

## Project Planning Phase

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

Date	29 October 2022
Team ID	PNT2022TMID38342
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and 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	User signup/ login	USN-1	I can register for the app as a user by providing my phone number, user name, password, and a password confirmation.	2	High	Vignesh, Thangam
Sprint-1	User confirmation	USN-2	I am a user, thus I sign in using my password and the password sign up.	2	High	Sanjay , Vignesh
Sprint-1		USN-3	I will receive a confirmation email as a user once I've registered for the application.	1	Medium Anna Universit	Thangam, Kishore Anand
Sprint-1		USN-4	As a user, as soon as I register for the application, I will receive a confirmation OTP.	2	High	Kishore Anand, Vignesh
Sprint-4	Interfacing	USN-5	I must connect all necessary devices, databases, and scripts.	2	High	Thangam, Sanjay
Sprint-2	Setting geo fence	USN-6	Using the user's input, I determine the geolocation coordinates for the geofence.	1	Medium	Vignesh, Kishore Anand

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	User notification	USN-7	Using the user's input, I determine the geolocation coordinates for the geofence.	2	High	Vignesh, Kishore Anand
Sprint-4	Emergency usage	USN-8	I create a module to alert users by mobile phone in the event of a potential emergency.	2	High	Sanjay, Thangam
Sprint-2	Tracking location	USN-9	I supplied the sensor's real-time location.	1	High	Kishore Anand, Thangam
Sprint-3		USN-10	I create a module that allows the dashboard to display current location.	2	Medium	Vignesh, Sanjay
Sprint-3	User location check	USN-11	I retrieve the current position from a cloud database and use it to check for out-of-boundary locations against established geo-fences.	2	High	Kishore Anand, Vignesh
Sprint-2	Database	USN-12	I build databases.	2	High	Sanjay, Thangam
Sprint-4		USN-13	I keep a database	2	Medium	Thangam, Kishore Anand

### 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	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	04 Nov 2022

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-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	11 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 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)

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

### 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.

<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>