

Project Planning Phase

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

| | |
|---------------|--|
| Date | 18 October 2022 |
| Team ID | PNT2022TMID01305 |
| Project Name | Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification |
| 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 | Stimulation Creation | USN-1 | Create IBM Watson IoT Device | 2 | Medium | Hemant Saranraj & Abernesh |
| Sprint-2 | Software | USN-2 | Create and configure IoT Device with Node-RED | 3 | High | Adhithyan & Dhuvarakesh |
| Sprint-2 | Software | USN-3 | Workflow for IoT scenarios using local node red | 3 | High | Hemant Saranraj & Adhithyan |
| Sprint-3 | MIT app inventor dashboard | USN-4 | Application for the project using MIT app | 3 | High | Dhuvarakesh & Abernesh |
| Sprint-3 | MIT app inventor dashboard | USN-5 | Design the model and test the app | 2 | Medium | Adhithyan & Dhuvarakesh |
| Sprint-4 | Web UI | USN-6 | To make the user interact with the software | 3 | High | Hemant Saranraj & Abernesh |

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 | 29 Oct 2022 | 15 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 16 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 15 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 17 | 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)

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

| Sprint | Total Story Points | Duration | Average Velocity |
|----------|--------------------|----------|------------------|
| Sprint-1 | 20 | 6 | 20/6=3.33 |
| Sprint-2 | 20 | 6 | 20/6=3.33 |
| Sprint-3 | 20 | 6 | 20/6=3.33 |
| Sprint-4 | 20 | 6 | 20/6=3.33 |

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.



