

Project Planning Phase

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

Date	31 October2022
Team ID	PNT2022TMID39421
Project Name	Smart solution for Railways using IOT
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	Simulation creation	USN-1	The first and foremost task is connecting sensors and Arudino or raspberrypi using python code(Python code can run in raspberrypi while C and C++ will run in Arudino)	2	High	Yokeshwari. S Durga devi. S Jayavarshini. K. P Kavitha. P
Sprint-2	Software	USN-2	Creating device in the IBM Watson IOT platform, workflow for IOT scenarios using Node-red in connection with IBM cloud.	1	High	Yokeshwari. S Durga devi. S Jayavarshini. K. P Kavitha. P
Sprint-3	MIT App Inventor	USN-3	Develop an application for railways using IOT project using MIT App Inventor in the IBM cloud.	2	Low	Yokeshwari. S Durga devi. S Jayavarshini. K. P

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Dashboard	USN-3	Design the modules and test Apps	2	Medium	Yokeshwari. S Durga devi. S Jayavarshini. K. P Kavitha. P
Sprint-4	Web UI	USN-4	To make the user to interact with software	1	High	Yokeshwari. S Durga devi. S Jayavarshini. K. P Kavitha. P

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

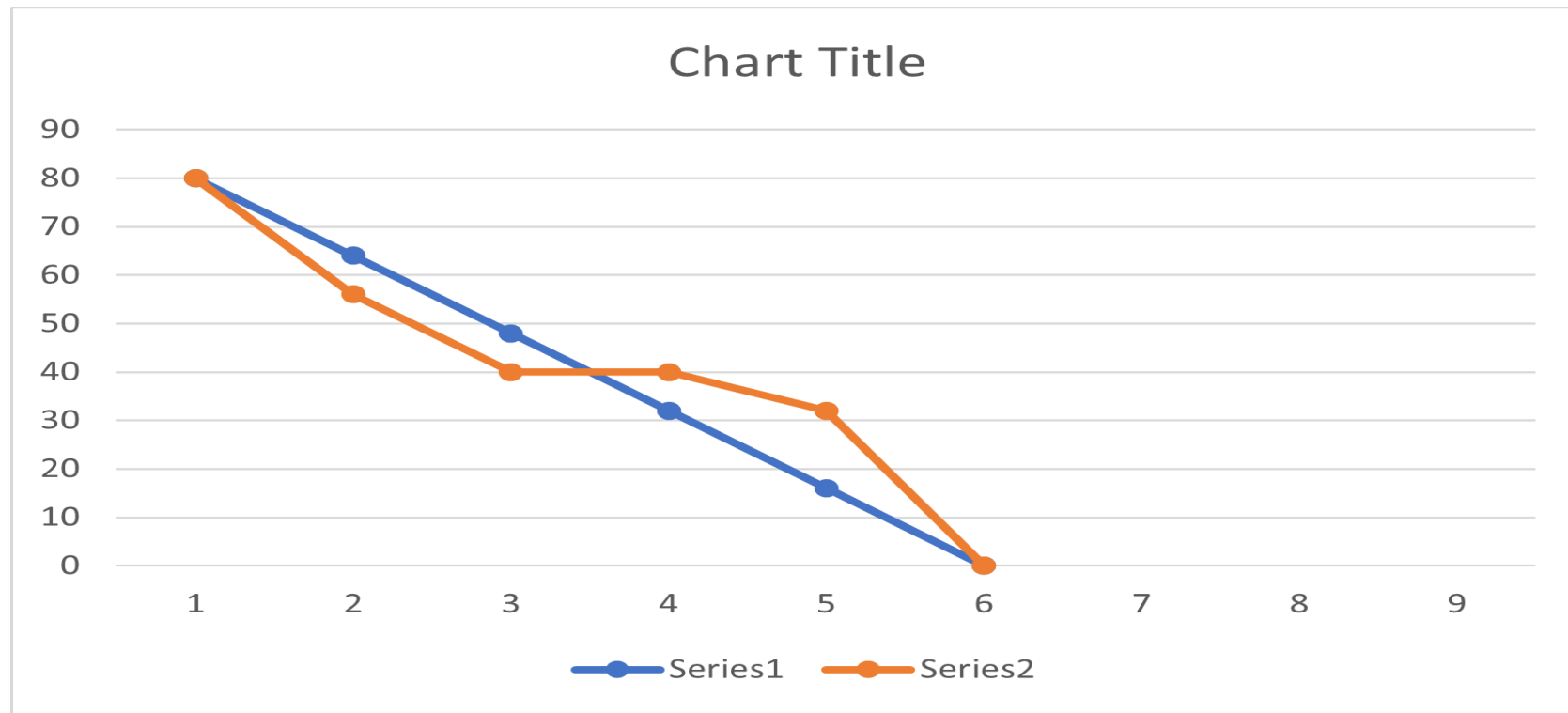
Velocity:

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)

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

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.



Series 1- Estimated effort

Series2- Actual effort