

Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

Date	18October 2022
Team ID	PNT2022TMID04066
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	Data Collection	USN-1	The Dataset for training the model is to obtained	20	Medium	Badri Krishnan A
Sprint-1	Image Pre-processing	USN-2	Processing the image to find the fire is detected or not. The output should be of high accuracy.	10	Medium	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan S
Sprint-2	Model Creation	USN-3	Now the model is created and trained on the processed images.	20	High	Badri Krishnan A Deepak S
Sprint-2	Model Deployment to IBM Cloud	USN-4	Now the model file is stored in IBM cloud for future usage as well by trained in IBM cloud	20	High	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan S
Sprint-3	Video Analysis	USN-5	The drone videos will be split into frames to detect the fire.	20	Medium	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan S
Sprint-3	Alerting	USN-6	Then the user is to be alerted using Twilio API in case of fire	10	Medium	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Flask Integration	USN-7	The model created along with alerting and rest will be integrated into a web app using Flask	20	High	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan S
Sprint-4	Location Tracking	USN-8	The exact location of the drone will be predicted and sent along with the alert message.	10	Medium	Badri Krishnan A Deepak S Dhanush Kumar V Hariharan 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	6 Days	24 Oct 2022	29 Oct 2022	30	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	40	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	30	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	30	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)

$$AV = (30+40+30+30)/10 = 13$$

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.

Chart

