

## Project Planning Phase

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

|               |   |
|---------------|---|
| Date          | 05 November 2022  |
| Team ID       | PNT2022TMID09836  |
| Project Name  | IoT Based Safety Gadget For Child Safety Monitoring & Notification. |
| Maximum Marks | 8 Marks   |

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

| Sprint   | Functional Requirement (Epic)    | User Story Number | User Story / Task   | Story Points | Priority | Team Members                 |
|----------|----------------------------------|-------------------|---|--------------|----------|------------------------------|
| Sprint-1 | Registration                     | USN-1             | As a user, I can register for the application by entering my email, password, and confirming my password. | 4            | High     | PUSHPAVENI                   |
| Sprint-1 | Confirmation Email               | USN-2             | As a user, I will receive confirmation email once I have registered for the application.                  | 4            | High     | PRABHA                       |
| Sprint-1 | Authentication                   | USN-3             | As a user, I can register for the application through Facebook.   | 4            | Medium   | SOWMIYADEVI                  |
| Sprint-1 | Login                            | USN-4             | As a user, I can register for the application through Gmail.  | 4            | High     | SAKTHI SOWNDARYA             |
| Sprint-1 | Dashboard                        | USN-5             | As a user, I can log into the application by entering email & password.                                   | 4            | High     | SAKTHI SOWNDARYA             |
| Sprint-2 | Notification                     | USN-1             | As a user, I should be able to notify my parent and guardian in emergency situations.                     | 10           | High     | PUSHPAVENI                   |
| Sprint-2 | Store data                       | USN-2             | As a user, I need to continuously store my location data into the data base.                              | 10           | Medium   | PRABHA                       |
| Sprint-3 | Communication                    | USN-3,1           | I should be able to communicate with my parents.  | 6            | Low      | SOWMIYADEVI, PUSHPAVENI.     |
| Sprint-3 | IoT Device- Watson communication | USN-1,4           | The data from IoT device should reach IBM Cloud.  | 7            | Medium   | PUSHPAVENI, SAKTHI SOWNDARYA |

| <b>Sprint</b> | <b>Functional Requirement (Epic)</b>   | <b>User Story Number</b> | <b>User Story / Task</b>   | <b>Story Points</b> | <b>Priority</b> | <b>Team Members</b>                  |
|---------------|--|--------------------------|--|---------------------|-----------------|--------------------------------------|
| Sprint-3      | Node Device- Cloudant DB communication | USN-4,2                  | The data stored in IBM Cloud should be properly intergrated with Cloudant DB.    | 7                   | High            | SAKTHI SOWNDARYA, PRABHA             |
| Sprint-4      | User – WebUI intrface                  | USN-1,4                  | The Web UI should get inputs from the user                                       | 6                   | High            | PUSHPAVENI, SAKTHI SOWNDARYA         |
| Sprint-4      | Geofencing                             | USN-2,3,4                | The geofencing of the child should be done based on the geographical coordinates | 7                   | High            | PRABHA,SOWMIYADEVI, SAKTHI SOWNDARYA |

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

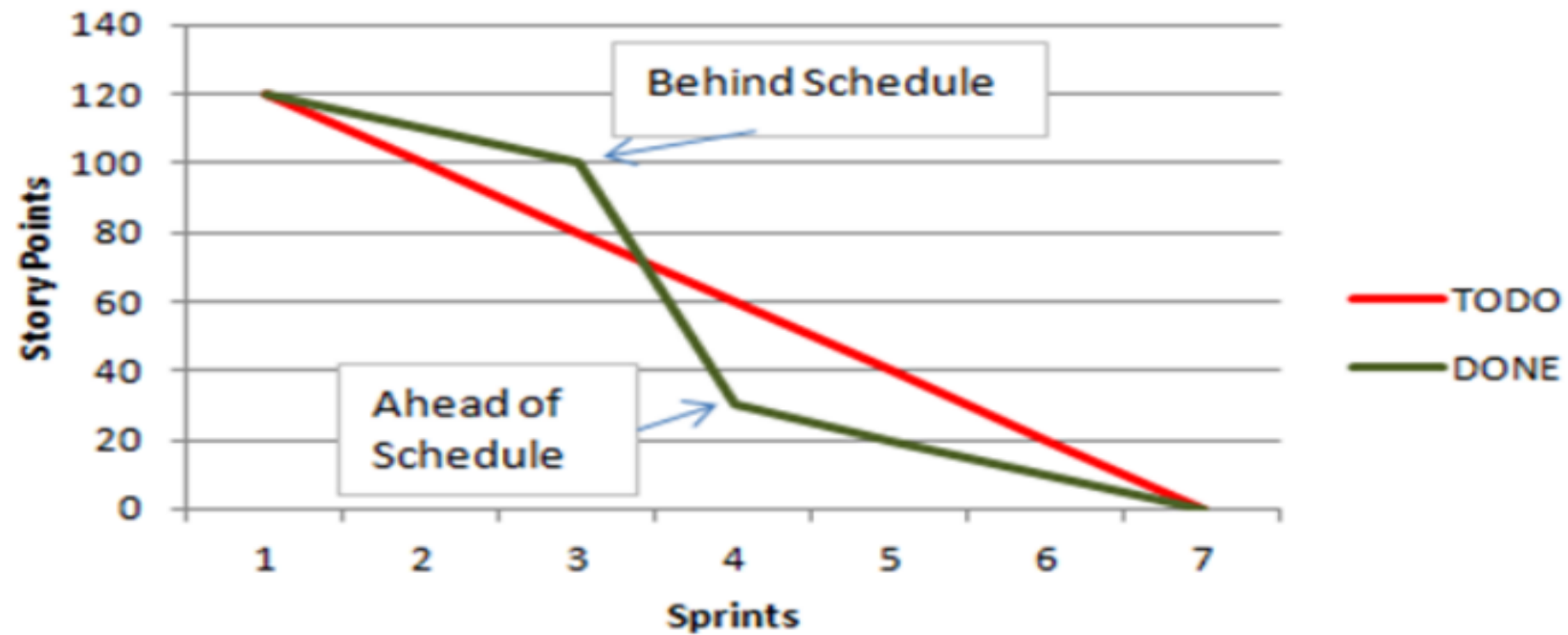
| <b>Sprint</b> | <b>Total Story Points</b> | <b>Duration</b> | <b>Sprint Start Date</b> | <b>Sprint End Date (Planned)</b> | <b>Story Points Completed (as on Planned End Date)</b> | <b>Sprint Release Date (Actual)</b> |
|---------------|---------------------------|-----------------|--------------------------|----------------------------------|--|-------------------------------------|
| Sprint-1      | 20                        | 6 Days          | 24 Oct 2022              | 29 Oct 2022                      | 22/10/22022  | 29 Oct 2022                         |
| Sprint-2      | 20                        | 6 Days          | 31 Oct 2022              | 05 Nov 2022                      | 22/10/2022   | 29 Oct 2022                         |
| Sprint-3      | 20                        | 6 Days          | 07 Nov 2022              | 12 Nov 2022                      | 22/10/2022   | 29 Oct 2022                         |
| Sprint-4      | 20                        | 6 Days          | 14 Nov 2022              | 19 Nov 2022                      | 22/10/2022   | 29 Oct 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)

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

## Release Burndown Chart



## JIRA Software:

The screenshot displays the Jira Software web interface. The browser's address bar shows the URL: `pnt2022tmid09836.atlassian.net/jira/software/projects/IBSGFCMN/boards/1`. The top navigation bar includes the Jira logo, 'Your work' dropdown, 'Projects' dropdown, 'Filters', 'Dashboards', 'People', 'Apps', and a 'Create' button. A search bar is also present. The left sidebar shows the project 'IoT Based Safety Gadg...' with options for 'Roadmap' and 'Board' (selected). Below this, there are sections for 'DEVELOPMENT' (Code), 'Project pages', 'Add shortcut', and 'Project settings'. The main content area features a banner for a free trial, the project name 'IoT Based Safety Gadget For Child Safety Monitoring & Notification', and the board title 'IBSGFCMN board'. The board is currently empty, with columns for 'TO DO', 'IN PROGRESS', and 'DONE'. A '+ Create issue' button is visible in the 'TO DO' column. A 'GROUP BY' dropdown is set to 'None'. At the bottom right, there is a 'Quickstart' button.

### **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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

### **Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>