## **Project Planning Phase**

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

| Date          | 25 October 2022  |
|---------------|--|
| Team ID       | PNT2022TMID09639   |
| Project Name  | Project - IOT-Based Safety Gadget for Child Safety Monitoring and 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<br>Requirement (Epic) | User Story<br>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     | LOGHAPRIYA,<br>AISHWARYA    |
| Sprint-1 | Confirmation Email               | USN-2                | As a user, I will receive confirmation email and SMS once I have registered for the application           | 3            | High     | DEEPAHARSINI                |
| Sprint-2 | Authentication                   | USN-3                | As a user, I can register for the application through Email ID and Mobile App.                            | 2            | Low      | DEEPAK                      |
| Sprint-1 | Login                            | USN-4                | As a user, I can log into the application by entering email & password.                                   | 2            | Medium   | AISHWARYA                   |
| Sprint-1 | Dashboard                        | USN-5                | As a user, I can monitor, measure, analyze relevant data in key areas.                                    | 8            | High     | LOGHAPRIYA                  |
| Sprint-2 | Notification                     | USN-1                | As a user, I should be able to receive notification when the child is in emergency situations.            | 9            | High     | DEEPAHARSHINI               |
| Sprint-2 | Store data                       | USN-2                | As a user, I need to store the location data and child information into the database.                     | 10           | High     | DEEPAK                      |
| Sprint-2 | Communication                    | USN-3,1              | The child and the parent should be able to communicate.   | 7            | Medium   | AISHWARYA,<br>DEEPAHARSHINI |

| Sprint   | Functional Requirement (Epic) | User Story<br>Number | User Story / Task  | Story Points | Priority | Team Members                               |
|----------|-------------------------------|----------------------|--|--------------|----------|--|
| Sprint-3 | IoT Device                    | USN-1,4              | We automatically monitor the child in real time using Internet of Things, with the help of GPS, GSM, and Raspberry Pi. | 6            | Medium   | LOGHAPRIYA,<br>DEEPAK                      |
| Sprint-3 | Node RED                      | USN-5,2              | The data stored in IBM Cloud should be integrated properly.  | 8            | High     | AISHWARYA,<br>DEEPAHARSHINI,<br>LOGHAPRIYA |
| Sprint-4 | User Interface                | USN-1,4              | The point of human-computer interaction and communication in a device.   | 7            | Medium   | DEEPAHARSHINI,<br>DEEPAK                   |
| Sprint-4 | Geofencing                    | USN-2,3,5            | Based on the geographical coordinates, the geofence of the child can be done.  | 8            | High     | AISHWARYA,<br>DEEPAHARSHINI,<br>LOGHAPRIYA |

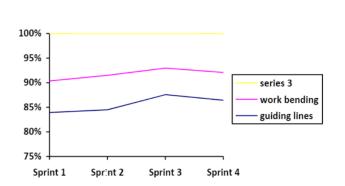
## Project Tracker, Velocity & Burndown Chart: (4 Marks)

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|---------------------------|---|---------------------------------|
| Sprint-1 | 20                    | 6 Days   | 24 Oct 2022       | 29 Oct 2022               | 20  | 29 Oct 2022                     |
| Sprint-2 | 20                    | 6 Days   | 31 Oct 2022       | 05 Nov 2022               | 30  | 05 Nov 2022                     |
| Sprint-3 | 20                    | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 40  | 11 Nov 2022                     |
| Sprint-4 | 20                    | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 50  | 17 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** 

#### **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.

#### VELOCITY

