

Project Planning Phase

Team ID	PNT2022TMID25867
Project Name	Emerging Methods for Early Detection of Forest Fires.
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule and Estimation:

SPRINT	FUNCTIONAL REQUIREMENTS	USER STORY NUMBER	USER STORY / TASK	STORY POINTS	PRIORITY	TEAM MEMBERS
Sprint-1	Data Collection	USN-1	Data collected by sensors aboard orbiting satellites, carried aboard aircraft, or installed on the ground provide a wealth of data that can be used to assess conditions before a burn and track the movement of a wildfire in near real-time.	10	High	<ul style="list-style-type: none">• Pavithiran G• Sharan Padmanabhan• Chandar B• Abinash M
Sprint-1	Image Preprocessing	USN-2	Image processing technique automatically detects forest fires around the world by using infrared (IR) images sourced from satellites and CNN used for image recognition and tasks that involve the processing of pixel data.	7	Medium	<ul style="list-style-type: none">• Pavithiran G• Sharan Padmanabhan• Chandar B• Abinash M
Sprint-2	Training And Testing	USN-3	The model is trained for detecting the fire by training with real time work and the testing is done according to the accuracy of the model.	10	High	<ul style="list-style-type: none">• Pavithiran G• Sharan Padmanabhan• Chandar B• Abinash M

Sprint-3	Reviewing The Model	USN-4	The main task is to check that the model is efficient to work in real time to ensure there is no error in the model.	7	Medium	<ul style="list-style-type: none"> • Pavithiran G • Sharan Padmanabhan • Chandar B • Abinash M
Sprint-4	Implementation	USN-5	After completing every step, the model is implemented on the forest and the quick responses are collected from forest organization	10	High	<ul style="list-style-type: none"> • Pavithiran G • Sharan Padmanabhan • Chandar B • Abinash M

Project Tracker, Velocity and Burndown Chart:

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	20 Oct 2022	8	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Oct 2022	7	08 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	8	15 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	7	20 Nov 2022

Velocity:

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

$$AV = \frac{\text{Sprint Duration}}{\text{Velocity}} = \frac{8}{10} = 0.8$$