Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID31301
Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story 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	Gayathri S R Arun G Dharun P Arunadevi R
Sprint-1	Email confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	4	High	Gayathri S R Arun G Dharun P Arunadevi R
Sprint-1	Authentication	USN-3	As a user, I can register for the application through Gmail	4	Medium	Gayathri S R Arun G Dharun P Arunadevi R
Sprint-1	Login	USN-4	As a user, I can log into the application by entering email & password	4	High	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 1	Dashboard	USN-5	As a user, I can see the changes I made reflect in the dashboard	4	High	Gayathri S R Arun G Dharun P Arunadevi R

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint 2	Notification	USN-1	I should be allowed to alert my parents and legal guardians in an emergency as a user.	10	High	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 2	Data Storage	USN-1	I must continually enter my location information into the database as a user.	10	Medium	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 3	Communication	USN-1.2	I should be able to contact my guardian and parents as a user.	6	Low	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 3	IoT device-Watson communication	USN-1.3	The IOT device should transmit data to the IBM Cloud.	7	Medium	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 3	Node Red-Cloudant DB communication	USN-1.4	The data on the IBM Cloud should be properly integrated with the Cloudant DB.	7	High	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 4	User - WebUI Interface	USN-1.5	The user's input should be collected via the Web UI.	10	High	Gayathri S R Arun G Dharun P Arunadevi R
Sprint 4	Geofencing	USN-1.2,5	Based on the child's GPS coordinates, geofencing should be implemented.	10	High	Gayathri S R Arun G Dharun P Arunadevi R

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

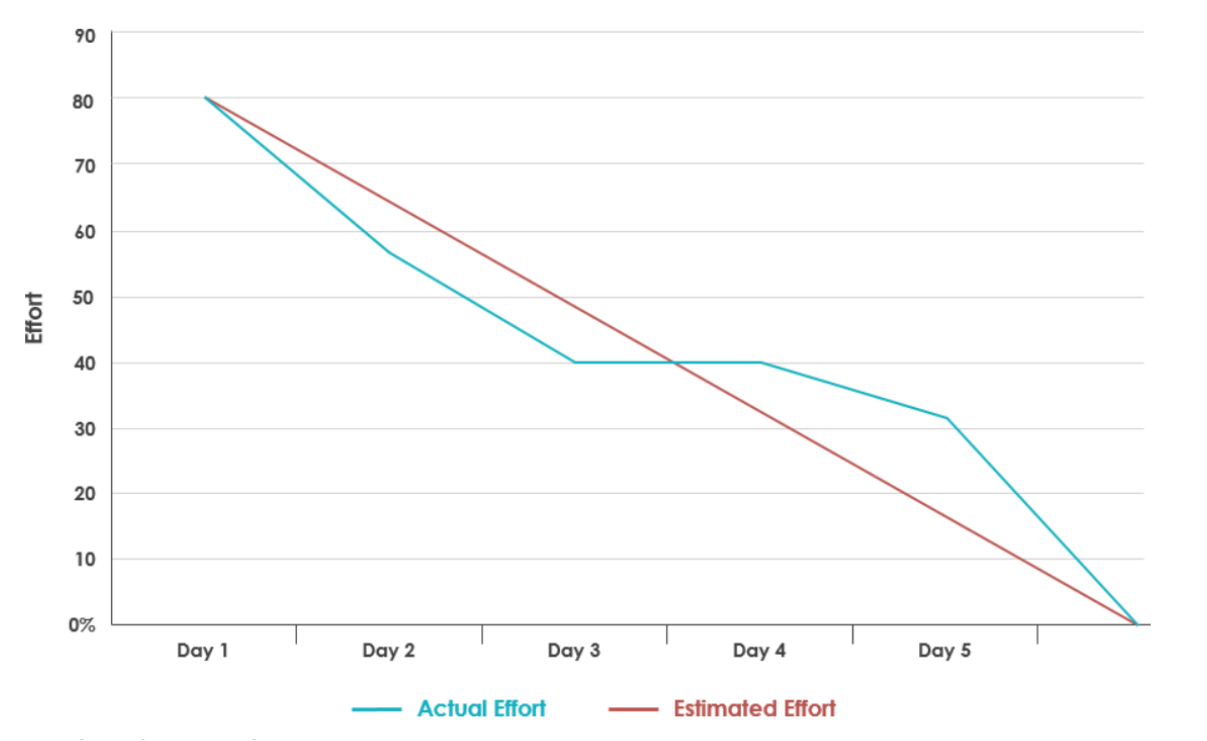
Velocity:
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

SPRINTS	AV
Sprint-1	20/6=3.33
Sprint-2	20/6=3.33
Sprint-3	20/6=3.33
Sprint-4	20/6=3.33

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, 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
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