

### Project Planning Phase

Date	09 November 2022
Team ID	PNT2022TMID35083
Project Name	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 Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1		US-1	Create the IBM Cloud services  which are being used in this project.	6	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P

<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-1		US-2	Configure the IBM Cloud services which are being used in completing this project.	4	Medium	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-2		US-3	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	Medium	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-2		US-4	In order to connect the IoT device to the IBM cloud, create a device in the IBM Watson IoT platform and get the device credentials.	5	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-3		US-1	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.	10	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-3		US-2	Create a Node-RED service.	10	High	Jeshrin Reubsiga.T Devika.I

<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>
						Gayathri.M Kalaiarasi.P
Sprint-3		US-1	Develop a python script to publish random sensor data such as temperature, moisture, soil and humidity to the IBM IoT platform	7	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-3		US-2	After developing python code, commands are received just print the statements which represent the control of the devices.	5	Medium	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-4		US-3	Publish Data to The IBM Cloud	8	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-4		US-1	Create Web UI in Node- Red	10	High	Jeshrin Reubsiga.T Devika.I Gayathri.M Kalaiarasi.P
Sprint-4		US-2	Configure the Node-RED flow to	10	High	Jeshrin Reubsiga.T

<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>
			receive data from the IBM IoT platform and also use Cloudant DB nodes to store the received sensor data in the cloudant DB			Devika.I Gayathri.M Kalaiarasi.P

**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	3 Days	31 Oct 2022	02 Nov 2022	20	02 Nov 2022
Sprint-2	20	3 Days	02 Nov 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	3 Days	05 Nov 2022	08 Nov 2022	20	08 Nov 2022
Sprint-4	20	3 Days	11 Nov 2022	14 Nov 2022	20	14 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)

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

**Burndown Chart:**

A burndown 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, burndown charts can be applied to any project containing measurable progress overtime.

