

## Project Planning Phase

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

Domain	Artificial Intelligence
Team ID	PNT2022TMID33568
Project Name	Emerging Methods for Early Detection of Forest Fires
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	Collect the data.	USN-1	As an Environmentalist, it is necessary to collect the data of the forest which includes temperature, humidity, wind, and rain of the forest.	20	High	Poorani D Kaviya S
Sprint -2	Identifying algorithm which is used for detecting the forest fires.	USN-2	Identify algorithms that can be used for predicting the forest fires.	10	Medium	Prithiba G Prithika N
Sprint -3	Implement Algorithm	USN-3	Identify the accuracy of each algorithm in detecting the fires.	20	Medium	Poorani D Kaviya S
Sprint-4	Reliability	USN-4	Evaluate the data collected from algorithm with the defined data set.	20	Medium	Prithiba G Prithika N

### 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	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	15	6 Days	31 Oct 2022	05 Nov 2022	15	05 Nov 2022
Sprint-3	20	8 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	10 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)

Sprint 1 average velocity:

$$\text{Average velocity} = 20 / 5 = 4.0$$

Sprint 2 average velocity:

$$\text{Average velocity} = 15 / 6 = 2.5$$

Sprint 3 average velocity:

$$\text{Average velocity} = 20 / 8 = 2.5$$

Sprint 4 average velocity:

$$\text{Average velocity} = 20 / 10 = 2.0$$

### Burn-down 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.

