Faculty of Engineering and Applied Science

SOFE - 3490U Software Project Management

Winter 2023

Lab 4
Camera Motion Sensor System

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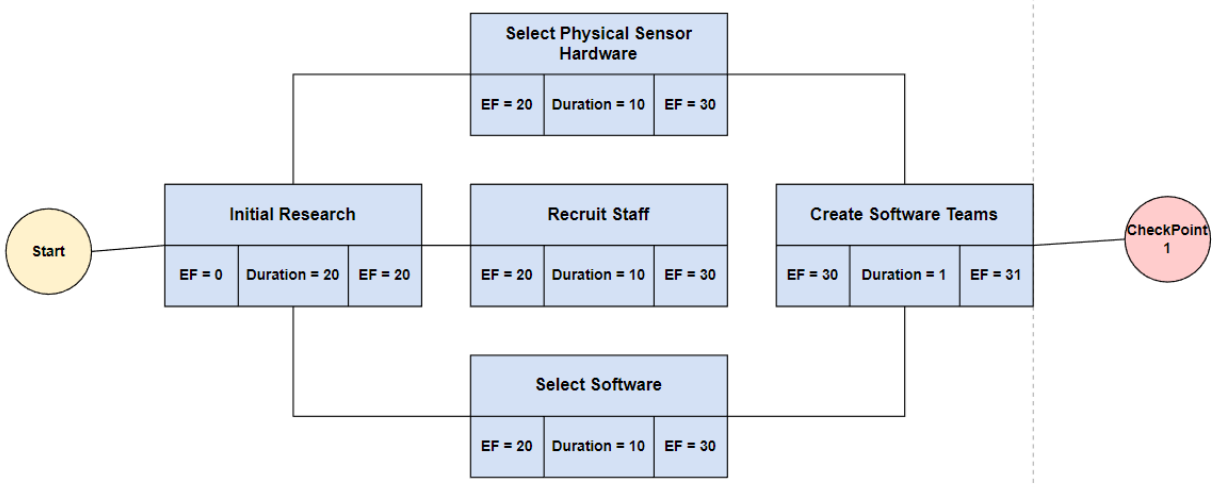
Monday, March 20th, 2023

CRN 74669, Group 11

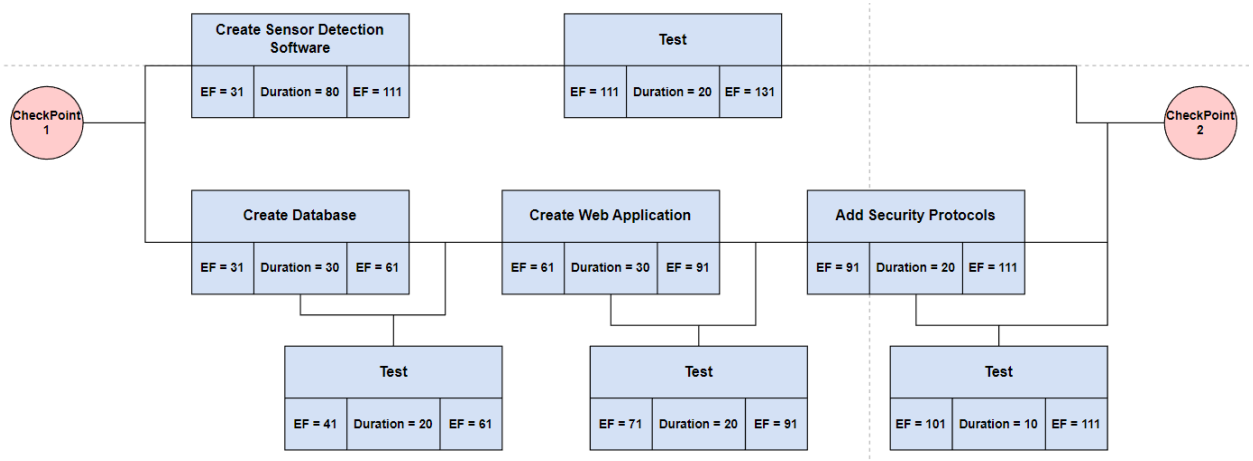
Activity Diagram

*From previous lab

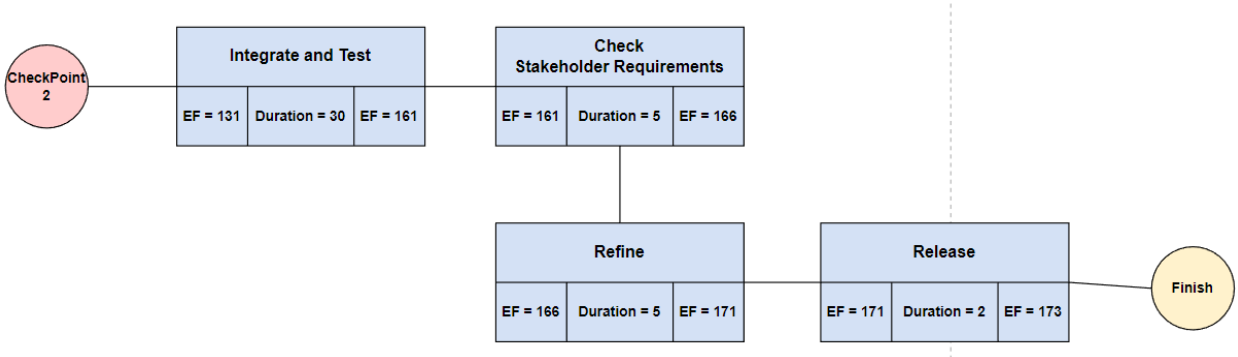
Planning Phase



Design Phase



Release Phase



Risks

From the previous lab, the risks that we mentioned were lack of motivation, falling behind schedule, miscommunication, integration issues, budget issues, and functionality issues.

In this lab, we will be taking those ideas and applying them to the specific activities declared in the activity diagrams.

Activity	Risk	Countermeasure
Release	Product does not suit the needs of the customer	Run an open beta test to get reviews, ratings, and feedback.
Create Sensor Detection Software	Motion detection is not as accurate as hoped.	Run a testing phase with diverse testing environments to determine if the system is working as intended.
Create Database	Is not capable of storing the required information. Does not have enough storage capacity.	Run test queries to ensure required data can be retrieved and stored. Measure data size of queries.
Create Database	Not secure. Security Issues.	Run a security test to find exploits and security concerns.
Create Website	Not user friendly.	Run an open beta session to get user feedback.
Add Security Protocols	Protocols are not secure enough.	Hire a security tester to break into the system and track down security flaws.

Resources

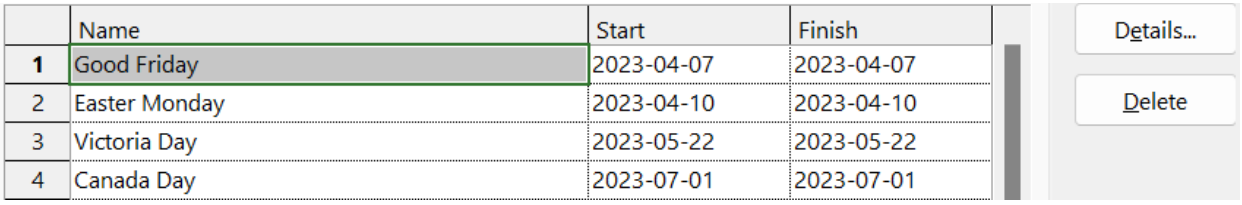
Team Members	Title	Assigned Activity
Akshat Kapoor	Lead Programmer	- Create sensor detection software - Create database - Create web application - Add security protocols
Vishan Patel	Team Manager	- All tasks (manages team)
Steven Mai	System Tester	- Integrate and test - Checks stakeholder

		requirements - Refine
Sabeh Khalid	System Analyst	- Initial research - Select software - Select physical sensor hardware

Microsoft Project Screenshots

Adding Holidays

Only federal holidays taking place between project start and end date have been ended. Project start data is March 20, 2023 and project end date is July 4, 2023.



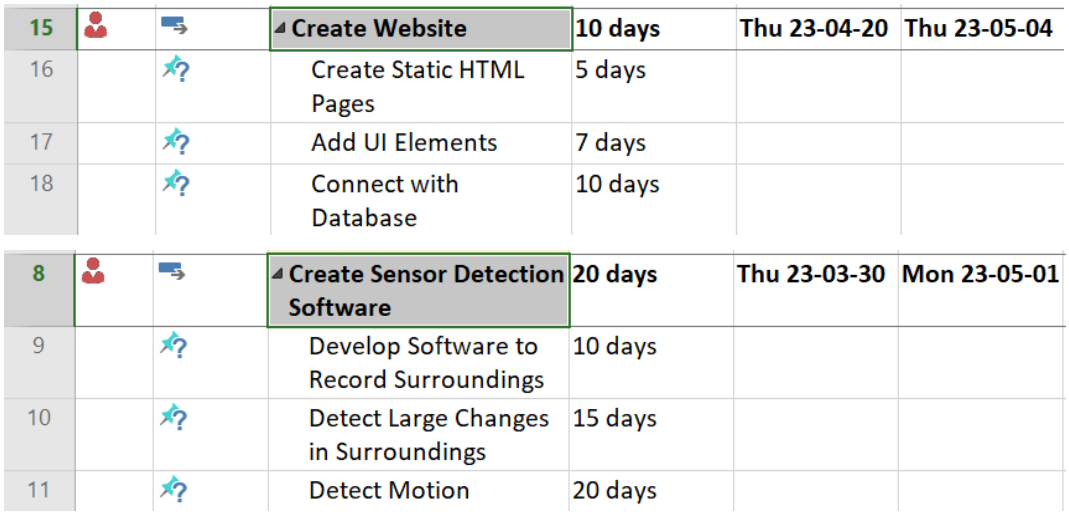
	Name	Start	Finish
1	Good Friday	2023-04-07	2023-04-07
2	Easter Monday	2023-04-10	2023-04-10
3	Victoria Day	2023-05-22	2023-05-22
4	Canada Day	2023-07-01	2023-07-01

Details...

Delete

Entering Larger Tasks as a Summary

The “Create Website” and “Create Sensor Detection Software” have been divided into subtasks.



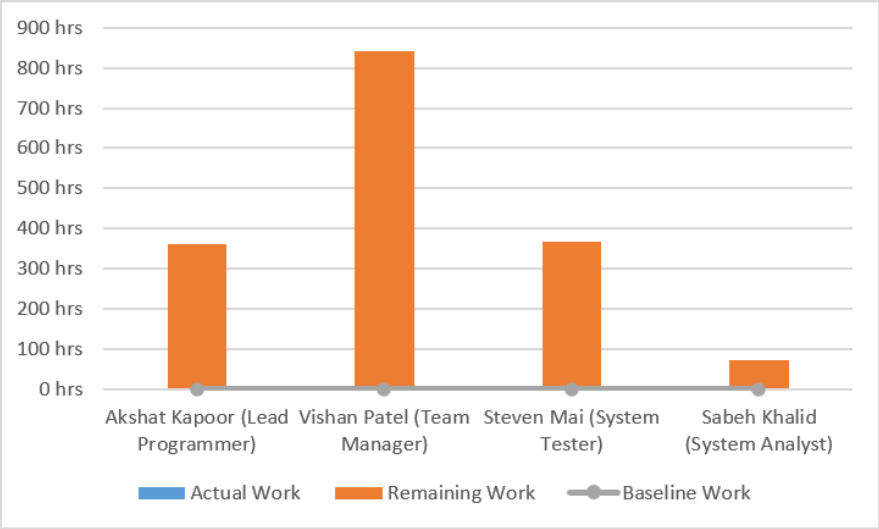
15	**Create Website**	**10 days**	**Thu 23-04-20**	**Thu 23-05-04**
16	Create Static HTML Pages	5 days		
17	Add UI Elements	7 days		
18	Connect with Database	10 days		

8	**Create Sensor Detection Software**	**20 days**	**Thu 23-03-30**	**Mon 23-05-01**
9	Develop Software to Record Surroundings	10 days		
10	Detect Large Changes in Surroundings	15 days		
11	Detect Motion	20 days		

Resources

RESOURCE STATS

Work status for all work resources.



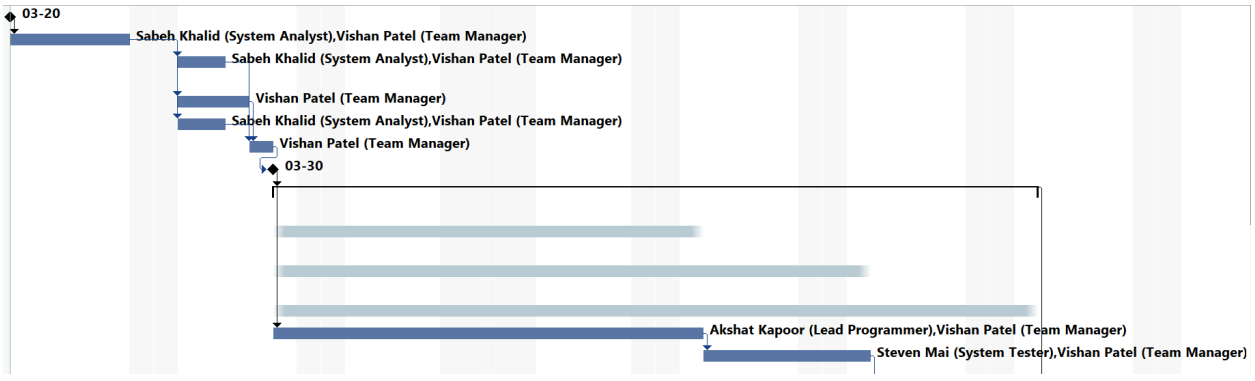
RESOURCE STATUS

Remaing work for all work resources.

Name	Start	Finish	Remaining Work
Akshat Kapoor (Lead Programmer)	Fri 23-03-31	Thu 23-05-18	360 hrs
Vishan Patel (Team Manager)	Mon 23-03-20	Tue 23-07-04	840 hrs
Steven Mai (System Tester)	Tue 23-04-18	Mon 23-07-03	368 hrs
Sabeh Khalid (System Analyst)	Mon 23-03-20	Tue 23-03-28	72 hrs

Gantt Chart

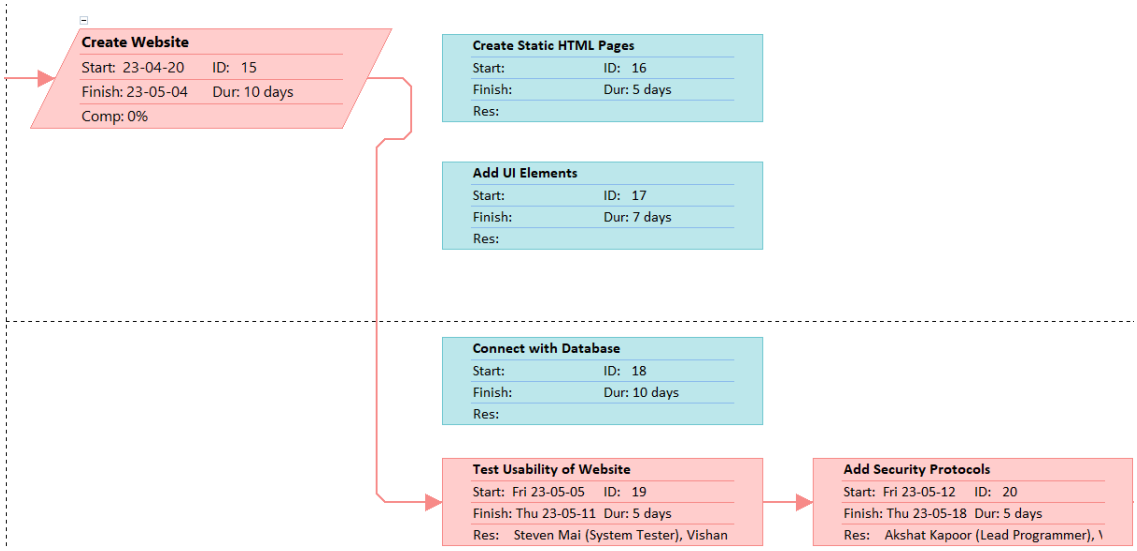
*Listed below is a fraction of the full gantt chart as it does not all fit



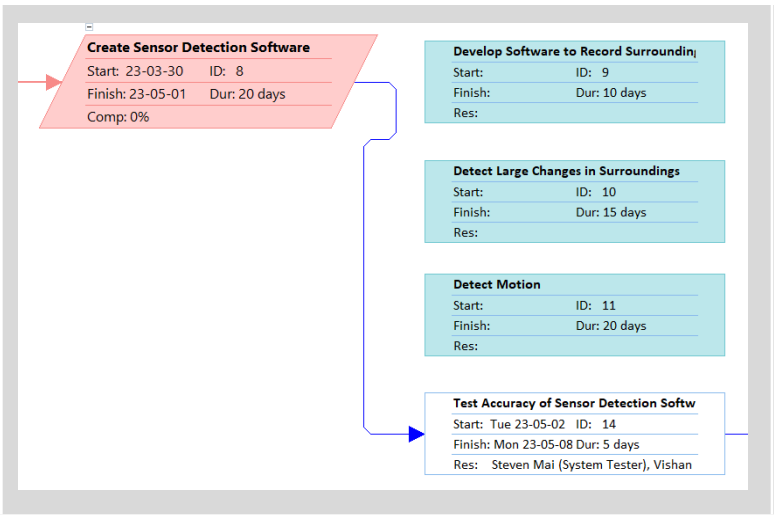
Activity Diagram

*Listed below is a fraction of the full network diagram as it does not all fit

The figure below demonstrates dependent tasks and entering larger tasks as a summary of smaller sub tasks.



Risk Mitigation



In the following figure, the activity called “Test Accuracy” is a mitigation task of the risks associated with developing a motion sensor.

In the following figure, the activity called “Run Open Beta Test” is another example of a mitigation task.