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Project Planning Phase
Project Planning (Product Backlog, Sprint Planning, Stories, Storypoints)

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Date	18October 2022
Team ID	PNT2022TMID47674
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	Paring IoT Device with Parents mobile	USN-1	The IoT device is paired with parents mobile by internet connection. It is used to track the child activities.	2	High	
Sprint-2	Live Location Tracking	USN-2	the GPS location is updated to the cloud at regular intervals or on request, whenever parent want to monitor the location of safety device then parental app can be used which fetches all the data from the updated cloud and also display the current/live location of the safety gadget.	1	High	
Sprint-3	Panic Alert System:	USN-3	The gadget is equipped with panic alert system feature which mainly consist of a button that is triggered only during certain abnormal/panic situations, this button is programmed in such a way that, once it is triggered then multiple alerts in various forms occurs within few seconds of time, SMS and also phone call is triggered to the parental phone from the safety gadget GSM module to the parental phone, which consists of current location of gadget fetched from its GPS and a pre-installed panic message seeking for help.	2	Low	

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Stay Connected Feature:	USN-4	This feature is to communicate between safety gadget (GSM module) and parental phone always connected irrespective of the situation, safety gadget can make a phone call anytime to parental phone and vice-versa.	2	Medium	
Sprint-5	Health Monitoring System:	USN-5	The gadget consists of heart beat and temperature sensor which is used to monitor the general health condition of child. Any abnormalities being detected in the health monitoring parameters by the safety gadget then an immediate alert is sent on the parental app via Wi-Fi. Also, displays on parental app	1	High	
Sprint-6	Gadget Plug and Unplug Monitoring:	USN-6	This feature is to keep monitoring if the safety gadget is plugged or not by monitoring the contact switch, necessary alerts are provided on parental app whenever the device is unplugged.	2	Medium	
Sprint-7	Boundary Monitoring System:	USN-7	Binding gadget is the device which is used to satisfy this feature along with safety gadget and parental phone. This gadget is used to monitor safety gadget within a bounded area using wireless technology. Once the safety gadget is moving out of the threshold distance from the BLE listener device then an alert is provided on device itself, which will be used by parent/guardian.	1	High	

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	15	6 Days	24 Oct 2022	29 Oct 2022	15	29 Oct 2022
Sprint-2	15	3 Days	31 Oct 2022	02 Nov 2022		
Sprint-3	10	3 Days	03 Nov 2022	05 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-4	10	3 Days	07 Nov 2022	09 Nov 2022		
Sprint-5	10	3 Days	10 Nov 2022	12 Nov 2022		
Sprint-6	10	3 Days	14 Nov 2022	16 Nov 2022		
Sprint-7	10	3 Days	17 Nov 2022	19 Nov 2022		

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 15 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{15}{10} = 1.5$$

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