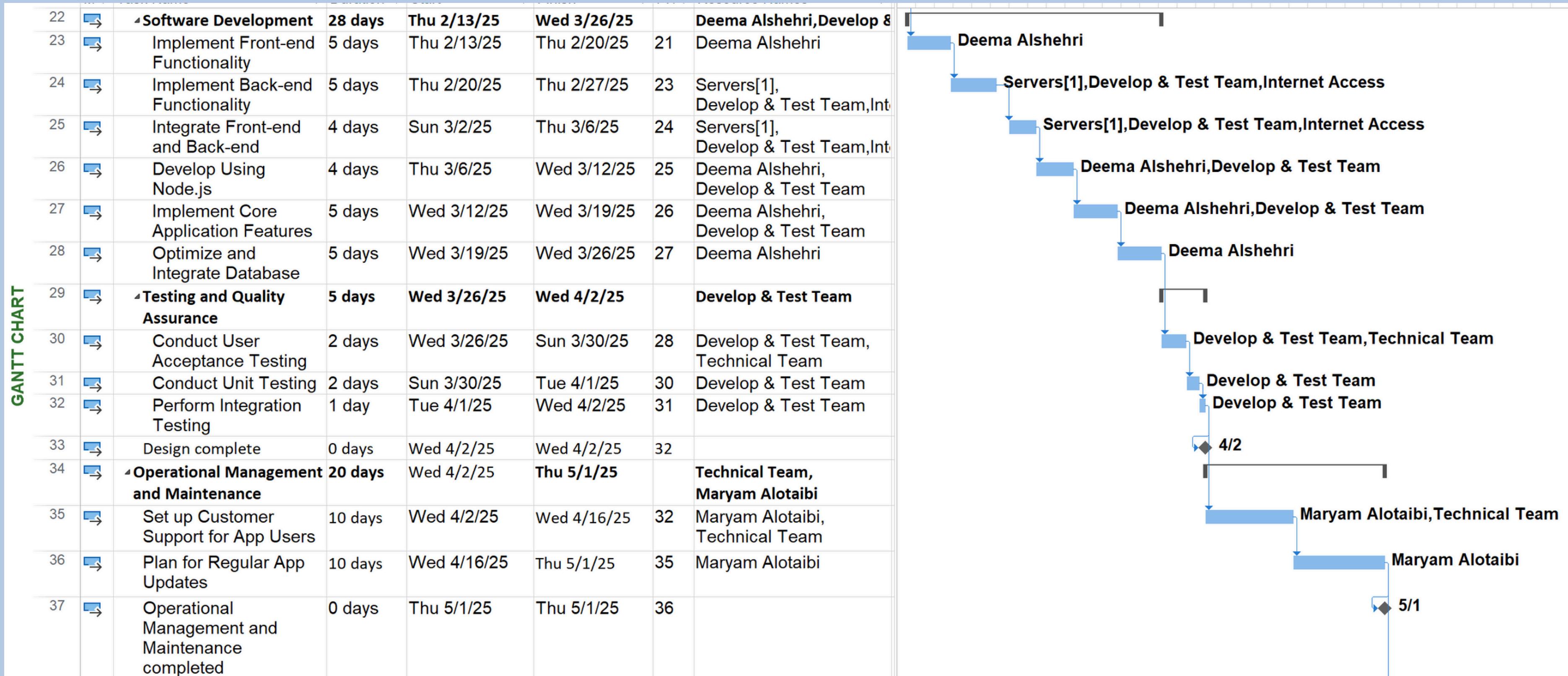
Closure

- 6.1 Finalize Deliverables
- 6.2 Conduct Final Project Review
- 6.3 Document Lessons Learned
- 6.4 Release Project Resources

WBS Gantt Chart

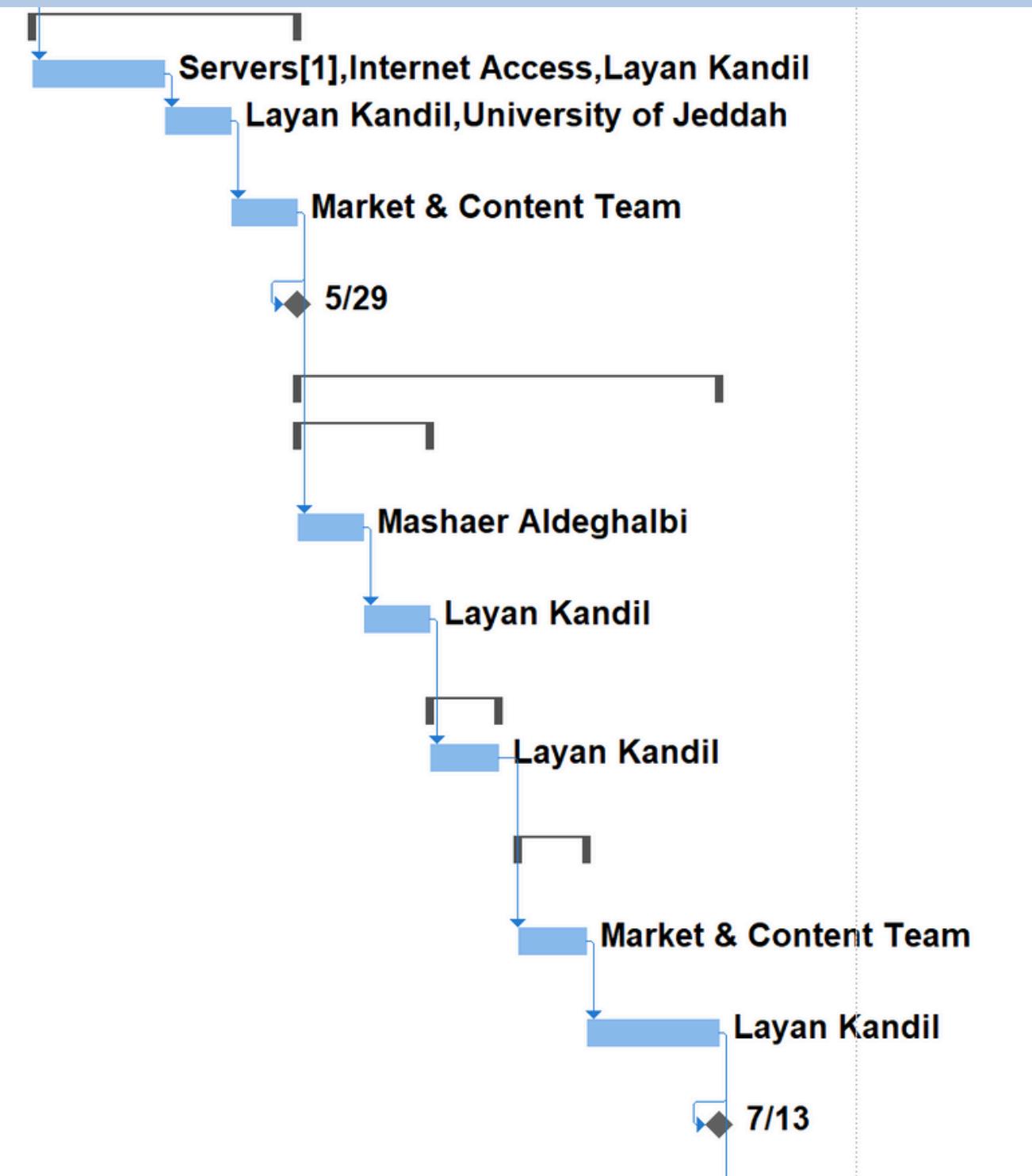


WBS Gantt Chart



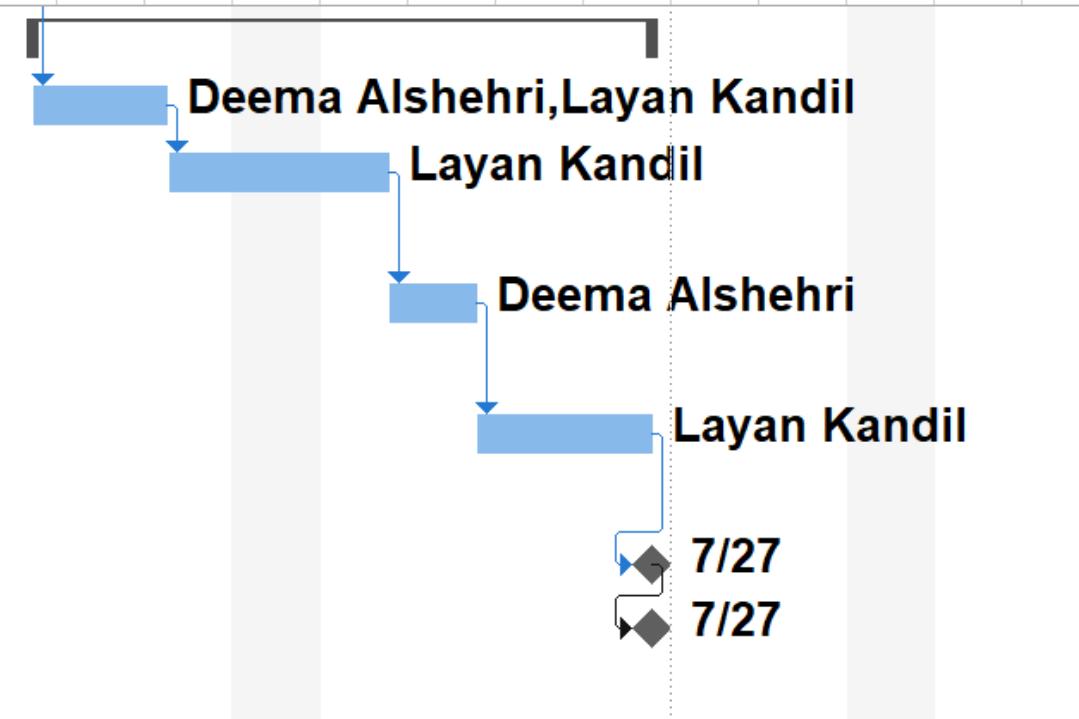
WBS Gantt Chart

38	➡ ▾ Implementation	20 days	Thu 5/1/25	Thu 5/29/25		Layan Kandil
39	➡ Deploy Platform	10 days	Thu 5/1/25	Thu 5/15/25	36	Servers[1],Internet Acces
40	➡ Conduct Training Sessions	5 days	Thu 5/15/25	Thu 5/22/25	39	Layan Kandil, University of Jeddah
41	➡ Launch Marketing Campaign	5 days	Thu 5/22/25	Thu 5/29/25	40	Market & Content Team
42	➡ implementation completed	0 days	Thu 5/29/25	Thu 5/29/25	41	
43	➡ ▾ Monitoring and Control	30 days	Thu 5/29/25	Sun 7/13/25		Layan Kandil,Mashaer Aldeghalbi
44	➡ ▾ Track Project Progress	10 days	Thu 5/29/25	Thu 6/12/25		Layan Kandil
45	➡ Update Status Reports	5 days	Thu 5/29/25	Thu 6/5/25	41	Mashaer Aldeghalbi
46	➡ Hold Regular Team Meetings	5 days	Thu 6/5/25	Thu 6/12/25	45	Layan Kandil
47	➡ ▾ Manage Risks	5 days	Thu 6/12/25	Thu 6/19/25		Layan Kandil
48	➡ Monitor Risk Mitigation	5 days	Thu 6/12/25	Thu 6/19/25	46	Layan Kandil
49	➡ ▾ Gather User Feedback	5 days	Sun 6/22/25	Sun 6/29/25		Market & Content Team
50	➡ Analyze Feedback for Improvements	5 days	Sun 6/22/25	Sun 6/29/25	48	Market & Content Team
51	➡ Manage Change Requests	10 days	Sun 6/29/25	Sun 7/13/25	50	Layan Kandil
52	➡ Monitoring and control completed	0 days	Sun 7/13/25	Sun 7/13/25	51	



WBS Gantt Chart

53	➡ Closure	10 days	Sun 7/13/25	Sun 7/27/25		Layan Kandil,Deema Alshehri
54	➡ Finalize Deliverables	3 days	Sun 7/13/25	Wed 7/16/25	51	Deema Alshehri,Layan Kandil
55	➡ Conduct Final Project Review	3 days	Wed 7/16/25	Mon 7/21/25	54	Layan Kandil
56	➡ Document Lessons Learned	2 days	Mon 7/21/25	Wed 7/23/25	55	Deema Alshehri
57	➡ Release Project Resources	2 days	Wed 7/23/25	Sun 7/27/25	56	Layan Kandil
58	➡ Closure complete	0 days	Sun 7/27/25	Sun 7/27/25	57	
59	➡ UJPathFinder Development completed	0 days	Sun 7/27/25	Sun 7/27/25	58	



Software project costing

Financial analysis

	A	B	C	D	E	F	G	
1	Financial Analysis for UjPathFinder							
2								
3								
4	Discount rate		8.00%					
5								
6	Assume the project is completed in Year 0			Year				
7		0	1	2	3	Total		
8	Costs	150,000	40,000	40,000	40,000			
9	Discount factor	1.00	0.93	0.86	0.79			
10	Discounted costs	150,000	37,200	34,400	31,600	253,200		
11								
12	Benefits	0	250,000	250,000	250,000			
13	Discount factor	1.00	0.93	0.86	0.79			
14	Discounted benefits	0	232,500	215,000	197,500	645,000		
15								
16	Discounted benefits - costs	(150,000)	195,300	180,600	165,900	391,800	← NPV	
17	Cumulative benefits - costs	(150,000)	45,300	225,900	391,800			
18								
19	ROI →		155%					
20			↑					
21	Assumptions		Payback in Year 1					
22	Initial costs are incurred at the start (Year 0). Benefits accrue starting Year 1 after the system becomes operational. Constant benefits growth reflecting increased adoption and usage over time. Costs are limited to maintenance post-initial implementation. Discount rate reflects the expected return on investment, set at 8% based on economic conditions and project risk.							

Activity Cost Estimation

	A	B	C	D	E	F
1	WBS Items	# Units/Hrs	Cost/Unit/Hr (SAR)	Subtotals (SAR)	WBS Level 1 Totals (SAR)	% of Total
2	1. Project Planning and Preparation				12500	
3	Budget Planning	50	56	2800		0.90
4	Estimate Costs of App Develop	60	70	4200		1.35
5	Develop Cost Baseline	50	60	3000		0.97
6	Risk Management Planning	50	50	2500		0.81
7	2. Design and Development				166120	
8	Conduct User Research	120	65	7800		2.52
9	Surveys and Interviews	80	69	5520		1.78
10	Data Analysis	100	65	6500		2.10
11	Platform Design	100	55	5500		1.77
12	Create Wireframes	80	75	6000		1.94
13	Develop UI/UX Prototypes	120	60	7200		2.32
14	Prototypes Creation	120	55	6600		2.13
15	Develop Front-end Prototype	80	70	5600		1.81
16	Develop Back-end Prototype	80	55	4400		1.42
17	Prototypes Creation Complete	60	65	3900		1.26
18	Software Development	400	100	40000		12.90
19	Implement Front-end Function	200	50	10000		3.23
20	Implement Back-end Function	220	50	11000		3.55
21	Integrate Front-end and Back-e	210	55	11550		3.73
22	Develop Using Node.js	230	60	13800		4.45

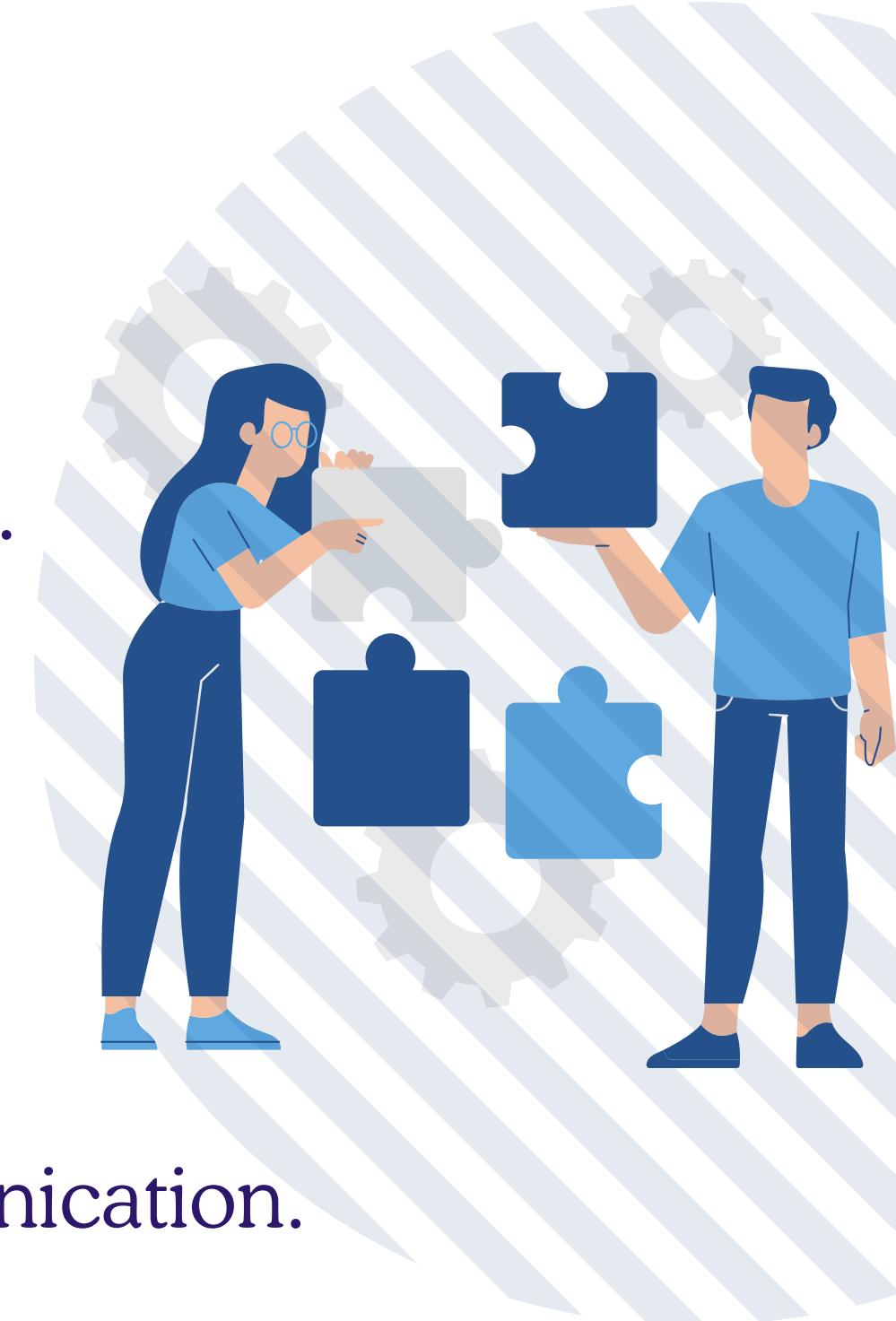
Activity Cost Estimation

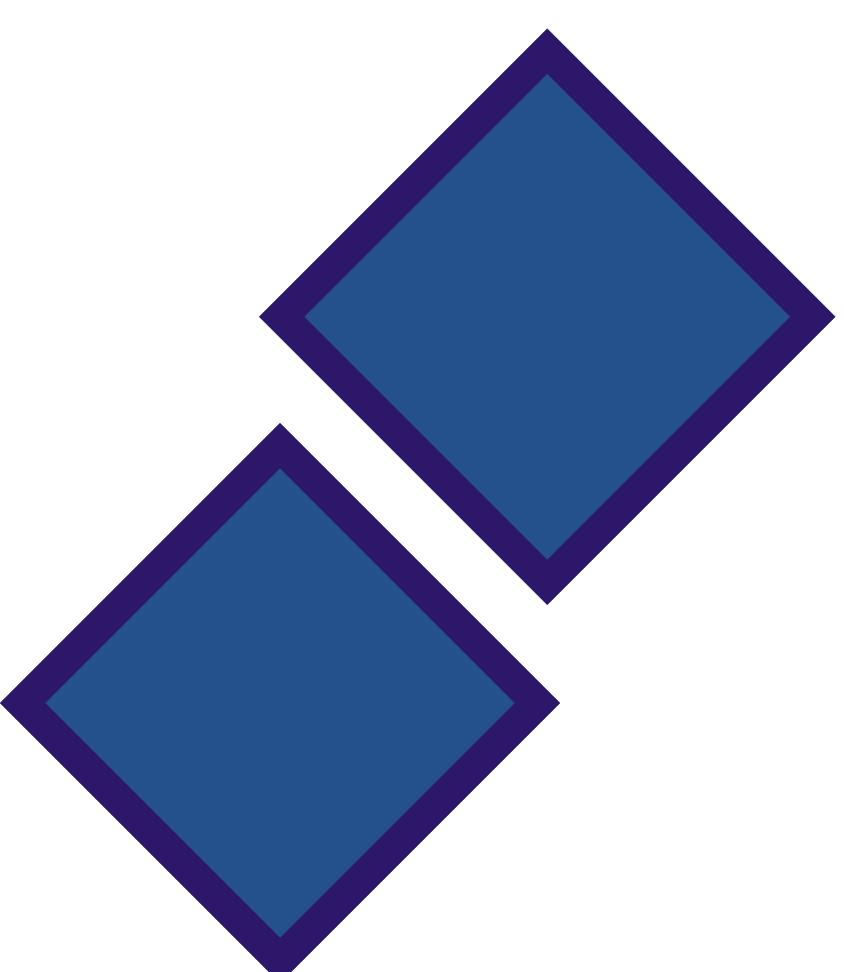
	A	B	C	D	E	F
22	Develop Using Node.js	230	60	13800		4.45
23	Implement Core Application Features	215	50	10750		3.47
24	Optimize and Integrate Databases	200	50	10000		3.23
25	3. Testing and Quality Assurance				32280	
26	Conduct User Acceptance Testing	50	70	3500		1.13
27	Conduct Unit Testing	60	75	4500		1.45
28	Perform Integration Testing	50	70	3500		1.13
29	Debugging and Fixes	120	90	10800		3.48
30	Security and Compliance Testing	72	90	6480		2.09
31	Post-Deployment Testing	50	70	3500		1.13
32	4. Implementation Phase				20400	
33	Deploy Platform	120	90	10800		3.48
34	Conduct Training Sessions	60	70	4200		1.35
35	Launch Marketing Campaign	60	90	5400		1.74
36	5. Maintenance and Support				32200	
37	Ongoing App Updates	120	120	14400		4.65
38	User Feedback Management	80	70	5600		1.81
39	Technical Support	100	80	8000		2.58
40	Bug Fixes and Security Patches	60	70	4200		1.35
41	6. Reserves (Risk Factor)			46500	46500	15.00
42	Total Project Cost Estimate				310,000.00	100.00%
43						

Lessons Learned and Experience Gained

Lessons Learned and Experience Gained

- Improved teamwork and communication.
- Gained project management and planning skills.
- Enhanced technical expertise in software development and testing.
- Learned problem-solving and decision-making under pressure.
- Understood the importance of user-focused design.
- Acquired experience in risk management and stakeholder communication.





THANK YOU

