

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

Team ID	PNT2022TMID15198
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification

#### 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	Device creation in Watson IoT	USN-1	Create a Device in Watson IoT	10	High	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-1	Python Script	USN-2	Develop the python Script	5	High	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-1	Node-Red Configuration	USN-3	Configure the Node-Red App	5	High	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-2	Geo Fencing Algorithm	USN-4	Develop the algorithm to implement Geofence	10	Low	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K

Sprint-2	Node-Red World Map	USN-5	Display the location of the child using worldmap of the Node-Red	5	Medium	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
<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-2	Android Application Front end Development	USN-6	Develop the front end of the Android Application	5	Medium	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-3	API configuration	USN-7	Configure the Node-Red to send data to the Android Application via http service	10	High	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-3	Android Application Backend Development	USN-8	Develop the backend of the Android Application	10	High	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-4	Database	USN-9	Upload the data to the Cloudant DB	10	Medium	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
Sprint-4	Alert Notification	USN-10	Develop code to send alert notification via Android Application in the Mobile Phone	5	Low	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K

Sprint-4	Tracking Location	USN-11	Tracking the location through app.	5	Medium	VISHAL N R MADHUMITHA K LAVANYA S SANJAYRAM A K
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**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	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	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)

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