

Project Planning Phase

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

DATE	30 October 2022
TEAM ID	PNT2022TMID43363
PROJECT NAME	Project - Hazardous Area Monitoring for Industrial Plant powered by IoT

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	Cloud Setup (Cloud Sevices)	USN-1	The smart beacons are connect with IBM cloud services for real-time data transfer	20	High	Dharanitharan S Harinandhan R Jaganaath A Mukil S
Sprint-2	Admin Dasboard Setup/ Web UI (Cloud Services)	USN-2	The web UI is developed and deployed for connecting the user to the cloud	20	High	Dharanitharan S Harinandhan R Jaganaath A Mukil S
Sprint-3	Mobile and wearable device setup (Users)	USN-3	Mobile applications are created using fast SMS API to send alert SMS message and also the watch display mechanism is developed	20	High	Dharanitharan S Harinandhan R Jaganaath A Mukil S
Sprint-4	Installation of Beacons(External)	USN-4	The technician should install the smart beacon devices at vital points to increase the data sensing range	20	High	Dharanitharan S Harinandhan R Jaganaath A Mukil S

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	5 Days	2 Nov 2022	6 Nov 2022	20	6 Nov 2022
Sprint-2	20	4 Days	7 Nov 2022	10 Nov 2022	20	10 Nov 2022
Sprint-3	20	5 Days	11 Nov 2022	15 Nov 2022	20	15 Nov 2022
Sprint-4	20	4 Days	16 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

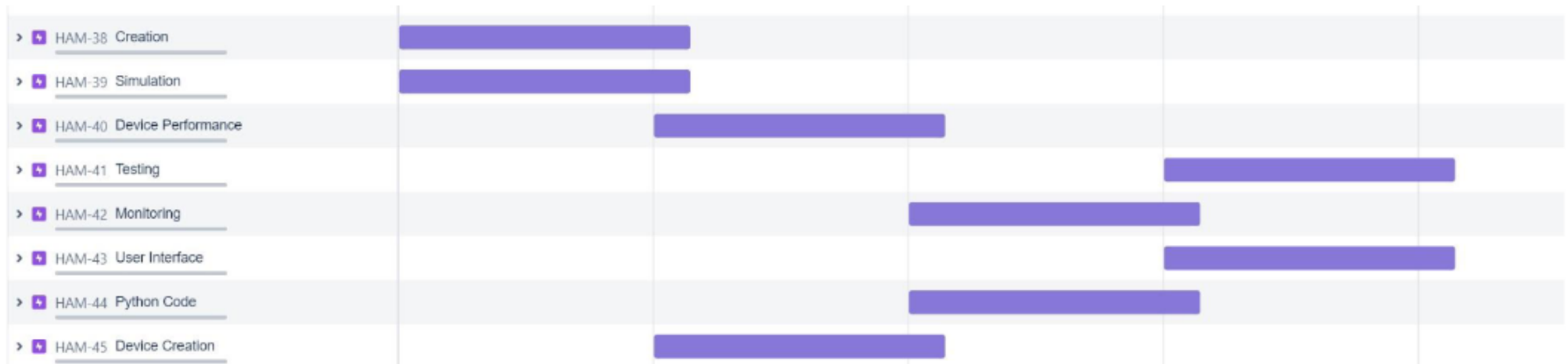
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

$$\text{Average Velocity} = 20/5 = 4$$

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>