AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH

Faculty of Engineering

Laboratory Report Cover Sheet

METRO RAIL APP IN DHAKA

Final Term LAB Reports

Semester: Spring_22_23		Section: F	Group Number: 6
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SOFTWARE ENGINEERING [F]
SUPERVISED BY,
DR.S.M. HASAN MAHMUD

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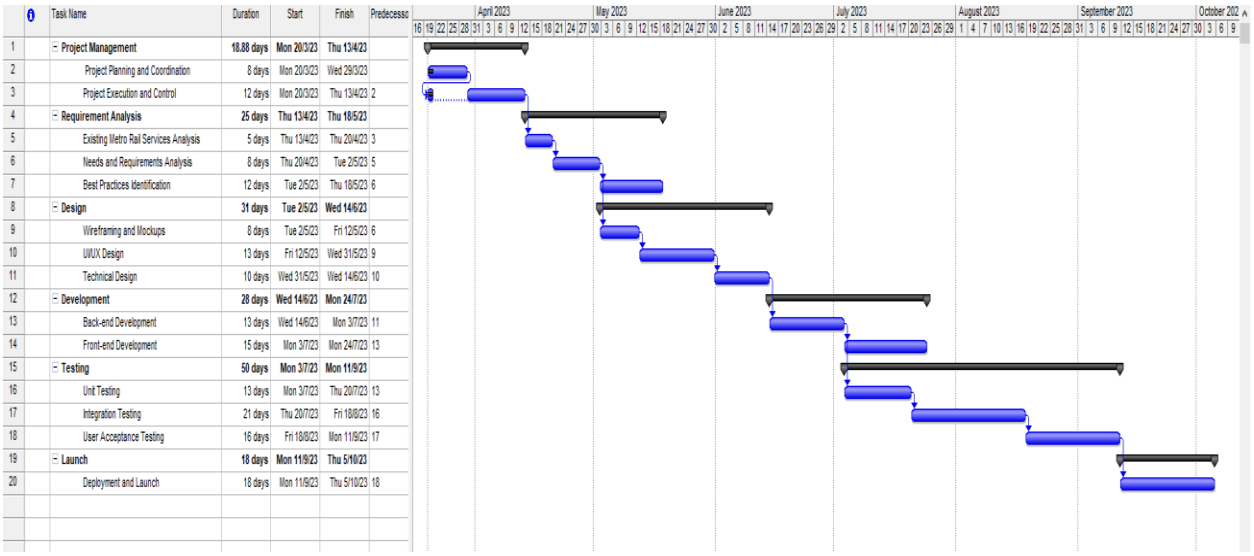
WBS Effort estimation:



	Task Name	Duration	Start	Finish	Predecesso
1	Project Management	18.88 days	Mon 20/3/23	Thu 13/4/23	
2	Project Planning and Coordination	8 days	Mon 20/3/23	Wed 29/3/23	
3	Project Execution and Control	12 days	Mon 20/3/23	Thu 13/4/23	2
4	Requirement Analysis	25 days	Thu 13/4/23	Thu 18/5/23	
5	Existing Metro Rail Services Analysis	5 days	Thu 13/4/23	Thu 20/4/23	3
6	Needs and Requirements Analysis	8 days	Thu 20/4/23	Tue 2/5/23	5
7	Best Practices Identification	12 days	Tue 2/5/23	Thu 18/5/23	6
8	Design	31 days	Tue 2/5/23	Wed 14/6/23	
9	Wireframing and Mockups	8 days	Tue 2/5/23	Fri 12/5/23	6
10	UIUX Design	13 days	Fri 12/5/23	Wed 31/5/23	9
11	Technical Design	10 days	Wed 31/5/23	Wed 14/6/23	10
12	Development	28 days	Wed 14/6/23	Mon 24/7/23	
13	Back-end Development	13 days	Wed 14/6/23	Mon 3/7/23	11
14	Front-end Development	15 days	Mon 3/7/23	Mon 24/7/23	13
15	Testing	50 days	Mon 3/7/23	Mon 11/9/23	
16	Unit Testing	13 days	Mon 3/7/23	Thu 20/7/23	13
17	Integration Testing	21 days	Thu 20/7/23	Fri 18/8/23	16
18	User Acceptance Testing	16 days	Fri 18/8/23	Mon 11/9/23	17
19	Launch	18 days	Mon 11/9/23	Thu 5/10/23	
20	Deployment and Launch	18 days	Mon 11/9/23	Thu 5/10/23	18

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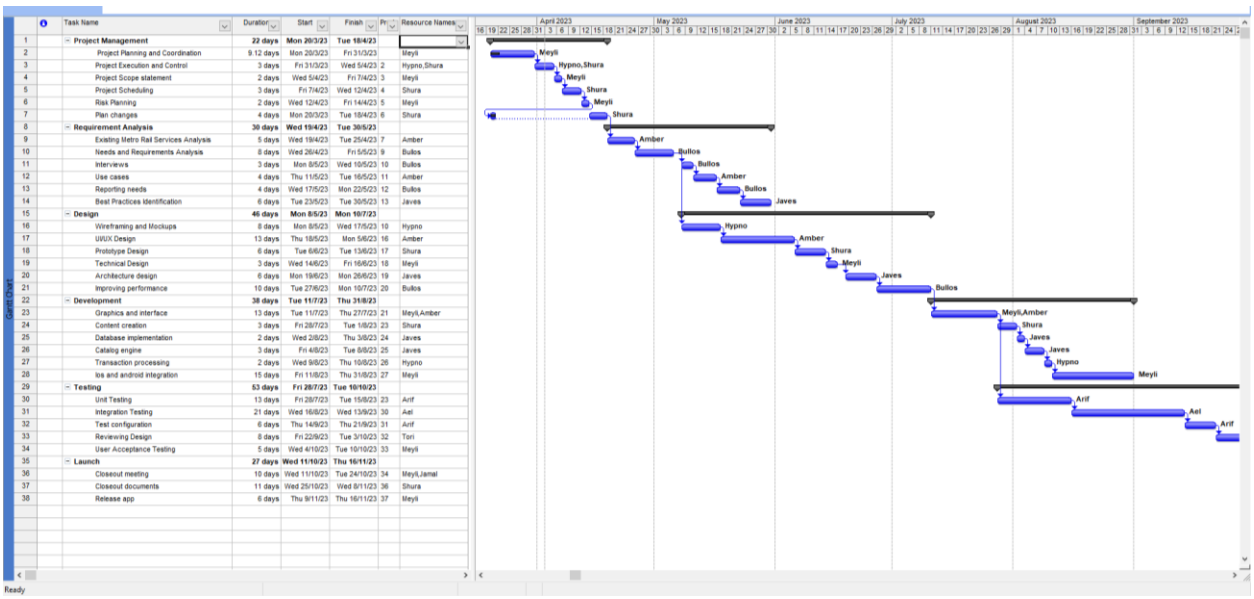
Resource Allocation:



	Task Name	Duration	Start	Finish	Pr	Resource Names
1	Project Management	22 days	Mon 20/3/23	Tue 18/4/23		
2	Project Planning and Coordination	9.12 days	Mon 20/3/23	Fri 31/3/23		Meyli
3	Project Execution and Control	3 days	Fri 31/3/23	Wed 5/4/23	2	Hypno,Shura
4	Project Scope statement	2 days	Wed 5/4/23	Fri 7/4/23	3	Meyli
5	Project Scheduling	3 days	Fri 7/4/23	Wed 12/4/23	4	Shura
6	Risk Planning	2 days	Wed 12/4/23	Fri 14/4/23	5	Meyli
7	Plan changes	4 days	Mon 20/3/23	Tue 18/4/23	6	Shura
8	Requirement Analysis	30 days	Wed 19/4/23	Tue 30/5/23		
9	Existing Metro Rail Services Analysis	5 days	Wed 19/4/23	Tue 25/4/23	7	Amber
10	Needs and Requirements Analysis	8 days	Wed 26/4/23	Fri 5/5/23	9	Bullos
11	Interviews	3 days	Mon 8/5/23	Wed 10/5/23	10	Bullos
12	Use cases	4 days	Thu 11/5/23	Tue 16/5/23	11	Amber
13	Reporting needs	4 days	Wed 17/5/23	Mon 22/5/23	12	Bullos
14	Best Practices Identification	6 days	Tue 23/5/23	Tue 30/5/23	13	Javes
15	Design	46 days	Mon 8/5/23	Mon 10/7/23		
16	Wireframing and Mockups	8 days	Mon 8/5/23	Wed 17/5/23	10	Hypno
17	UIUX Design	13 days	Thu 18/5/23	Mon 5/6/23	16	Amber
18	Prototype Design	6 days	Tue 6/6/23	Tue 13/6/23	17	Shura
19	Technical Design	3 days	Wed 14/6/23	Fri 16/6/23	18	Meyli
20	Architecture design	6 days	Mon 19/6/23	Mon 26/6/23	19	Javes
21	Improving performance	10 days	Tue 27/6/23	Mon 10/7/23	20	Bullos
22	Development	38 days	Tue 11/7/23	Thu 31/8/23		
23	Graphics and interface	13 days	Tue 11/7/23	Thu 27/7/23	21	Meyli,Amber
24	Content creation	3 days	Fri 28/7/23	Tue 1/8/23	23	Shura
25	Database implementation	2 days	Wed 2/8/23	Thu 3/8/23	24	Javes
26	Catalog engine	3 days	Fri 4/8/23	Tue 8/8/23	25	Javes
27	Transaction processing	2 days	Wed 9/8/23	Thu 10/8/23	26	Hypno
28	Ios and android integration	15 days	Fri 11/8/23	Thu 31/8/23	27	Meyli
29	Testing	53 days	Fri 28/7/23	Tue 10/10/23		
30	Unit Testing	13 days	Fri 28/7/23	Tue 15/8/23	23	Arif
31	Integration Testing	21 days	Wed 16/8/23	Wed 13/9/23	30	Ael
32	Test configuration	6 days	Thu 14/9/23	Thu 21/9/23	31	Arif
33	Reviewing Design	8 days	Fri 22/9/23	Tue 3/10/23	32	Tori
34	User Acceptance Testing	5 days	Wed 4/10/23	Tue 10/10/23	33	Meyli
35	Launch	27 days	Wed 11/10/23	Thu 16/11/23		
36	Closeout meeting	10 days	Wed 11/10/23	Tue 24/10/23	34	Meyli,Jamal
37	Closeout documents	11 days	Wed 25/10/23	Wed 8/11/23	36	Shura
38	Release app	6 days	Thu 9/11/23	Thu 16/11/23	37	Meyli

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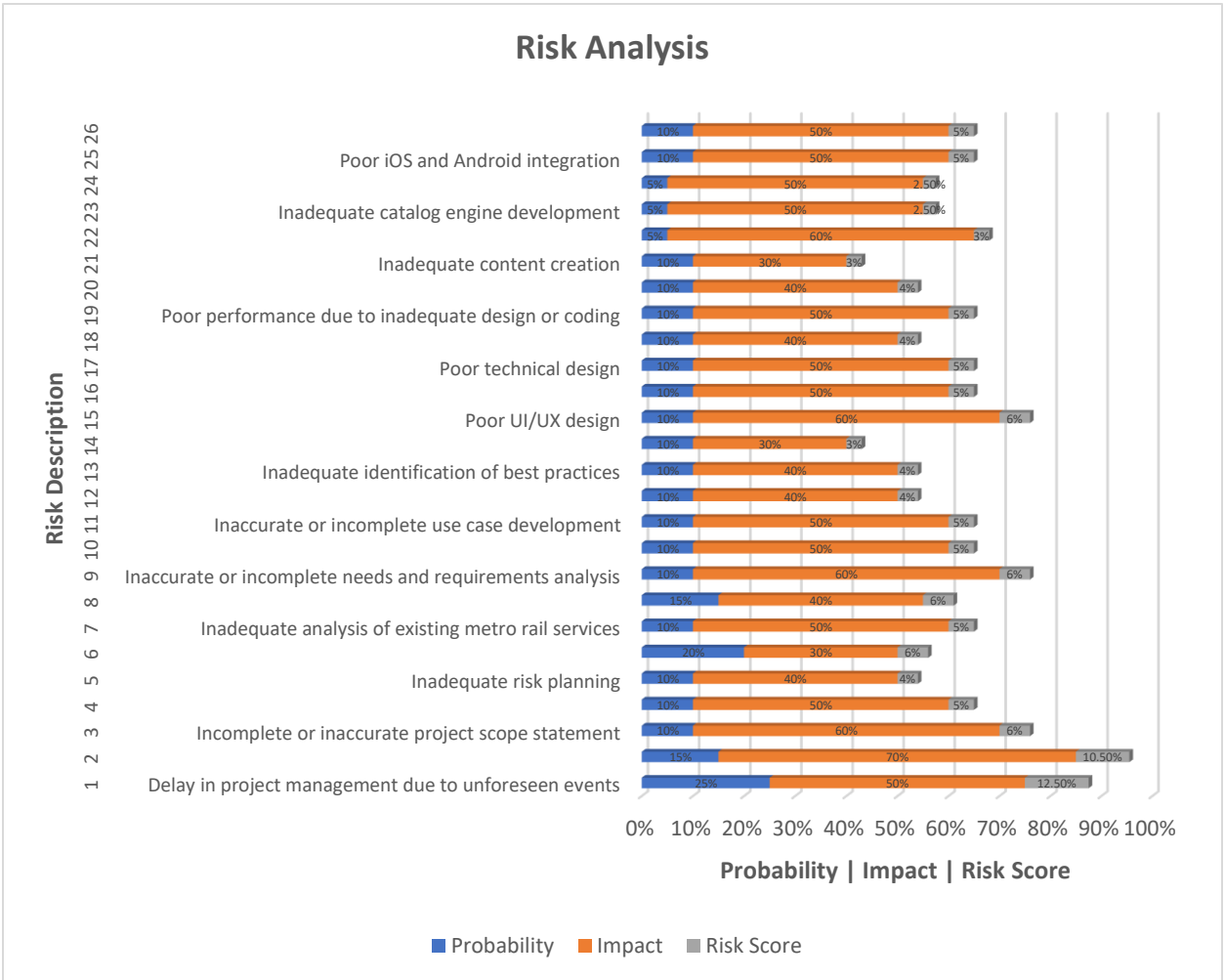
Risk analysis:

Risk Assessment										
Area Name: Updated by:										
		Inherent Risk (without controls)						Residual Risk(with controls)		
Unique ID	Risk Description	Probability	Impact	Risk rating	Probability	Impact	Risk score	Residual Probability	Residual Impact	Residual Risk Rating
1	Delay in project management due to unforeseen events	Medium	Very Low	Sustainable	25%	50%	12.50%	Low	Very low	Sustainable
2	Poor project execution and control	Low	High	Severe	15%	70%	10.50%	Low	High	Severe
3	Incomplete or inaccurate project scope statement	Medium	Medium	Moderate	10%	60%	6%	Medium	Medium	Moderate
4	Inaccurate or unrealistic project scheduling	Low	Medium	Moderate	10%	50%	5%	Low	Low	Sustainable
5	Inadequate risk planning	High	High	Critical	10%	40%	4%	Medium	Medium	Moderate
6	Scope changes and requirements alterations	High	Very Low	Sustainable	20%	30%	6%	Medium	Very Low	Sustainable
7	Inadequate analysis of existing metro rail services	Medium	Low	Moderate	10%	50%	5%	Low	Low	Severe
8	Lack of user engagement and feedback	Medium	Very Low	Sustainable	15%	40%	6%	Low	Low	Moderate
9	Inaccurate or incomplete needs and requirements analysis	Low	High	Severe	10%	60%	6%	Low	Low	Sustainable
10	Inaccurate or incomplete interviews with stakeholders	Medium	Medium	Moderate	10%	50%	5%	Low	Low	Moderate
11	Inaccurate or incomplete use case development	Low	Medium	Moderate	10%	50%	5%	Low	Low	Sustainable
12	Inadequate identification of reporting needs	High	High	Critical	10%	40%	4%	Low	Low	Severe
13	Inadequate identification of best practices	High	Very Low	Sustainable	10%	40%	4%	Low	Low	Moderate
14	Delay in wireframing and mockups due to unforeseen events	Medium	Low	Moderate	10%	30%	3%	Low	Low	Sustainable
15	Poor UI/UX design	Medium	Very Low	Sustainable	10%	60%	6%	Low	Low	Moderate
16	Poor prototype design	Low	High	Severe	10%	50%	5%	Low	Low	Sustainable
17	Poor technical design	Medium	Medium	Moderate	10%	50%	5%	Low	Low	Severe
18	Inadequate architecture design	Low	Medium	Moderate	10%	40%	4%	Low	Low	Moderate
19	Poor performance due to inadequate design or coding	High	High	Critical	10%	50%	5%	Low	Low	Sustainable
20	Graphics and interface issues	High	Very Low	Sustainable	10%	40%	4%	Low	Low	Moderate
21	Inadequate content creation	Medium	Low	Moderate	10%	30%	3%	Low	Low	Severe
22	Inadequate database implementation	Medium	Very Low	Sustainable	5%	60%	3%	Low	Low	Moderate
23	Inadequate catalog engine development	Low	High	Severe	5%	50%	2.50%	Low	Low	Sustainable

Probability	Impact
Very High	Very High
High	High
Medium	Medium
Low	Low
Very Low	Very Low

Risk Matrix:

	Impact:	Very Low	Low	Medium	High	Very High
Probability	Very High	Moderate	Severe	Severe	Critical	Critical
	High	Sustainable	Moderate	Severe	Critical	Critical
	Medium	Sustainable	Moderate	Moderate	Severe	Critical
	Low	Sustainable	Sustainable	Moderate	Severe	Critical
	Very Low	Sustainable	Sustainable	Sustainable	Moderate	Severe

	Impact:	Very Low	Low	Medium	High	Very High
Probability	Very High					
	High	1				
	Medium	1	1	1	1	
	Low		1	1	1	
	Very Low					1

	Impact:	Very Low	Low	Medium	High	Very High
Probability	Very High					
	High					
	Medium			1		
	Low		1			
	Very Low