Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

| Team ID | PNT2022TMID07704 |
|---------------|---|
| Project Name | Project - Signs with smart connectivity for |
| | better road safety |
| Maximum Marks | 8 Marks |

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------------|----------------------|---|--------------|----------|---|
| Sprint-1 | IDE | USN-1 | Installing all the softwares which are required like python IDE | 2 | Low | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-1 | Resources | USN-2 | Initialization Create and initialize accounts in various public APIs like Open Weather API. | 5 | Low | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-1 | | USN-3 | Write a Python program that outputs results given the inputs like weather | 13 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-2 | | USN-4 | Checking the simulation with conditions and Coding. | 5 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |

| Sprint | Functional User Story User Story / Task Requirement (Epic) Number | | Story Points | Priority | Team Members | |
|----------|---|-------|--|----------|--------------|--|
| Sprint-2 | Software | USN-5 | Working with IBM Watson IOT and Node Red integration | 2 | High | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidhar an S |
| Sprint-2 | | | Test the above created IOT devices and workflow | 13 | High | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-3 | Application Development | USN-6 | Using MIT App Inventor create an App | 13 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-3 | | | Integrate the MIT app with node-red | 5 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-3 | | | Testing the Application | 2 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |
| Sprint-4 | Interface | USN-7 | Displaying speed Limitations | 2 | Medium | Abirami V Priya N Rameshkumar M Arulkumar A Dharanidharan S |

| Sprint-4 | | Displaying traffic diversion | 5 | Medium | Abirami V |
|----------|--|---|----|--------|-----------------|
| | | Signs depending on the road conditions | | | Priya N |
| | | | | | Rameshkumar |
| | | | | | M |
| | | | | | Arulkumar A |
| | | | | | Dharanidharan S |
| Sprint-4 | | Testing of the user interface with the software | 13 | Medium | Abirami V |
| | | | | | Priya N |
| | | | | | Rameshkumar |
| | | | | | M |
| | | | | | Arulkumar A |
| | | | | | Dharanidharan S |

Project Tracker, Velocity & Burndown Chart: (4 Marks)

| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|------------------------------|
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 07 Nov 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 07 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 12 Nov 2022 | 20 | 19 Nov 2022 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

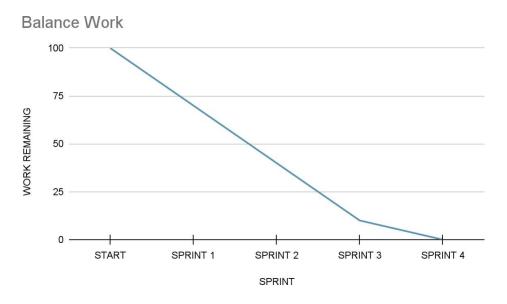
Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



Sprint 2 (example)

