

Project Planning Phase

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

Date	24 October 2022
Team ID	PNT2022TMID13753
Project Name	Emerging Methods for Early Detection of Forest Fires

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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application usage.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S
Sprint-2	Input	USN-3	Whenever the fire is detected, the information is given to the database.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S

Sprint-2		USN-4	When it is the wildfire then the alarming system is activated.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S
Sprint-3	Output	USN-5	And the alarm also sent to the corresponding departments and made them know that the wildfire is erupted.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S
Sprint-4	Action	USN-6	Required actions will be taken in order to control erupted wildfire by reaching as early as possible to the destination with the help of detecting systems.	20	High	MANI PRABHU T DHARSHANNATH Y MOHAN M ARAVINTH S

Project Tracker, Velocity & Burn down Chart: (4 Marks)

Project Tracker:

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)

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

Average velocity of sprint-1: $AV = 17/8 = 2.125$

Average velocity of sprint-2: $AV = 11/4 = 2.75$

Average velocity of sprint-3: $AV = 22/5 = 5.5$

Average velocity of sprint-4: $AV = 15/4 = 3.75$

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.

