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**Weight:10%**

**Student ID: 870746, 875362, 885695,877704,884615, 867957** **Marks: /13**

# Assignment: Project Plan

## Background

Now that you have a viable project idea, it's time to plan how you will execute on the idea. Follow the instructions below to complete your project plan. Please note this is a live document, and it is expected that you will update this plan throughout the remainder of the course.

## Instructions

1. This is a team submission.
2. You will be provided time in class during week 4 to complete this assignment. However, you will likely need to do work outside of class as well.
3. The submission should include a completed version of the below template, along with a plan for sprint 1 using your chosen project management methodology. Alternatively, you can share this plan for sprint 1 using a third-party tool.
4. For your plan for sprint 1, you are free to choose how tasks will be tracked given your project management methodology. You could use a word document or a third-party project management tool. Regardless, make sure your instructor has access so they can keep track of your progress.
5. Regardless of the project management methodology you choose, all tasks should be written using a SMART goal format.
6. It is expected that you will manage your project using the tool mentioned above on an ongoing basis.
7. Tasks in the provided template can be written at a high level for each team member; however, the high-level tasks should be broken down and detailed in whatever tool you choose to manage your project. In your planning tool for sprint 1, no task should require more than a few hours of effort. If it does, break it down into multiple tasks.

# Table of Contents

# Overall Timeline

The Execution Phase has a fixed schedule of 12 weeks comprised of three sprints.

| Phase | Course | Weeks | Lab hours per week | Lab hours in total |
|---|---|---|---|---|
| *Execution – Sprint 1* | *PROJ 309* | *4* | *6* | *24* |
| *Execution – Sprint 2* | *PROJ 309* | *4* | *6* | *24* |
| *Execution – Sprint 3* | *PROJ 309* | *4* | *6* | *24* |
| ***Total*** | | | | ***72*** |

# Minimum Viable Product (MVP) Backlog

Listed in the table below are our User Stories that have a Priority of “Must” (not “Should” or “Could”) in our overall Product Backlog. Collectively, these User Stories constitute the feature set required for a Minimum Viable Product for the solution we are proposing.

| User Story ID | As a… | I want to be able to… | So that… |
|---|---|---|---|
| *1* | *Administrator* | *Setup a functional database that allows the customers to register their faces on the product.* | *The door will unlock when their faces match the ones registered within the database.* |
| *2* | *Designer* | *Create a detailed schematic of the facial recognition door* | *The product design will be a lot easier to assemble or make changes.* |
| *3* | *Developer* | *Ensure that the product is fully functional and is able to scan an individual's face.* | *The door is able to unlock upon facial detection.* |
| *4* | *Developer* | *Create a working code or software that will be incorporated with the door.* | *The door's unlocking mechanism will be automated smoothly.* |
| *5* | *Administrator* | *Setup a working connection between the database and the door.* | *The door can rely on the database when verifying a user's data.* |
| *6* | *Administrator* | *Ensure that the database is backed up and keeps regular health checks.* | *The door will have a backup of all the data and will not suffer a tremendous loss.* |
| *7* | *User* | *Register my face in the product’s database* | *The door will be able to recognize the facial features of the newly registered user.* |
| *8* | *Administrator* | *Ensure that the security of the database of the facial recognition door is highly confidential and secured.* | *The registered user will not have to worry about their data being leaked to third party sources.* |
| *9* | *Developer* | *Make sure that there are regular updates or patch for the software* | *The doors facial recognition software won't be faulty as long as it is regularly checked/improved.* |

| | | | |
|---|---|---|---|
| *10* | *Administrator* | *Integrate with existing Access control systems* | *The facial recognition system can seamlessly work with existing access control infrastructure, allowing for automatic unlocking or denial of access based on the authentication results.* |
| *11* | *User* | *Report bugs and issues to the developer* | *The developers can improve/fix these bugs or help the user with their issues.* |
| *12* | *Administrator* | *Ensure Data security and device integrity* | *The user data stored in the secure database remains protected from unauthorized access or breaches, and the device itself is resistant to tampering or manipulation* |
| *13* | *User* | *Ensure that the safety and security of my data is safely secured and cannot be accessed by third parties* | *Other people won't be able to have access to the information they put in when using the product.* |
| *14* | *Developer* | *Establish communication with central server* | *The system can communicate with the central server for authentication. This involves developing the necessary protocol and network connection to enable secure and reliable communication between the device and the server* |
| *15* | *Administrator* | *Add raspberry pi into the system that we will be using to help with the software for using the facial recognition door* | *We can successfully be able to use the product since most of our software that we will be using is open source and can be used on raspberry pi machines.* |
| *16* | *Administrator* | *Create a demo working and fully functional door for testing purposes to make sure the product works.* | *We can test and see if the product is fully functional.* |
| *17* | *Developer* | *Implement Logging System.* | *So that access attempts can be tracked and recorded for auditing purposes. This involves developing a logging mechanism that securely stores access logs and provides the necessary information for monitoring and analysis.* |
| *18* | *Developer* | *Design User Interface* | *The users can interact with the system effectively. This includes creating a user-friendly interface* |

| | | | |
|---|---|---|---|
| | | | *with a display and buttons for easy navigation and interaction.* |
| *19* | *User* | *Know when the Facial Recognition Door is up and running.* | *I will be aware if the door is powered on and know that it is running correctly.* |
| *20* | *User* | *Create a personal account for managing the product.* | *I can set up my account and create profiles for the Facial Recognition Door. This will make it easier to register my face on the product's database.* |
| *21* | *User* | *Modify my account's password and associated phone/email.* | *I can be confident that I have full control of my account and I can regularly update my credentials.* |
| *22* | *User* | *Have an instruction manual for the Facial Recognition Door.* | *If there are problems with the setup, I can look at the manual and see how it's supposed to work or be assembled.* |

# Deliverables Outside of Minimum Viable Product

Listed in the table below are deliverables you must complete or update for each sprint. These deliverables are deliberately not included in the Minimum Viable Product Backlog (above) as they do not represent features of the product. When you plan for a sprint, ensure to allocate time to completing these deliverables.

| # | Deliverable | Description |
|---|---|---|
| *(1)* | *Updated Documentation* | *Ongoing updates to the business canvas and project plan* |
| *(2)* | *Sprint Progress Report* | *One progress report per sprint* |
| *(3)* | *Solution Showcase* | *One showcase per sprint* |

# Project Management Methodology

Use *Activity - Selecting a Project Management Methodology*, found in Brightspace, to choose a project management methodology.

What is the methodology you are choosing?

*We plan to choose the more Agile project management methodology. We as team SKARY would prefer a more flexible iterative design and build process. The agile methodology best fits our team currently as we do not pre plan most things and in a situation, we'll just hammer out any problems that come our way.*

## Tool

Given your chosen project methodology, what tools will you use to manage your project?

*Adaptability. Being able to change the situation and adapt to any current problems our team may be facing will be one of our tools. Flexibility, having as much freedom as possible to work on things so nobody feels pressured. Tools that are available to us are tools like Jira which is an Agile project management tool that can help plan, track, and manage work using user stories, sprints, and backlogs. Or other tools like Trello which is a visual tool that uses boards, lists, and cards to help teams manage tasks and workflows. Asana is a project management tool that supports agile practices as well. Allowing teams to create tasks, priorities, and assign work to help keep track of progress during the project's completion.*

## Daily/Weekly/Monthly

Given your methodology and tools, how will members use the above project tools on a daily, weekly, and monthly basis?

**Daily**

*Our team does not have the luxury to work on this project on a daily basis. With that said, we can at least think about it or research during our free time on how we can put the project together. This is where adaptability kicks in, as we as a team need to adapt with the conditions that are given to us. There is also an online platform where our team can communicate about the project so we can further our progress.*

*We talked within our team that we will allot time every day of the week to work on the project for at least 30 minutes and ideally be in a call with the other members to brainstorm. This will help us achieve our goal as our project is complicated.*

***Weekly***

*Our course has 2 meetings given, so working on this project weekly is a must. This will be vital to further our project's progress as this is the only given time when all our members are supposed to work on the project. We plan to clear our goals on a weekly basis and create a checklist of what we accomplished. We can use Trello, a visual tool, to help us with organizing the tasks that are supposed to be completed. The total weekly time allotted per member will come down to 7 hours.*

***Monthly***

*For the monthly work, we plan to complete an entire sprint which will need every member's cooperation. We will have to be flexible with our working times as being on time with the sprint will be ideal for the project. All members are expected to have 30 hours of working time per month/sprint to be able to complete the project.*

# Sprint 1 Plan on a Page

## Sprint 1 Goal

### What are we trying to accomplish?

By the end of Sprint 1, we want to have accomplished these things:

| | Goal |
|---|---|
| 1 | *Team sets up a development environment.* |
| 2 | *Introduced all the new team members to the project.* |
| 3 | *Gotten all the required hardware and software.* |
| 4 | *Perform basic testing, document progression and lessons learned.* |
| 5 | *Started the development on the hardware and software portion of the project.* |

## Sprint 1 Backlog

### What product backlog stories will we complete?

To achieve the Sprint Goal, these stories must be completed:

| User Story ID | As a… | I want to be able to… | So that… |
|---|---|---|---|
| *1* | *Administrator* | *Gotten the hardware parts* | *We can start working on the raspberry.* |
| *2* | *Administrator* | *Sign up for Amazon LightSail* | *To create the database.* |
| *3* | *Developer* | *Set the Raspberry Pi OS* | *The raspberry pi is all set up for development.* |
| *4* | *Developer* | *Created a website layout* | *There'll be a template for the website to be used in the beginning.* |

## Sprint 1 Resource Plan

### Who will do what to accomplish our goal?

| # | Team Member | What tasks the Team Member will commit to work on |
|---|---|---|
| *1* | *Rolly* | *During the first sprint, I will focus mainly on making sure that our team has all the necessary hardware and software that will be used for this project. I will work on documenting the building process of our project so that we can have a detailed overview of it.* |
| *2* | *Yohannes* | *Integrate facial recognition algorithm and establish communication with the central server* |
| *3* | *Alex* | *During the development of the facial recognition door, I will help in polishing the code that we currently have for facial detection. I will also help in demoing and testing the software that we have present so that we can determine if the product is fully functional. I will collaborate with Yohannes in configuring the Raspberry pi to make sure that it is functioning properly.* |
| *4* | *Kent* | *During the first sprint I will conduct research to gather information about the project to get a better understanding and further the development. I will aid my fellow group members; help gather all the materials needed to start the project, assist with documents, and testing.* |
| *5* | *Sudeepa* | *My focus will be on gaining a comprehensive understanding of the project and assisting my team members in developing visual and interactive components for the user interface. I will also contribute any necessary documentation required.* |

# Sprint 1 Stakeholder Communication Plan

**How will we communicate with our stakeholders?**

| # | Stakeholder | What do they need to know | Frequency |
|---|---|---|---|
| 1 | N/A | N/A | *N/A* |
| 2 | *Fill this in* | *Fill this in* | |
| 3 | *Fill this in* | *Fill this in* | |
| 4 | *Fill this in* | *Fill this in* | |
| 5 | *Fill this in* | *Fill this in* | |
| 6 | *Fill this in* | *Fill this in* | |
| 7 | *Fill this in* | *Fill this in* | |

# Sprint 2 Plan on a Page

## Sprint 2 Goal

### What are we trying to accomplish?

By the end of Sprint 2, we want to have accomplished these things:

| | Goal |
|---|---|
| 1 | *To have made more development than in the first sprint.* |
| 2 | *Having the website pages created and running.* |
| 3 | *The database and the domain are all set up.* |
| 4 | *Have the documents completed and started working on the manual.* |
| 5 | *Set up and have the raspberry pi working.* |

## Sprint 2 Backlog

### What product backlog stories will we complete?

To achieve the Sprint Goal, these stories must be completed to achieve the sprint goal:

| User Story ID | As a… | I want to be able to… | So that… |
|---|---|---|---|
| *1* | *Developer* | *Create the web pages of the website* | *We have the code for the websites and each of the pages are created namely the home page, registration page, and the team page.* |
| *2* | *Administrator* | *Deploy a fully backed up database that can be used* | *The data of the users who registered will be protected and saved. This will serve as the backbone of this project.* |
| *3* | *Developer* | *Bought a domain* | *The website will be able to be accessed, and the website can link to the database.* |
| *4* | *Developer* | *Configured the Raspberry* | *The Raspberry Pi will be able to scan the face of the user and recognize the user's face who has uploaded it to the database.* |
| *5* | *Developer* | *Get started on the manual* | *We have a manual on how our product works and the users can use it.* |

## Sprint 2 Resource Plan

### Who will do what to accomplish our goal?

| # | Team Member | What tasks the Team Member will commit to work on |
|---|---|---|
| 1 | Rolly | *For the next sprint, I will be focusing on testing and improving the Facial Recognition Door. I will make sure that it will be fully functional and, with the team, resolve the upcoming problems that the project may possess. I will analyze it thoroughly and look for improvements that can push it to being more industry ready.* |

| | | |
|---|---|---|
| 2 | Yohannes | *I will be responsible for setting up and configuring the secure database system to store and manage registered user face embeddings, ensuring data integrity and privacy.* |
| 3 | Alex | *During sprint 2 I will commit to working and improving the facial recognition door system. This would include further testing of the raspberry pi and spending more time on implementing the code into the raspberry pi. I will spend time figuring out ways to keep the product and data safe in the project.* |
| 4 | Kent | *Within spring 2 I will help my teammates further development of the facial recognition door. I'll help with the testing to figure out what's wrong with each test alongside with solutions to fix each problem. I will also write the documentation part of this sprint that will include the testing and any kind of developments we have made so far.* |
| 5 | Sudeepa | *For sprint 2, I will Help adding security features to the design of a user interface for safeguarding user's data. I'll also help my team members in identifying and solving any issues that come along the way. Will also complete the documentation for this part.* |

# Sprint 3 Plan on a Page

## Sprint 3 Goal

### What are we trying to accomplish?

By the end of Sprint 3 we want to have accomplished these things:

| | Goal |
|---|---|
| 1 | *Webcam Integration and Image capture* |
| 2 | *Facial Recognition Algorithm Implementation* |
| 3 | *Database Setup and Management* |
| 4 | *Have a fully functioning website* |
| 5 | *Completed all the required documents* |

## Sprint 3 Backlog

### What product backlog stories will we complete?

To achieve the Sprint Goal, these stories must be completed to achieve the sprint goal:

| User Story ID | As a… | I want to be able to… | So that… |
|---|---|---|---|
| *1* | *Developer* | *Finalize all the documents* | *So that the manual, schematics, and the product info are completed and ready to present* |
| *2* | *Developer* | *Modify the code to be able to unlock the motorized lock* | *So, we can unlock the lock with facial recognition. Also, that the product works as intended and is ready for presentation.* |
| *3* | *User* | *Can create an account on the website that will be stored on the database* | *The user that has created the account will be able to use the features on it and the website will save any data on that user.* |
| *4* | *Developer* | *Host the website that is on the MySQL database* | *The website is fully up and ready to go. The website is available to be accessed online on the internet.* |

## Sprint 3 Resource Plan

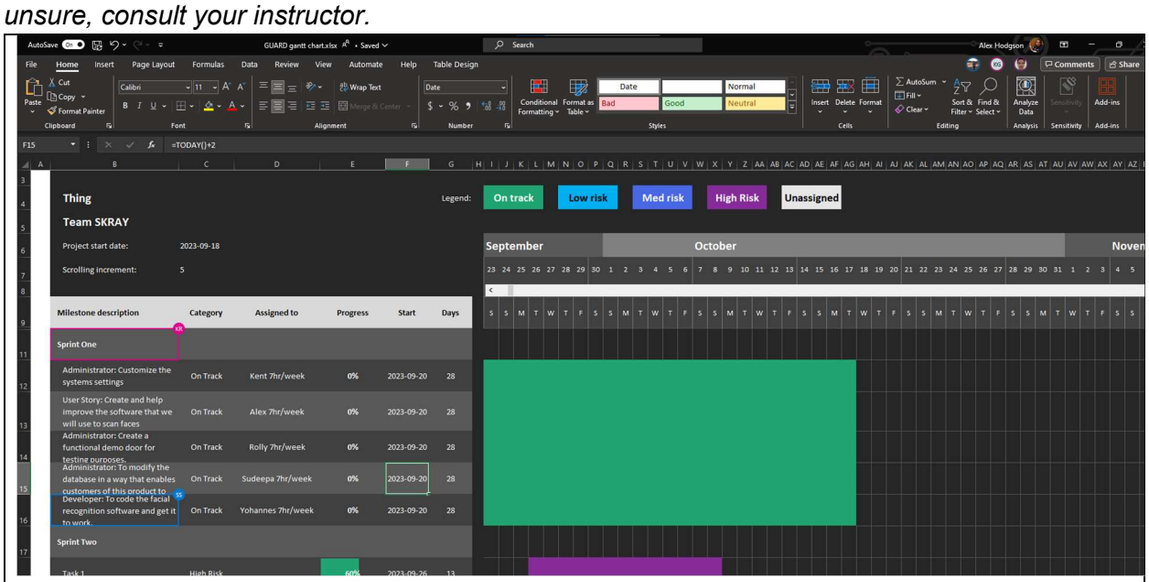
### Who will do what to accomplish our goal?

| # | Team Member | Significant tasks Team Member will commit to work on |
|---|---|---|
| *1* | *Rolly* | *For this last sprint, I will be preparing the Facial Recognition Door to be a proper usable product that can be catered to the general masses. Our goal is to come up with this full product, and if possible, earn some money through it. I will also finalize all the necessary documents that will be needed.* |
| *2* | *Yohannes* | *I will take on the task of coordinating hardware integration, ensuring seamless communication between the webcam, raspberry Pi, and the door's locking mechanism for efficient and secure access control.* |
| *3* | *Alex* | *I will work on the integration of the webcam and the raspberry pi for the facial recognition door. And to help set up the* |

| | | |
|---|---|---|
| | | *database that we will be using for scanning and saving every individual's face.* |
| *4* | *Kent* | *In this final sprint resource plan, I will work alongside Rolly to finalize all the documents we have work this semester regarding this project. Come to the aid of any group member and make sure everything is ready and finished.* |
| *5* | *Sudeepa* | *I will take on the responsibility of designing an intuitive and user-friendly interface to ensure a secure and efficient access control experience. Additionally, I will thoroughly review the entire project and address any bugs or overlooked elements.* |

# Sprint 1 Plan

*Using the chosen project methodology and any relevant tools, plan out your first sprint. Please refer to the rubric for details. It is likely that you will use third party tools or other documents to track this. For your submission, please provide relevant URLs or copies of those documents. If unsure, consult your instructor.*



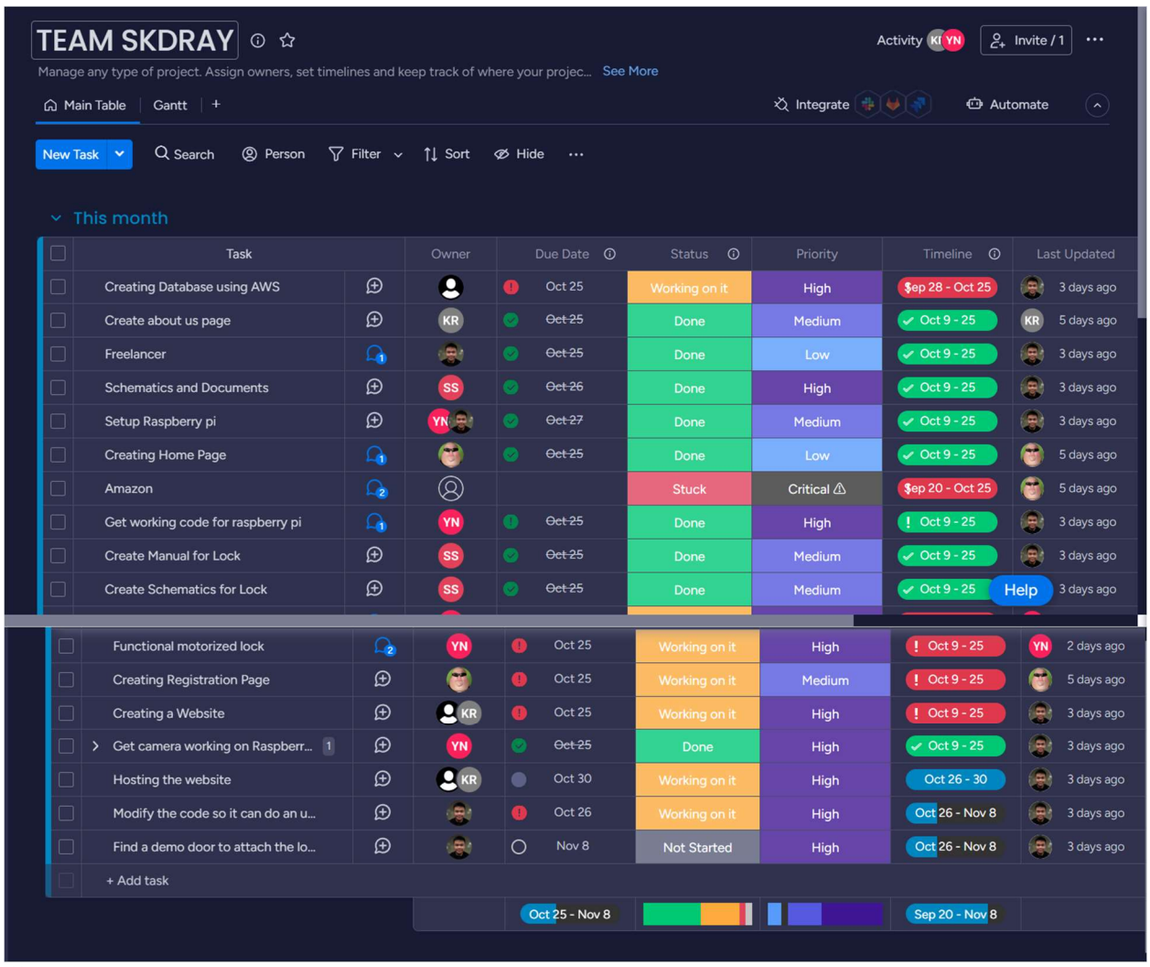

[GUARD gantt chart.xlsx]

For David

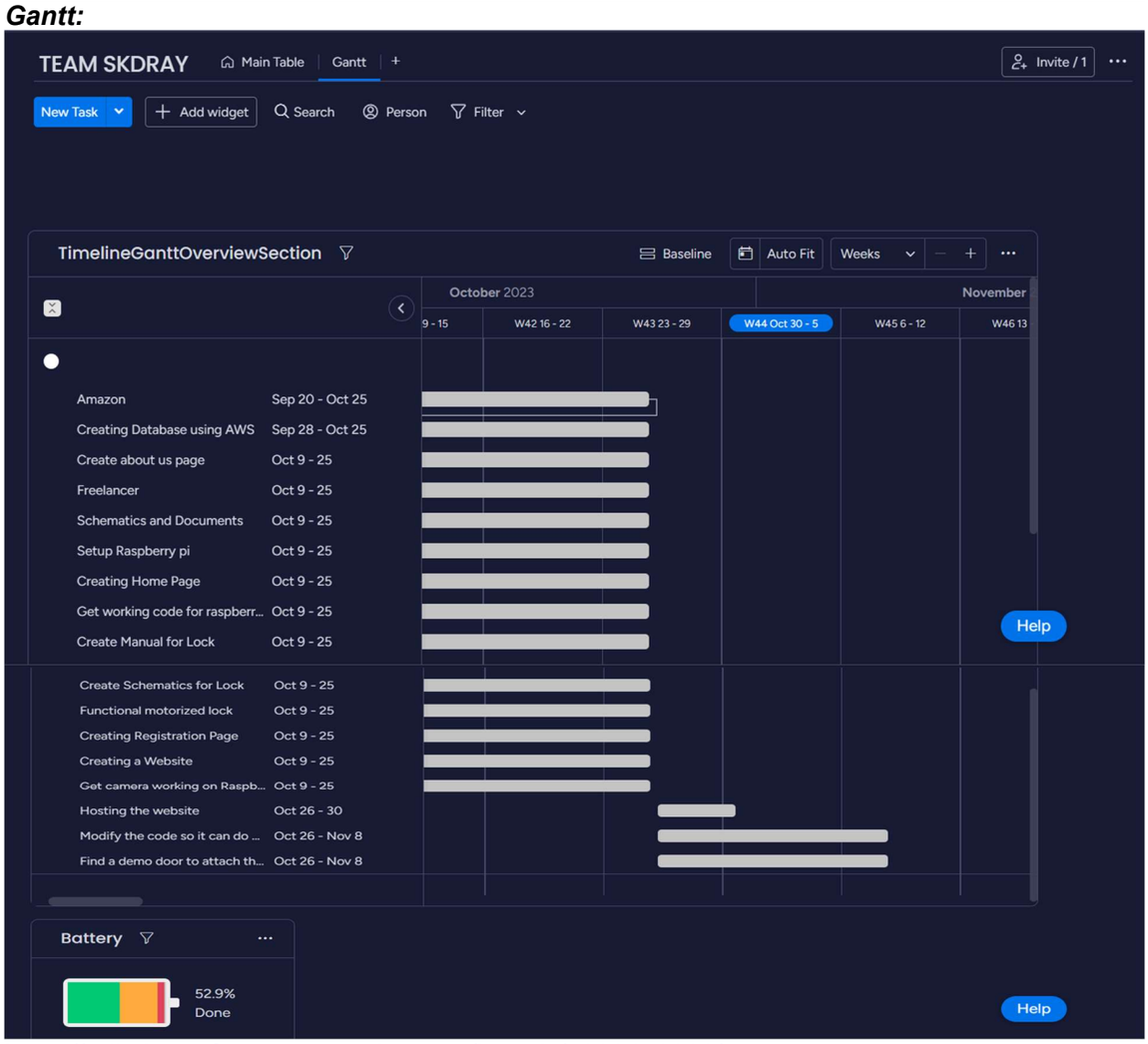
# Sprint 2 Plan

*We will be using a Gantt Chart once again to track the progress of our work. We plan to add more work here to this chart as we go through the 2nd sprint.*

***Main Table:***




***Gantt:***

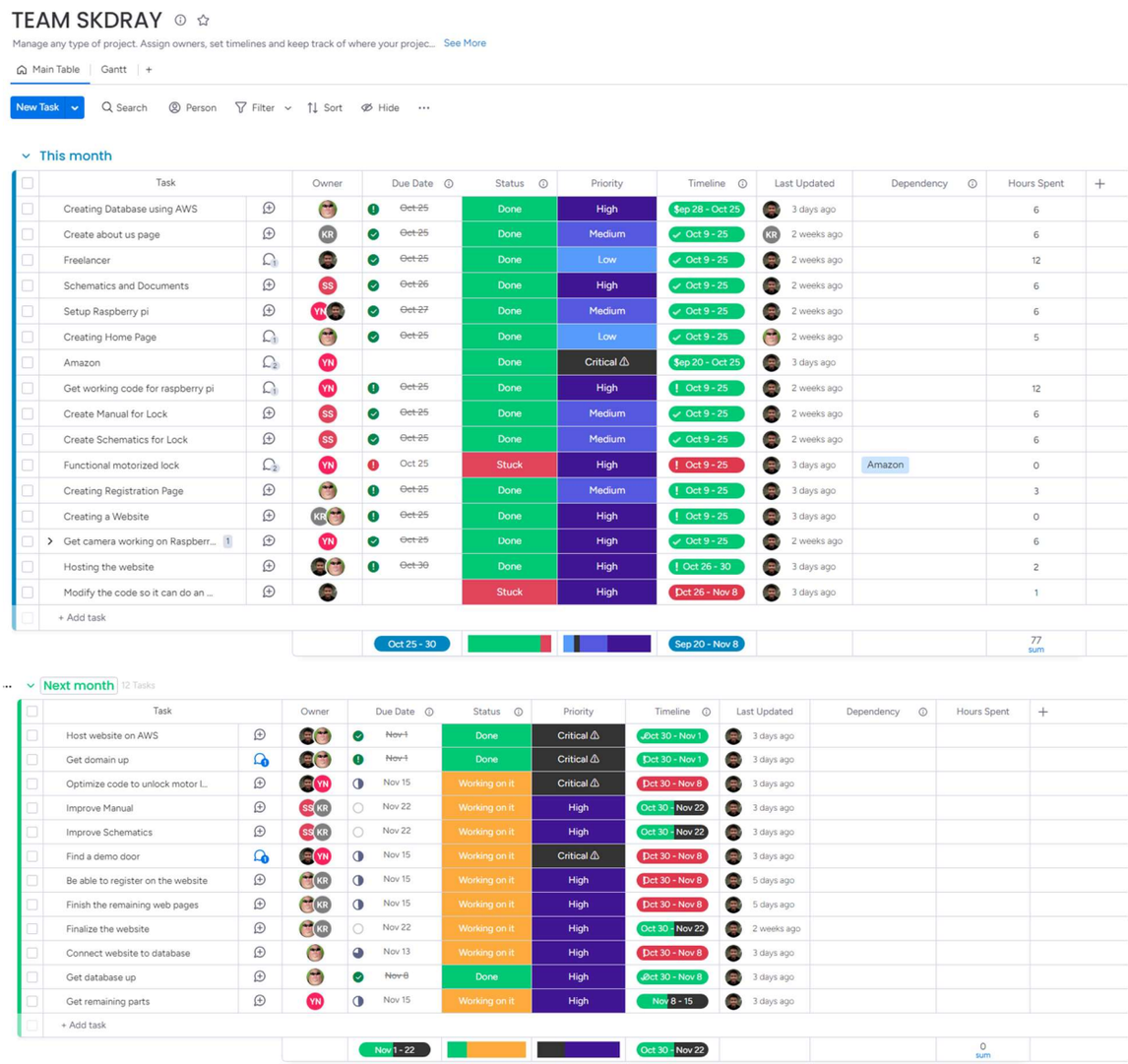



https://rollyriverarfrs-team.monday.com/boards/5393458898/

# Sprint 3 Plan

*We will be using Monday.com to track the progress of our work. We plan to add more work here to this chart as we go through the 3rd sprint.*



TEAM SKDRAY

Manage any type of project. Assign owners, set timelines and keep track of where your projec... See More

Main Table | Gantt | +

New Task | Search | Person | Filter | Sort | Hide | ...

This month

| Task | Owner | Due Date | Status | Priority | Timeline | Last Updated | Dependency | Hours Spent |
|---|---|---|---|---|---|---|---|---|
| Creating Database using AWS | | ~~Oct 25~~ | Done | High | Sep 28 - Oct 25 | 3 days ago | | 6 |
| Create about us page | KR | ~~Oct 25~~ | Done | Medium | Oct 9 - 25 | 2 weeks ago | | 6 |
| Freelancer | | ~~Oct 25~~ | Done | Low | Oct 9 - 25 | 2 weeks ago | | 12 |
| Schematics and Documents | SS | ~~Oct 26~~ | Done | High | Oct 9 - 25 | 2 weeks ago | | 6 |
| Setup Raspberry pi | YN | ~~Oct 27~~ | Done | Medium | Oct 9 - 25 | 2 weeks ago | | 6 |
| Creating Home Page | | ~~Oct 25~~ | Done | Low | Oct 9 - 25 | 2 weeks ago | | 5 |
| Amazon | YN | | Done | Critical | Sep 20 - Oct 25 | 3 days ago | | |
| Get working code for raspberry pi | YN | ~~Oct 25~~ | Done | High | Oct 9 - 25 | 2 weeks ago | | 12 |
| Create Manual for Lock | SS | ~~Oct 25~~ | Done | Medium | Oct 9 - 25 | 2 weeks ago | | 6 |
| Create Schematics for Lock | SS | ~~Oct 25~~ | Done | Medium | Oct 9 - 25 | 2 weeks ago | | 6 |
| Functional motorized lock | YN | Oct 25 | Stuck | High | Oct 9 - 25 | 3 days ago | Amazon | 0 |
| Creating Registration Page | | ~~Oct 25~~ | Done | Medium | Oct 9 - 25 | 3 days ago | | 3 |
| Creating a Website | KR | ~~Oct 25~~ | Done | High | Oct 9 - 25 | 3 days ago | | 0 |
| Get camera working on Raspberr... 1 | YN | ~~Oct 25~~ | Done | High | Oct 9 - 25 | 2 weeks ago | | 6 |
| Hosting the website | | ~~Oct 30~~ | Done | High | Oct 26 - 30 | 3 days ago | | 2 |
| Modify the code so it can do an ... | | | Stuck | High | Oct 26 - Nov 8 | 3 days ago | | 1 |
| + Add task | | | | | | | | |
| | | Oct 25 - 30 | | | Sep 20 - Nov 8 | | | 77 sum |

Next month 12 Tasks

| Task | Owner | Due Date | Status | Priority | Timeline | Last Updated | Dependency | Hours Spent |
|---|---|---|---|---|---|---|---|---|
| Host website on AWS | | ~~Nov 1~~ | Done | Critical | Oct 30 - Nov 1 | 3 days ago | | |
| Get domain up | | ~~Nov 1~~ | Done | Critical | Oct 30 - Nov 1 | 3 days ago | | |
| Optimize code to unlock motor l... | YN | Nov 15 | Working on it | Critical | Oct 30 - Nov 8 | 3 days ago | | |
| Improve Manual | SS KR | Nov 22 | Working on it | High | Oct 30 - Nov 22 | 3 days ago | | |
| Improve Schematics | SS KR | Nov 22 | Working on it | High | Oct 30 - Nov 22 | 3 days ago | | |
| Find a demo door | YN | Nov 15 | Working on it | Critical | Oct 30 - Nov 8 | 3 days ago | | |
| Be able to register on the website | KR | Nov 15 | Working on it | High | Oct 30 - Nov 8 | 5 days ago | | |
| Finish the remaining web pages | KR | Nov 15 | Working on it | High | Oct 30 - Nov 8 | 5 days ago | | |
| Finalize the website | KR | Nov 22 | Working on it | High | Oct 30 - Nov 22 | 2 weeks ago | | |
| Connect website to database | | Nov 13 | Working on it | High | Oct 30 - Nov 8 | 3 days ago | | |
| Get database up | | ~~Nov 8~~ | Done | High | ~~Oct 30 - Nov 8~~ | 3 days ago | | |
| Get remaining parts | YN | Nov 15 | Working on it | High | Nov 8 - 15 | 3 days ago | | |
| + Add task | | | | | | | | |
| | | Nov 1 - 22 | | | Oct 30 - Nov 22 | | | 0 sum |

*Unfortunately, our Monday.com subscription has ended, and this is the last screen capture that we were able to save. However, the tasks that we completed are all on the business canvass as well as a detailed description of every task.*

# Marking Criteria

| Criteria | 4 | 3 | 2 | 0 |
|---|---|---|---|---|
| Minimum Viable Product | The stories chosen from the product backlog form a clear minimum viable product that solves a compelling problem. Enough stories are chosen for adequate complexity, however few enough that the goal is clear. | The stories chosen from the product backlog form a minimum viable product that solves a problem. Enough stories are chosen for adequate complexity, however few enough that the goal is reasonably clear. | The stories chosen from the product backlog could form a minimum viable product that solves a problem. | There is no minimum viable product, or the stories chosen could not form a minimum viable product. |
| Project Management Methodology | Adequate research was put into choosing the project methodology, and there are clear expectations set for how procedures will be managed on a daily, weekly, and monthly basis. | Adequate research was put into choosing the project methodology, and there are expectations set for how procedures will be managed on a daily, weekly, and monthly basis. | A project methodology was chosen, and how the project will be managed is described, although clarification may be required. | A project methodology was not chosen, or it is unclear how the project will be managed. |
| **Criteria** | **3** | **2.25** | **1.75** | **0** |
| Sprint Plans | There is clear thought behind the stories the team intends to complete each sprint, and a mixture of must do and should do items for each sprint. Each team member has a number of key objectives. It is very clear who the stakeholders involved with each sprint are and how they will be communicated with. | There is thought behind the stories the team intends to complete each sprint, and a mixture of must do and should do items for each sprint. Each team member has a number of key objectives. It is clear who the stakeholders involved with each sprint are and how they will be communicated with. | There is thought behind the stories the team intends to complete each sprint. Most team members have a number of key objectives. Most stakeholders involved with each sprint are listed. | The sprint planning is unclear, not all members have stories assigned, or stakeholders are not correctly identified. |
| **Criteria** | **6** | **4.5** | **3** | **0** |
| Plan for Upcoming Sprint | Using the proposed project methodology, the team has planned tasks that will ensure each team member has at least 30 hours of work for the next sprint. Tasks are written in a SMART format. Larger tasks are broken down into smaller sub-tasks. It is clear what members plan to do on a week by week basis. | Using the proposed project methodology, the team has planned tasks that will ensure each team member has at least 25 hours of work for the sprint ahead. Tasks are written in a SMART format. Larger tasks are broken down into smaller sub-tasks. It is clear what members plan to do during the next sprint. | Using the proposed project methodology, the team has planned tasks that will ensure each team member has at least 20 hours of work for the next sprint. | A plan was not completing using the chosen methodology, or there is less than 20 hours per team member for the next sprint. |