Systems analysis and design

Dealings Project

Team Member :

1. Hussein Abd-Elkader
2. Khaled Mohsen
3. Doaa Atef Muhammed
4. Doaa Othman
5. Doaa Ahmed Gharib
6. Salsabil Syed
7. Enas Ragab
8. Sanaa Mohamed

2021/2022

Dealings Application
SYSTEM REQUEST & FEASIBILITY ANALYSIS

System Request

Dealings Project **(project that facilitates interaction between different professionals and clients)**	
project sponser	*E-commerce Company.*
Business Need	**This project was created to:** **1- facilitate communication between different professions (doctors, engineers, electricians, plumbers, barbers, hairdressers.....etc.) and customers who are located in different places and find it difficult to reach the owners of these professions easily.** **2- Increase job opportunities for different professions.** **3- Professionals can be contacted at any time or when necessary.** **4- reduce unemployment.**
Business Requirements	**1- This application can be used using both Android and IOS systems.** **2- This application is used for ease of communication between the customer and the users (professionals).** **3- Create an account on the application for professionals with monthly subscriptions.** **4- Entering experience or certificates for professionals and evaluating them.** **5- Organizing appointments and the appropriate time for each client.**
Business Value	**We expect that the App (Dealings) will increase job opportunities for people with professions, which will increase their income and increase the application's revenues even more.** **Conservative estimates of tangible value to the App include the following:** • *6,800,000 $ in increasing sales.* • *794,000 $ in Downloading the App.* • *533,250 $ in visiting the website.*
Special Issues or Constraints	**1- Finish this project within a period not exceeding one year.** **2- The professionals involved in the application should be highly experienced.** **3- If a customer complains about the profession, the program will automatically send alerts to him, and if the complaints increase again, he will be removed from the application.**
Created By: • ***Doaa Ahmed Gharib*** • ***Doaa Atef Muhammed***	

Technical Feasibility

- ## Familiarity with Application:

- Marketing Department has expertise in advertising, marketing and business management.

- Right now, there are many sites that offer this service to connect consumers and professionals, so we're going to have a problem with that, and to overcome that, we're going to add a lot of advantages.

- ## Familiarity with Technology:

- The IT department has good knowledge of the website used in this system and the databases and IOS App, but not enough knowledge of the Android App, and we'll still use another company for that.

- ## Project Size:

- The project requires a team of about 15 people.
- Money is required to subscribe through App.
- The project will take a year because it will perform many functions.

- ## Compatibility:

Compatibility is good enough to be able to integrate the system with its old currency, and we can also develop this system in the future if we want to.

Created By:

- **Doaa Othman**
- **Salsabil Syed**

Economic Feasibility “Cost–Benefit analysis”

Benefits	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Increased Sales			$100,000	$700,000	$1,000,000	$2,000,000	$3,000,000	$6,800,000
Times Of Download The App			$30,000	$90,000	$110,000	$136,000	$428,000	$794,000
Times Of Visiting The Website			$15,000	$29,000	$85,000	$168,250	$236,000	$533,250
Total Benefits			$145,000	$819,000	$1,195,000	$2,304,250	$3,664,000	$8,127,250
PV Total Benefits			$131,818	$744,545	$1,086,364	$2,094,773	$3,330,909	$7,388,409
Development Costs								
Android Developer	$50,000		0	0	0	0	0	$50,000
IOS Developer	$50,000		0	0	0	0	0	$50,000
Web Developer	$60,000		0	0	0	0	0	$60,000
Android Device	$1,200		0	0	0	0	0	$1,200
Iphone Device	$1,200		0	0	0	0	0	$1,200
4 laptops Devices @ $1500	$6,000		0	0	0	0	0	$6,000
Sotfware Licenses	$800		0	0	0	0	0	$800
Server Software	$6,000		0	0	0	0	0	$6,000
Database Storage	$3,351		0	0	0	0	0	$3,351
Backup Storage	$120		0	0	0	0	0	$120
Total Development Costs	$178,671		0	0	0	0	0	$178,671
Operational Costs								
Hardware			$500	$500	$500	$500	$500	$2,500
Software			$9,471	$9,471	$9,471	$9,471	$9,471	$2,500
Total Operational Costs			$9,971	$9,971	$9,971	$9,971	$9,971	$49,855
Total Costs	$178,671		$9,971	$9,971	$9,971	$9,971	$9,971	$228,526
Net Benefits (Total Benefits - Total Costs)	($178,671.00)		$135,029	$809,029	$1,185,029	$2,294,279	$3,654,029	$7,898,724
Cumulative Net Cash Flow	($178,671.00)		($43,642)	$765,387	$1,950,416	$4,244,695	$7,898,724	
Return on Investment (ROI)	34.56378705 %							
Break-Even Point (BEP)	1.053943678 Years							
PV Total Costs	$178,671		$9,064.55	$8,240.5	$7,491.36	$6,810.33	$6,191.21	$216,469
NPV (PV Total Benefits - PV Total Costs)	$7,171,940							

Created By:

- **Hussein Abd-Elkader**
- **Enas Ragab**

Position	Members	Role
Champion	* Project sponsor. * Project manager. * team members (Android eveloper, ios developers, web developers…etc). * Database designer.	* Providing the necessary hardware to implement the application (android, iphone and laptops devices). * Designing the application and its database.
Organizational Management	* Project sponsor. * Project manager. * Marketing agant.	* Identification and management of risks (no more than 25% risk). * Determine the duration of the project (no more than a year). * Determine the budget of the project. * Marketing for this app.
System Users	* Professionals. * App users for the need.	* Those who want to participate from among the professionals in this application must write down their skills, the nature of their work, their experiences and the certificates they obtained (if exist). * Whoever wants to communicate with any of the customers of these professions must download the application and search for the service he needs, and the professionals of this service will appear to him. * After completing the desired service, an opinion survey is conducted for both the customer and the owner of the profession about the application to make the desired developments.

Created by:
* Doaa Atef Muhammed
* Doaa Othman Muhammed

RISK ASSESSMENT

RISK #1 :

The IT department probably doesn't have enough knowledge on the Android AAP.

Likelihood of risk :

High probability of risk.

Potential impact on the project :

This risk is likely to increase project budget and time.

Ways to address this risk :

It is important that we provide employees with excellent experience and knowledge of the android system, and provide our employees with training in the android system or overcome this by purchasing the system from another company.

RISK #2 :

It is possible that some professionals or users are insufficiently familiar with the use of application.

Likelihood of risk :

High probability of risk.

Potential impact on the project :

It is likely to affect the acceptance and use of the application, and thus its success.

Ways to address this risk :

We will create lots of advertising to awareness and educate professionals and users about the application and how to use it.

RISK #3 :

While booking in the system, there can be confusion in available time, such as when one user is booking an appointment and it can be booked by another user.

Likelihood of risk :

Low probability of risk.

Potential impact on the project :

This risk could affect the evaluation and feedback of the project by users.

Ways to address this risk :

If an appointment has been booked, the new user can no longer book the same appointment and it is important to have a table showing the time available and the time reserved to avoid confusion.

Created by :

. Doaa Othman Muhammed .

Project work plan

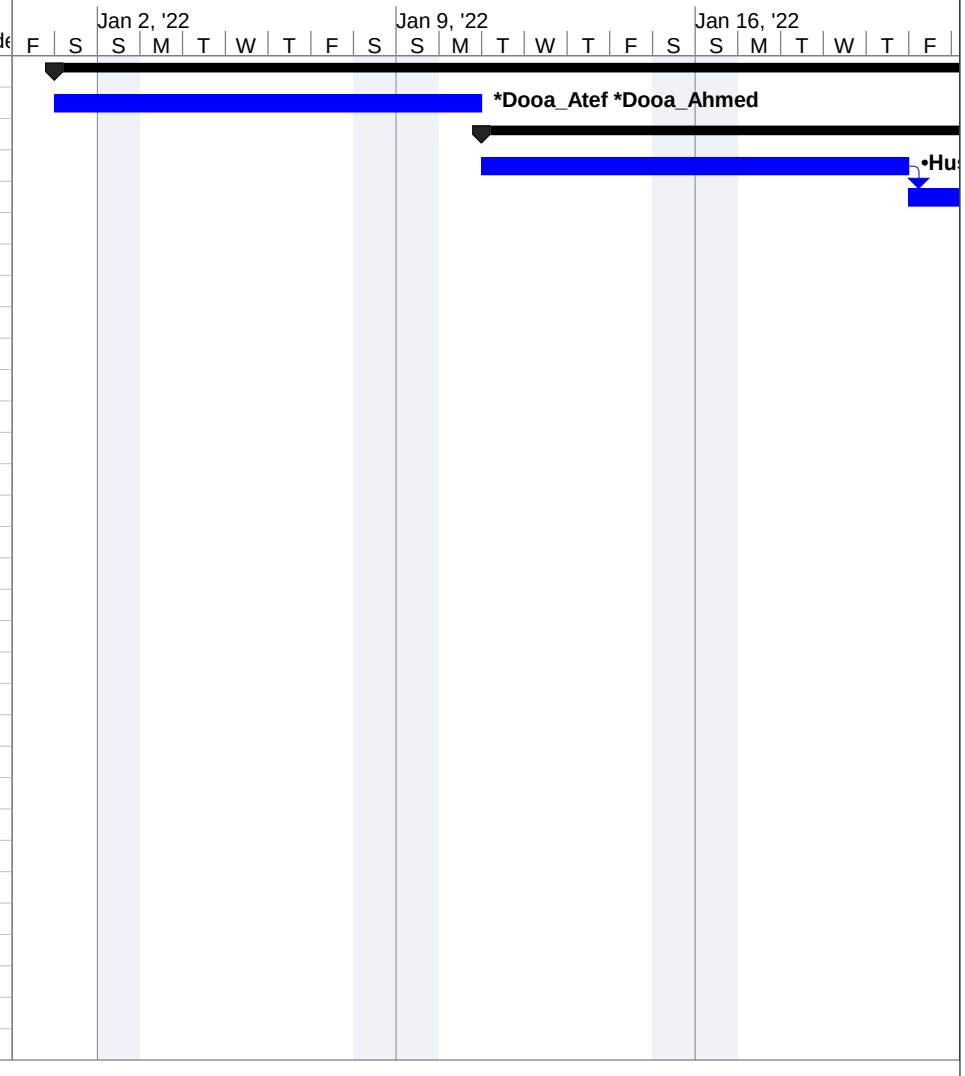
Task ID	Task Name	Assigned To	Duration (days)	Start Date	Finish Data	Start Date 2	Finish Data 2	Duration Variance (days)	Dependency	Status
1	**Planning**									
1.1	System Request	• Doaa Ahmed Gharib • Doaa Atef Muhammed	36	2022-01-01	2022-02-06	2022-01-01	2022-01-10	9		closed
1.2	Feasibility									
1.2.1	Economic Feasibility	• Hussein Abd-Elkader • Enas Ragab	36	2022-01-01	2022-02-06	2022-01-11	2022-01-20	9		closed
1.2.2	Technical Feasibility	• Doaa Othman • Salsabil Syed	36	2022-01-01	2022-02-06	2022-01-21	2022-01-30	9	1.2.1	closed
1.2.3	Organization feasibility	• Doaa Atef Muhammed • Doaa Othman	38	2022-02-07	2022-03-17	2022-02-07	2022-03-15	36		closed
1.3	Project work plan	• Hussein Abd-Elkader • Khaled Mohsen	38	2022-02-07	2022-03-17	2022-02-10	2022-03-14	32		closed
1.4	Gannt chart	• Sanaa Mohamed • Salsabil Syed	27	2022-03-18	2022-04-14	2022-03-18	2022-04-12	25	1.3	closed
2	**Analysis**									
2.1	Requirements									
2.1.1	Functional Requirements	• Hussein Abd-Elkader • Enas Ragab	30	2022-04-15	2022-05-15					open
2.1.2	Nonfunctional Requirements	• Doaa Othman • Salsabil Syed	30	2022-04-15	2022-05-15					open
2.2	Interviews	• Doaa Ahmed Gharib • Doaa Othman	30	2022-04-15	2022-05-15					
2.2.1	Selecting Interviewees	• Hussein Abd-Elkader • Enas Ragab	40	2022-05-16	2022-06-25					open
2.2.2	Designing Interview Questions	• Sanaa Mohamed • Salsabil Syed	40	2022-05-16	2022-06-25					open
2.2.3	Preparing for the Interview	• Doaa Ahmed Gharib • Doaa Atef Muhammed	40	2022-05-16	2022-06-25					open
2.2.4	Conducting the Interview	• Khaled Mohsen	24	2022-06-26	2022-07-20					open
2.2.5	Post-interview Follow-up	• Hussein Abd-Elkader • Enas Ragab	24	2022-06-26	2022-07-20					open
2.3	Root Cause Analysis	• Doaa Othman • Salsabil Syed	24	2022-06-26	2022-07-20					open
2.4	Building Use Cases	• Doaa Ahmed Gharib • Doaa Othman	20	2022-07-21	2022-08-10					open
2.5	Creating Data Flow Diagram	• Khaled Mohsen	20	2022-07-21	2022-08-10					open
2.6	Creating ERD	• Sanaa Mohamed • Salsabil Syed	20	2022-07-21	2022-08-10					open
3	**Design**									
3.1	creating Alternative Matrix	• Khaled Mohsen	35	2022-08-11	2022-09-15					open
3.2	Design Requirements	• Hussein Abd-Elkader • Enas Ragab	35	2022-08-11	2022-09-15					open
3.2.1	Operational Requirements	• Doaa Othman • Salsabil Syed	35	2022-08-11	2022-09-15					open
3.2.2	Performance Requirements	• Doaa Ahmed Gharib • Doaa Othman	35	2022-09-16	2022-10-21					open
3.2.3	Security Requirements	• Hussein Abd-Elkader • Enas Ragab	35	2022-09-16	2022-10-21					open
3.2.4	Cultural and Political Requirements	• Sanaa Mohamed • Salsabil Syed	35	2022-09-16	2022-10-21					open
3.3	Tune Source ISD	• Khaled Mohsen	35	2022-10-22	2022-11-26					open
3.4	Program Design		35	2022-10-22	2022-11-26					open
3.5	Data Storage Design	• Hussein Abd-Elkader • Enas Ragab	35	2022-10-22	2022-11-26					open
4	**Implementation**									
4.1	Android app	• Doaa Ahmed Gharib • Doaa Othman	33	2022-11-27	2022-12-30					open
4.2	IOS app	• Hussein Abd-Elkader • Enas Ragab	33	2022-11-27	2022-12-30					open
4.3	Website	• Sanaa Mohamed • Salsabil Syed	33	2022-11-27	2022-12-30					open
4.4	Test Plan	• Khaled Mohsen	33	2022-11-27	2022-12-30					open
4.5	Documentation	• Doaa Ahmed Gharib • Doaa Othman	33	2022-11-27	2022-12-30					open
4.6	Problem Reports	• Hussein Abd-Elkader • Enas Ragab	33	2022-11-27	2022-12-30					open
4.7	Project Assessment	• Khaled Mohsen	33	2022-11-27	2022-12-30					open

Created by:

*** Hussein Abd-Elkader Hussein**

*** Khaled Mohsen**

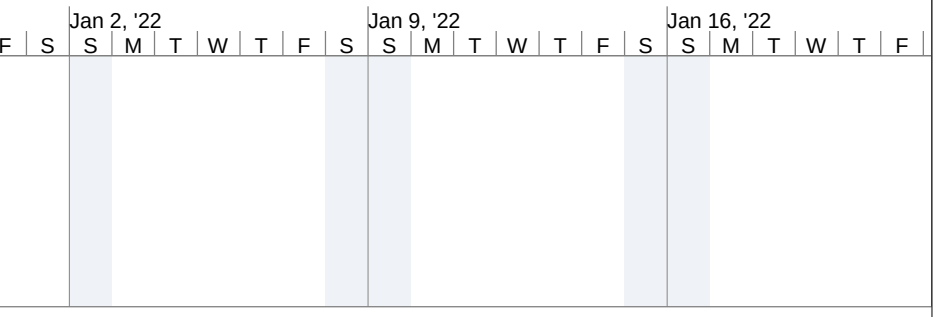
ID	Task Name	Duration	Start	Finish	Prede
1	**(1)Planning**	**74 days?**	**Sat 1/1/22**	**Tue 4/12/22**	
2	(1.1) System Request	7 days?	Sat 1/1/22	Mon 1/10/22	
3	**(1.2) Feasibility**	**47 days?**	**Tue 1/11/22**	**Tue 3/15/22**	
4	(1.2.1) Economic Fe	8 days?	Tue 1/11/22	Thu 1/20/22	
5	(1.2.2) Technical Fe	7 days?	Fri 1/21/22	Sun 1/30/22	4
6	(1.2.3)Organization f	27 days?	Mon 2/7/22	Tue 3/15/22	
7	(1.3) Project work plan	23 days?	Thu 2/10/22	Mon 3/14/22	
8	(1.4) Gannt chart	18 days?	Fri 3/18/22	Tue 4/12/22	7
9	**(2) Analysis**	**41 days?**	**Mon 3/21/22**	**Sun 5/15/22**	
10	**(2.1) Requirements**	**22 days?**	**Fri 4/15/22**	**Sun 5/15/22**	
11	(2.1.1)Functional Re	22 days?	Fri 4/15/22	Sun 5/15/22	
12	(2.1.2) Nonfunction	22 days?	Fri 4/15/22	Sun 5/15/22	
13	**(2.2) Interviews**	**31 days?**	**Mon 3/21/22**	**Mon 5/2/22**	
14	(2.2.1)Selecting Inte	31 days?	Mon 3/21/22	Mon 5/2/22	
15	(2.2.2)Designing Inte	31 days?	Mon 3/21/22	Mon 5/2/22	
16	(2.2.3)Preparing for t	31 days?	Mon 3/21/22	Mon 5/2/22	
17	(2.2.4)Conducting th	18 days?	Mon 3/21/22	Wed 4/13/22	
18	(2.2.5)Post-interview	18 days?	Mon 3/21/22	Wed 4/13/22	
19	(2.3)Root Cause Analys	18 days?	Mon 3/21/22	Wed 4/13/22	
20	(2.4) Building Use Case	15 days?	Mon 3/21/22	Fri 4/8/22	
21	(2.5) Creating Data Flo	15 days?	Mon 3/21/22	Fri 4/8/22	
22	(2.6)Creating ERD	1 day?	Mon 3/21/22	Mon 3/21/22	
23	**(3) Design**	**131 days?**	**Mon 3/21/22**	**Thu 9/15/22**	
24	(3.1)creating Alternative	26 days?	Thu 8/11/22	Thu 9/15/22	
25	**(3.2)Design Requirem**	**131 days?**	**Mon 3/21/22**	**Thu 9/15/22**	
26	(3.2.1) Operational F	26 days?	Thu 8/11/22	Thu 9/15/22	
27	(3.2.2) Performance	26 days?	Mon 3/21/22	Mon 4/25/22	
28	(2.2.3) Security Requ	26 days?	Mon 3/21/22	Mon 4/25/22	
29	(3.2.4)Cultural and F	26 days?	Mon 3/21/22	Mon 4/25/22	
30	(3.3) Tune Source ISD	25 days?	Mon 3/21/22	Fri 4/22/22	
31	(3.4) Program Design	25 days?	Mon 3/21/22	Fri 4/22/22	
32	(3.5) Data Storage Des	25 days?	Mon 3/21/22	Fri 4/22/22	



Project: Gantt Chart.mpp
Date: Sun 3/20/22

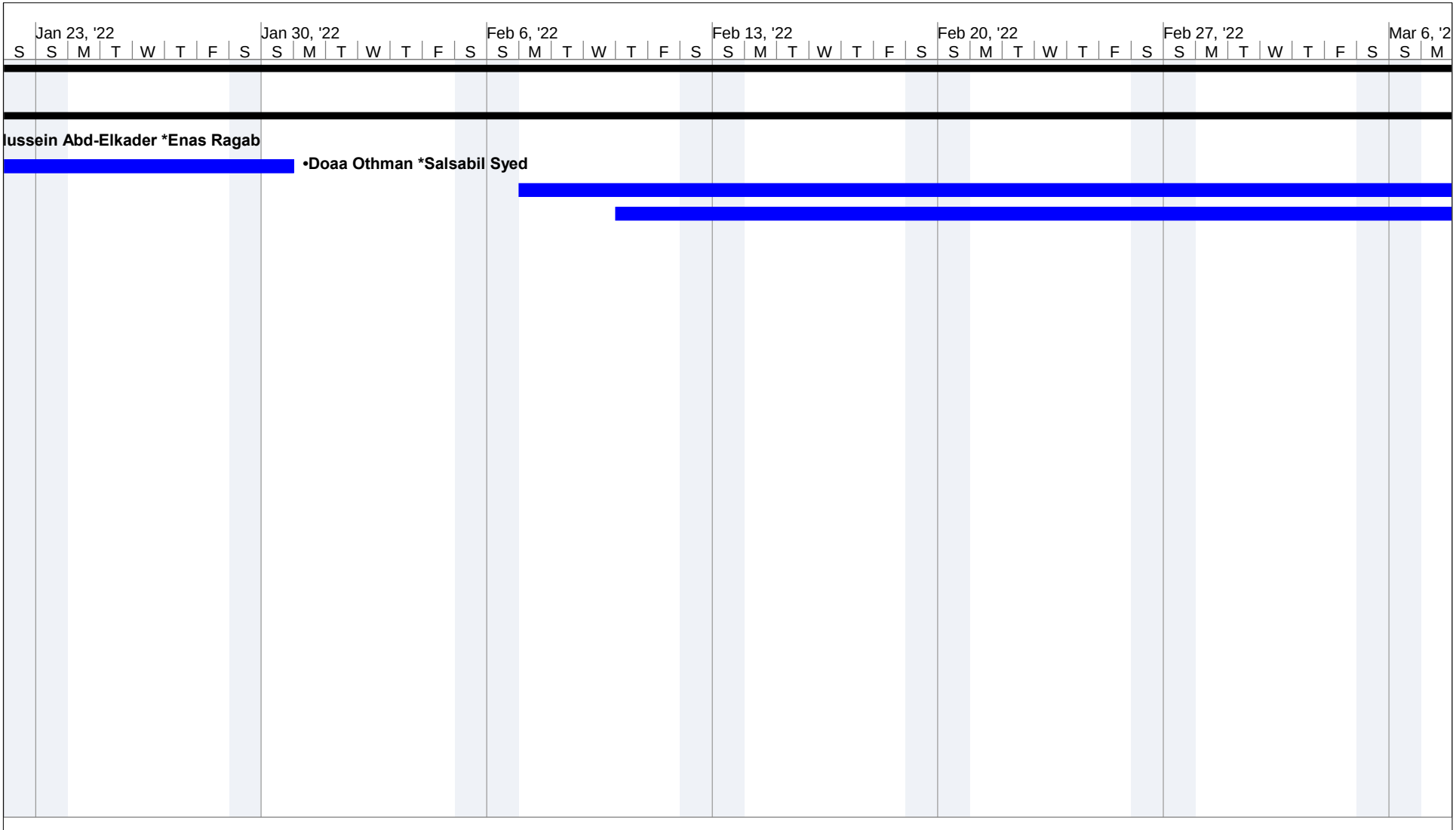
Task	Inactive Milestone	Finish-only	
Split	Inactive Summary	External Tasks	
Milestone	Manual Task	External Milestone	
Summary	Duration-only	Progress	
Project Summary	Manual Summary Rollup	Deadline	
External Tasks	Manual Summary		
External Milestone	Start-only		

ID	Task Name	Duration	Start	Finish	Prede
33	**(4) Implementation**	**32 days?**	**Thu 11/17/22**	**Fri 12/30/22**	
34	(4.1) Android app	32 days?	Thu 11/17/22	Fri 12/30/22	
35	(4.2) IOS app	25 days?	Mon 11/28/22	Fri 12/30/22	
36	(4.3) Website	3 days?	Mon 11/28/22	Wed 11/30/22	
37	(4.4) Test Plan	3 days?	Mon 11/28/22	Wed 11/30/22	
38	(4.5) Documentation	25 days?	Mon 11/28/22	Fri 12/30/22	
39	(4.6) Problem Reports	3 days?	Mon 11/28/22	Wed 11/30/22	
40	(4 . 7) Project Assessm	32 days?	Thu 11/17/22	Fri 12/30/22	



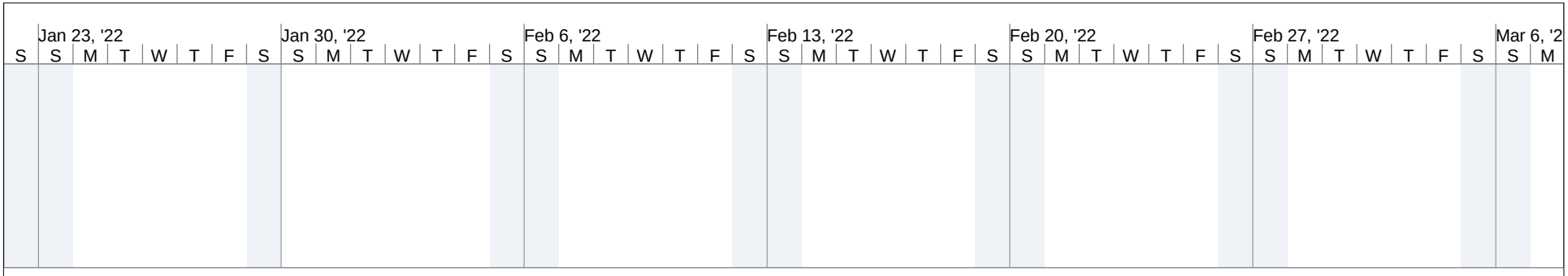
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task	Inactive Milestone	Finish-only
Split	Inactive Summary	External Tasks
Milestone	Manual Task	External Milestone
Summary	Duration-only	Progress
Project Summary	Manual Summary Rollup	Deadline
External Tasks	Manual Summary	
External Milestone	Start-only	



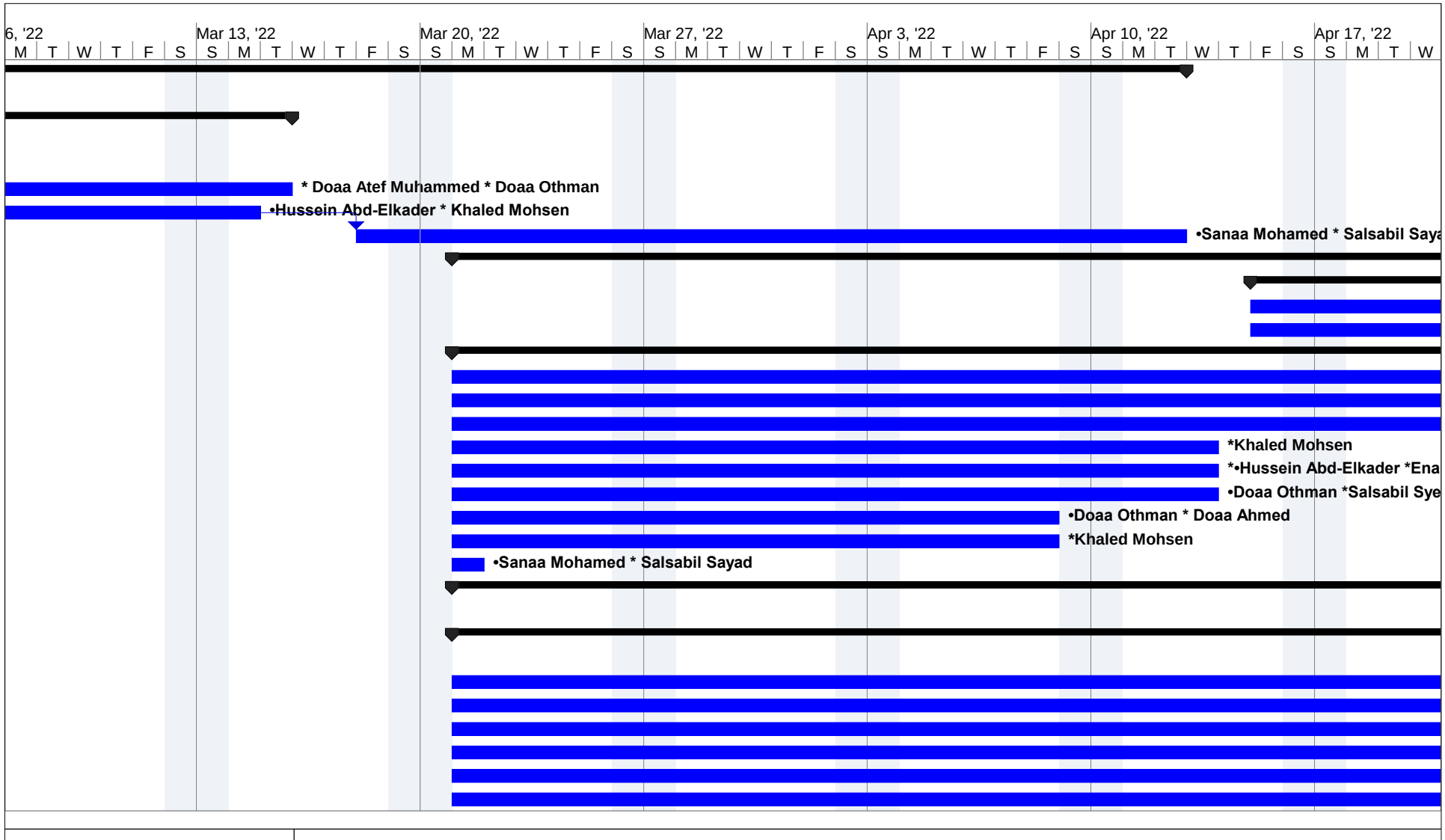
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



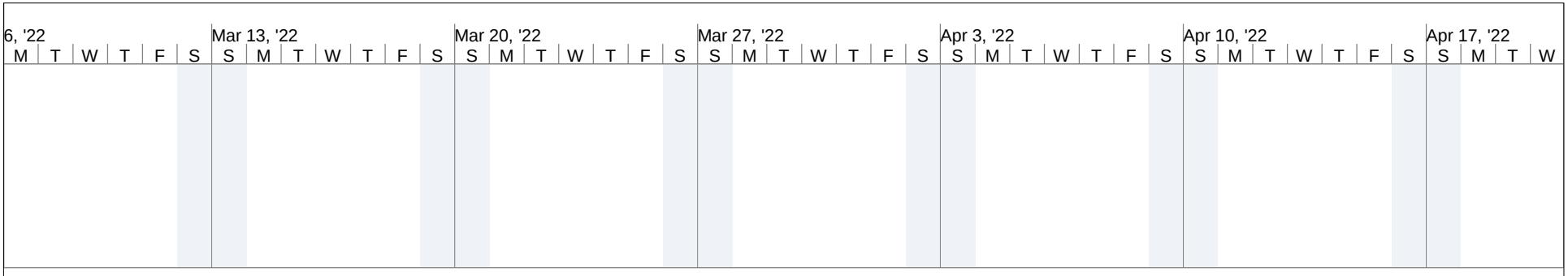
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



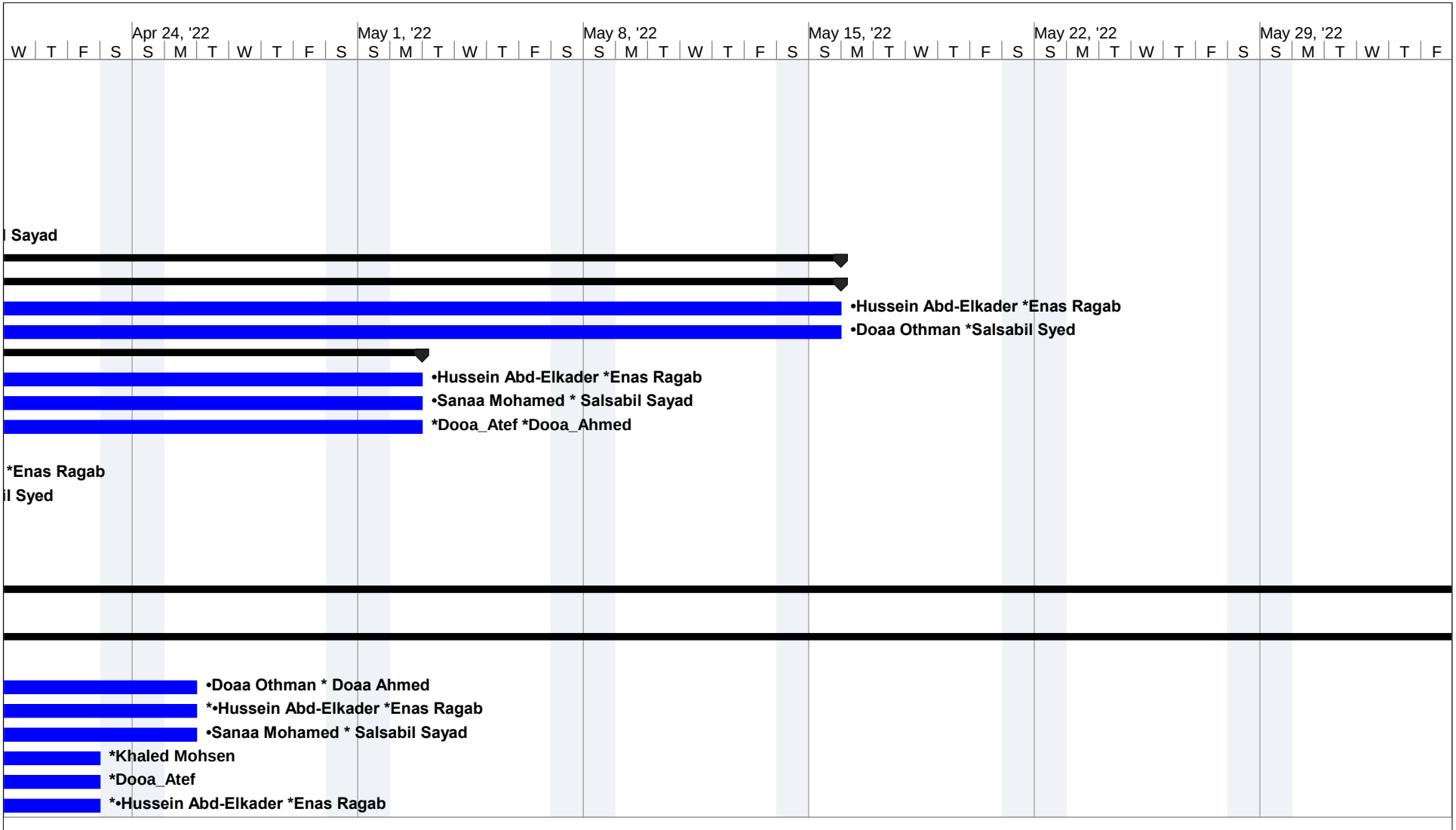
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



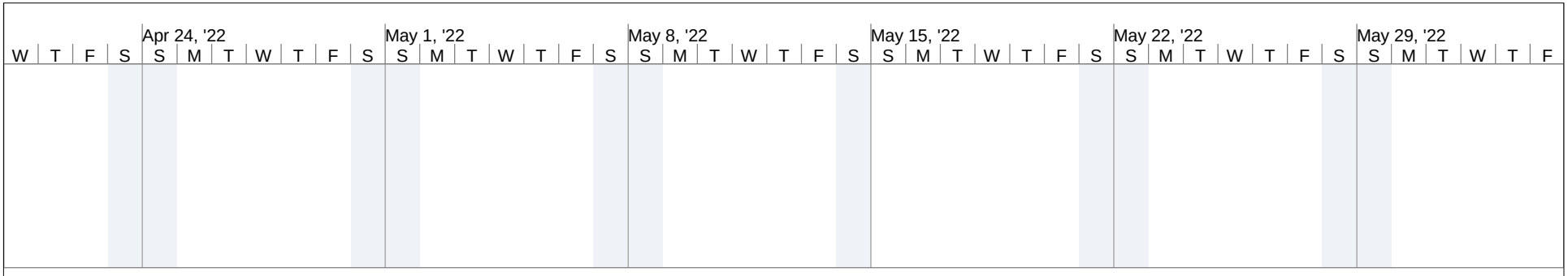
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task	Inactive Milestone	Finish-only
Split	Inactive Summary	External Tasks
Milestone	Manual Task	External Milestone
Summary	Duration-only	Progress
Project Summary	Manual Summary Rollup	Deadline
External Tasks	Manual Summary	
External Milestone	Start-only	

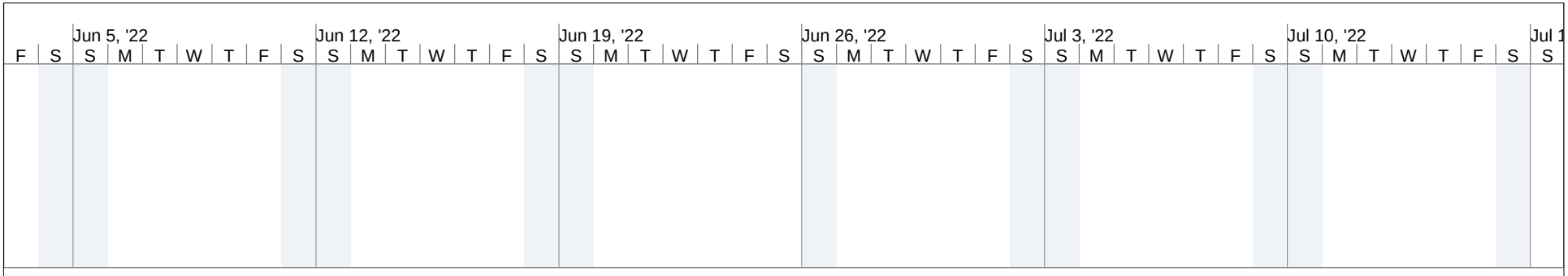


Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			

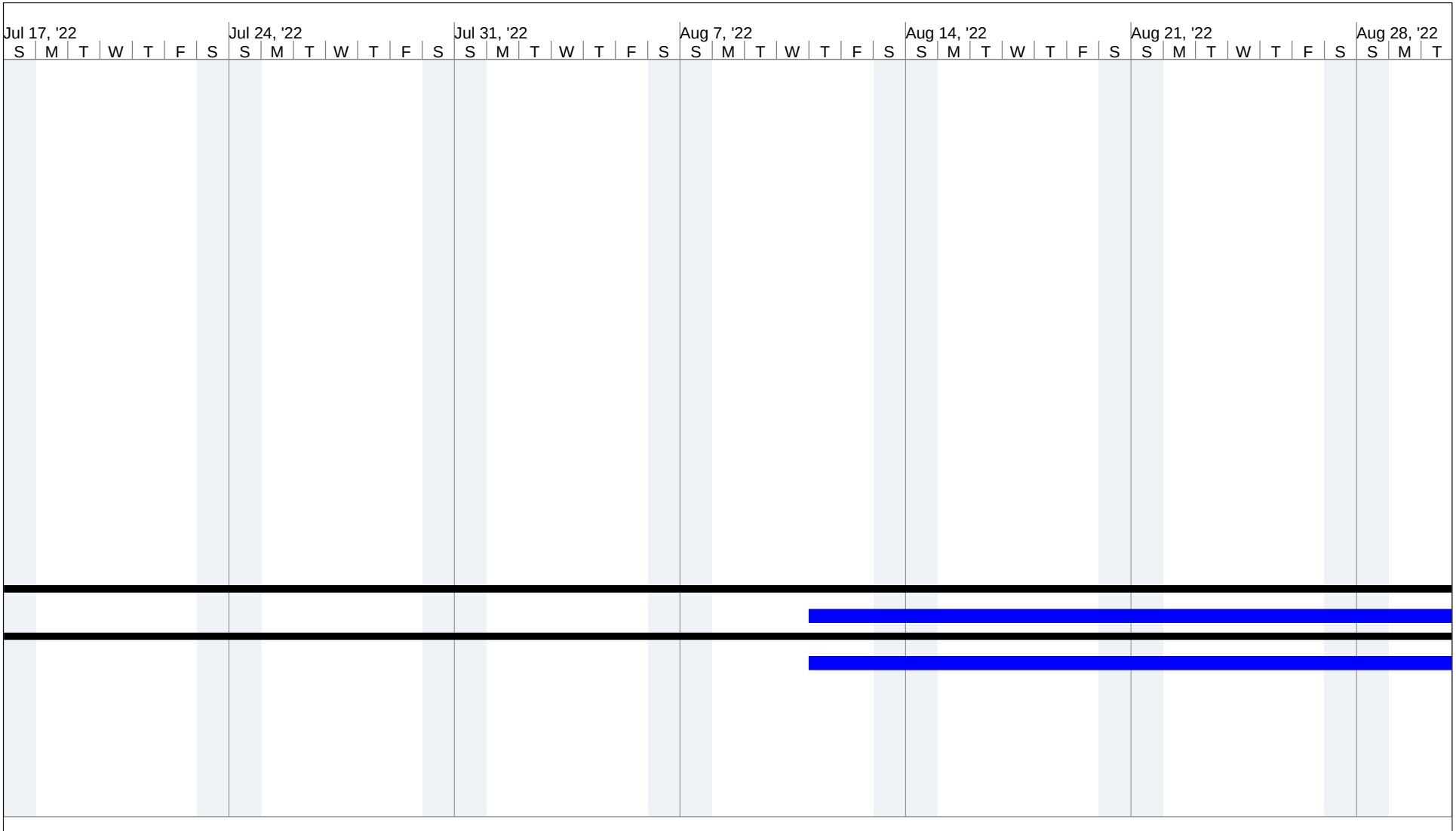
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task	Inactive Milestone	Finish-only
Split	Inactive Summary	External Tasks
Milestone	Manual Task	External Milestone
Summary	Duration-only	Progress
Project Summary	Manual Summary Rollup	Deadline
External Tasks	Manual Summary	
External Milestone	Start-only	



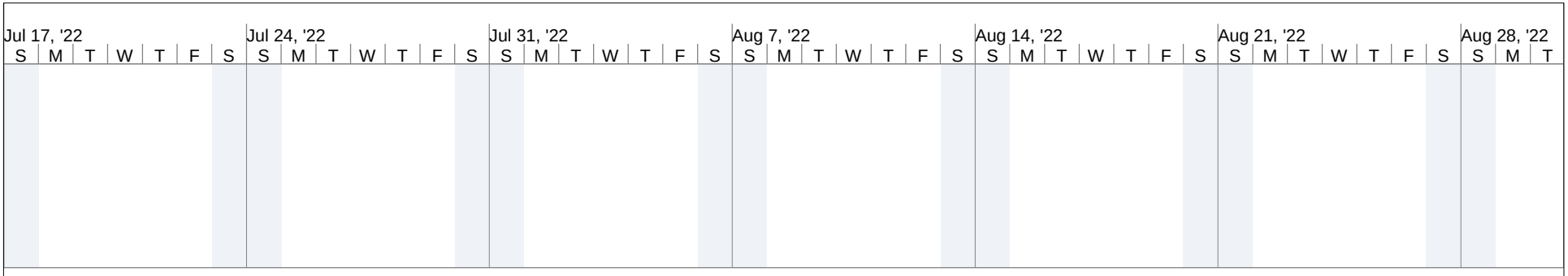
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task	Inactive Milestone	Finish-only
Split	Inactive Summary	External Tasks
Milestone	Manual Task	External Milestone
Summary	Duration-only	Progress
Project Summary	Manual Summary Rollup	Deadline
External Tasks	Manual Summary	
External Milestone	Start-only	



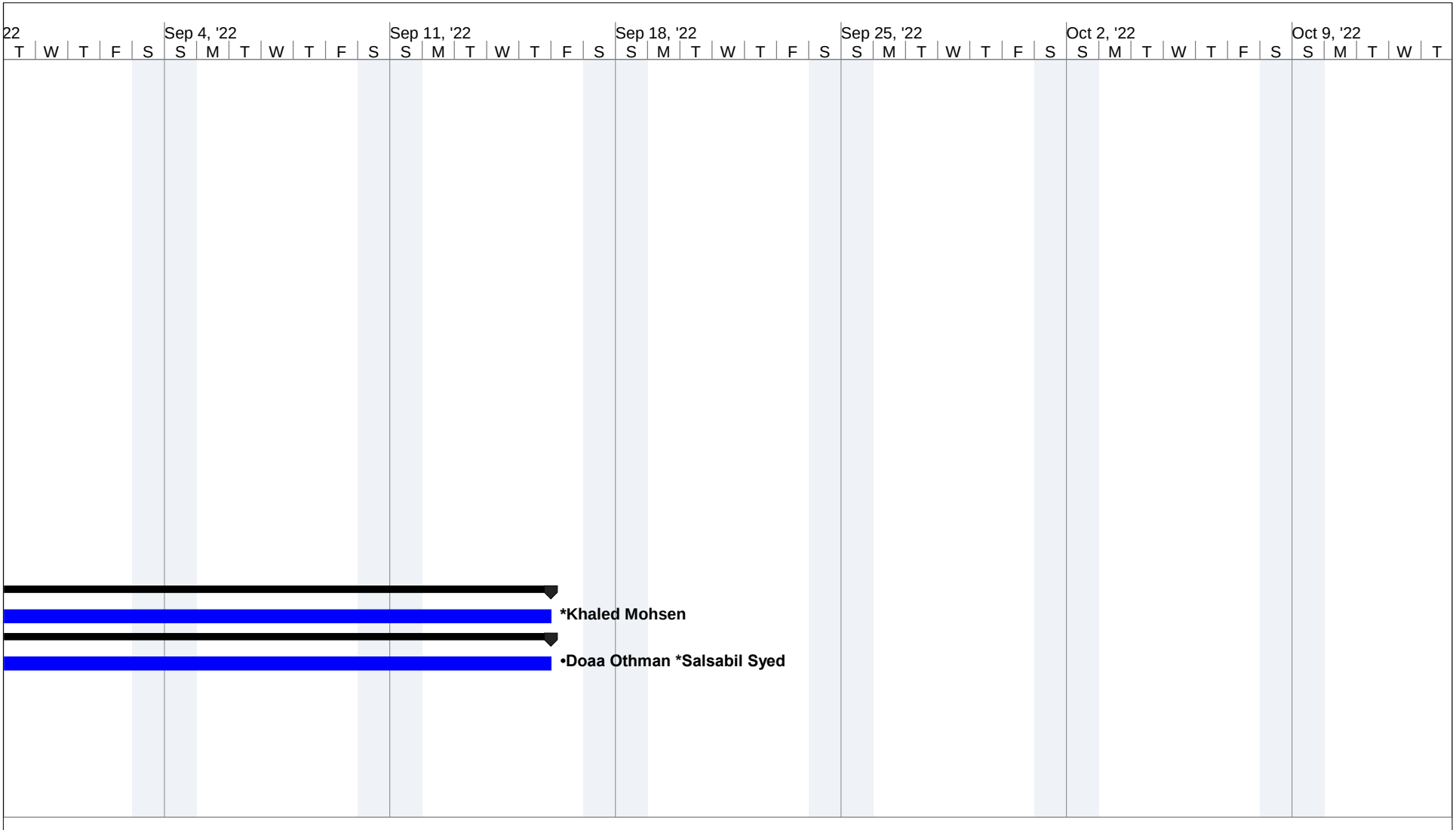
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



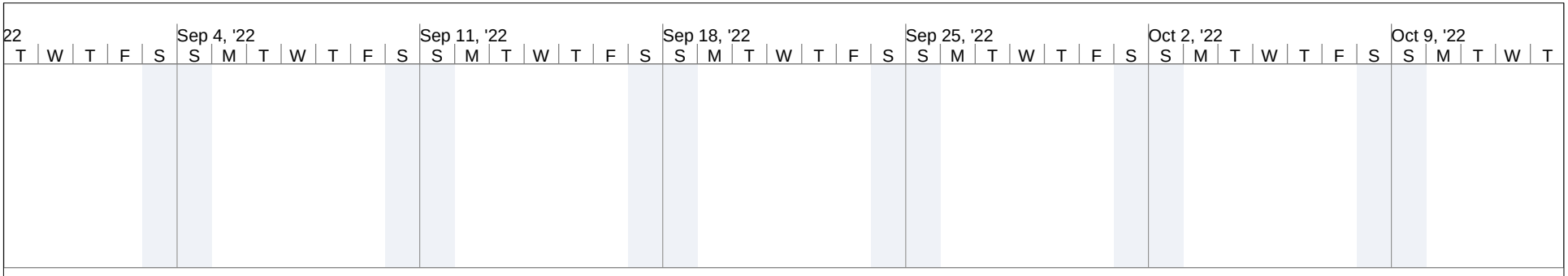
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



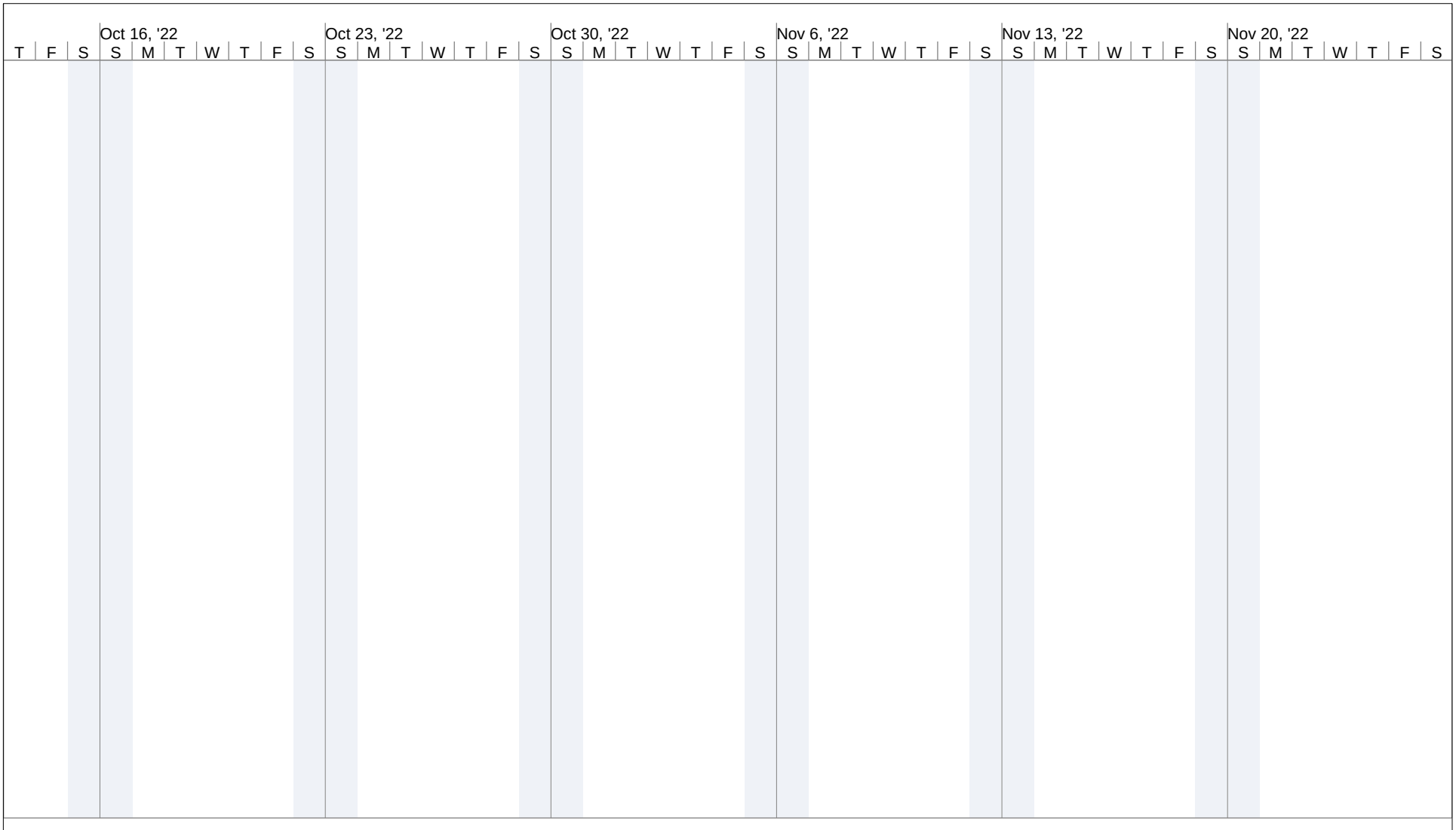
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



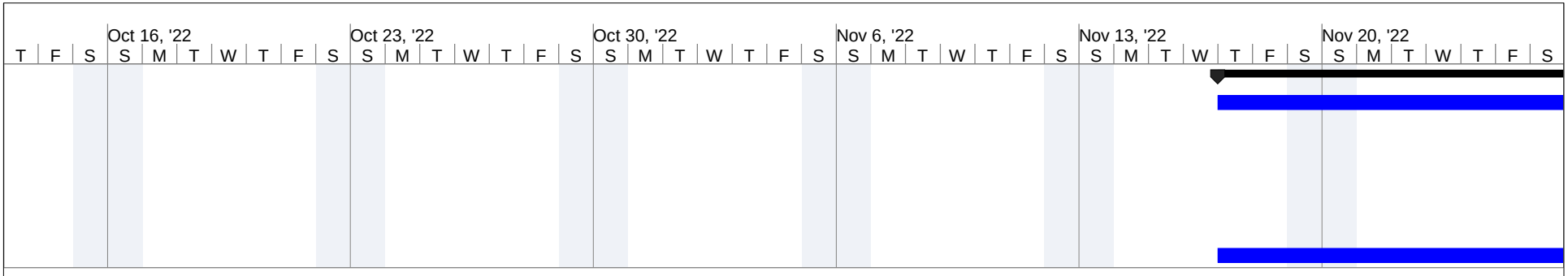
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



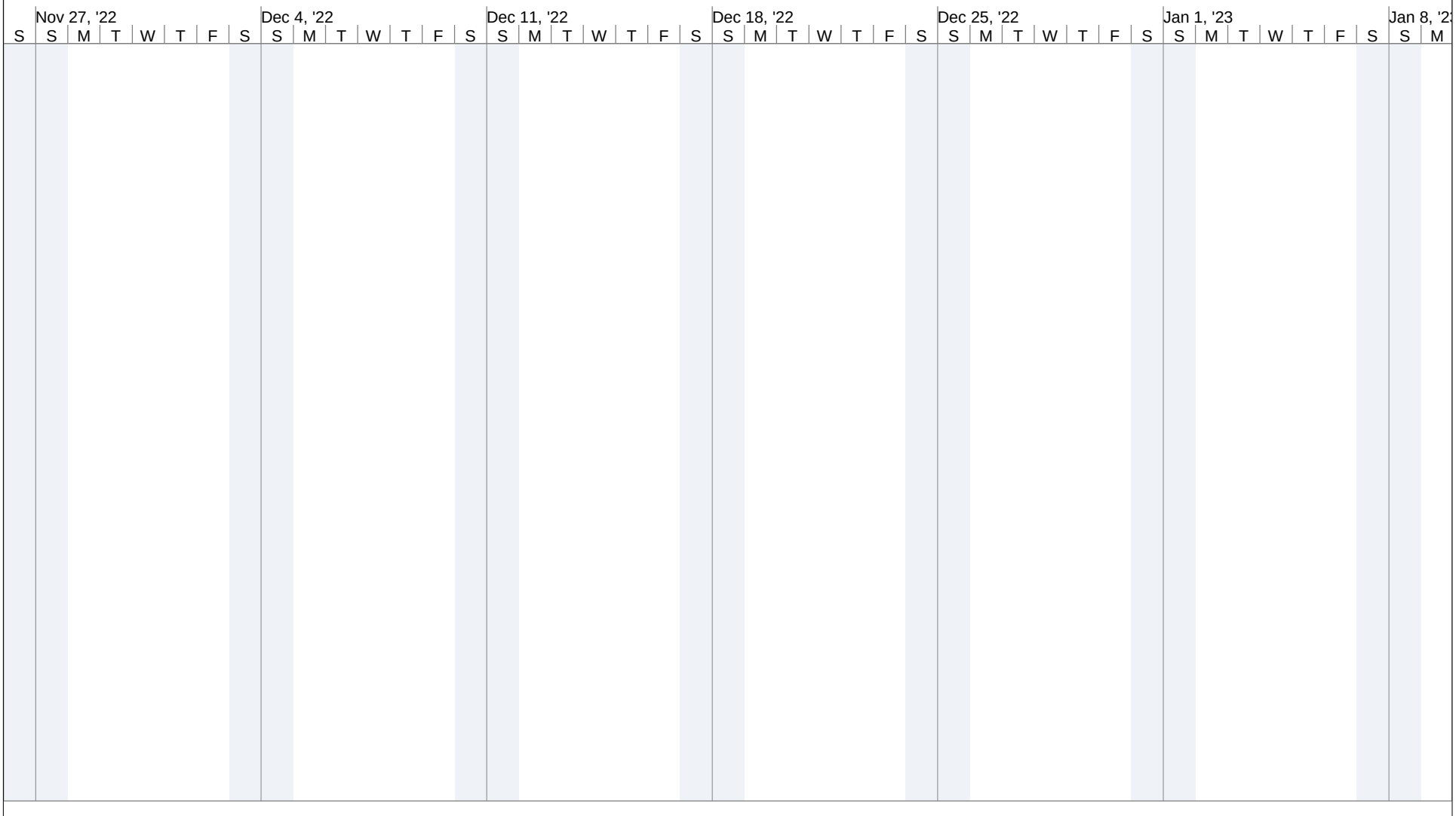
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



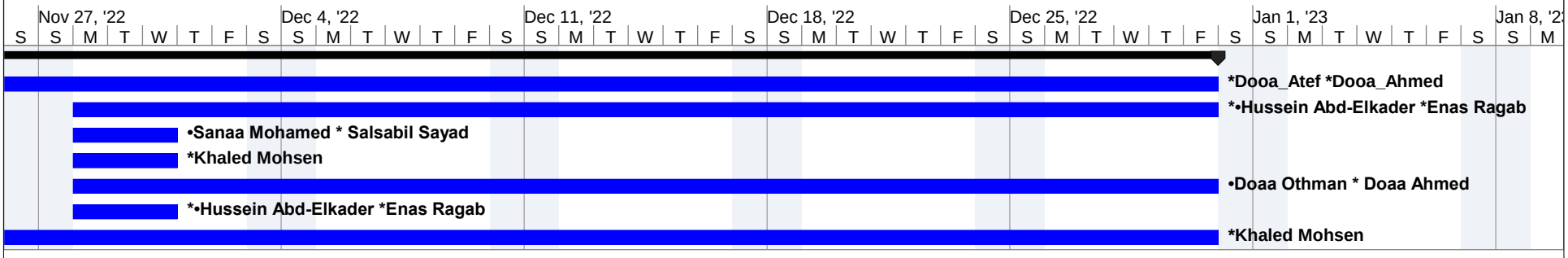
Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			



Created by:

- **Sanaa Mohamed**
- **Salsabil Syed**

Project: Gantt Chart.mpp
Date: Sun 3/20/22

Task		Inactive Milestone		Finish-only	
Split		Inactive Summary		External Tasks	
Milestone		Manual Task		External Milestone	
Summary		Duration-only		Progress	
Project Summary		Manual Summary Rollup		Deadline	
External Tasks		Manual Summary			
External Milestone		Start-only			