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## Project Planning Phase

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

Date	26 October 2022
Team ID	PNT2022TMID04190
Project Name	Project - Emerging Methods for Early Detection of Forest Fires
Maximum Marks	20 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	Registration	USN-1	As a user, I should be able to register myself in the application by giving my email ID, phone number, username and password	5	High	Karthik Sri Sakthi Degala
Sprint-1	Login	USN-2	As a user, I should be able to access my account using my username and password	5	High	Karthik Sri Sakthi Degala
Sprint-1	Data Collection	USN-3	Collection of data (images) for testing and training data	4	High	Jeevaprakash T
Sprint-1	Data preprocessing	USN-4	Image preprocessing and image segregation for the ease of training AI model and helps to classify images.	6	Medium	Jeevaprakash T
Sprint-2	Model Training	USN-1	Training an AI model using the preprocessed data using AI techniques like CNN, RNN, and YOLO Algorithms.	10	Medium	Srinithi Samyuktha S J

Sprint-2		USN-2	Computer Vision (OpenCV) for video processing and techniques like frame-to-frame segmentation, image interpolation.	10	Medium	Srinithi Samyuktha S J
Sprint-3	Local Implementation	USN-1	Integration of the AI model and the webpage for user interface	10	Medium	Priya Dharshini R
Sprint-3		USN-2	Activation of Twilio account and integration of Twilio	3	High	Priya Dharshini R

			account with Open CV and the previously integrated AI model			
Sprint-3		USN-3	Testing of SMS alert by implementing the entire model locally using Python-Flask	7	Medium	Jeevapraakash T
Sprint-4	Cloud Deployment	USN-1	Creation of the IBM Cloud services which are being used in this project.	6	High	Karthik Sri Sakthi Degala
Sprint-4		USN-2	Configuration of the IBM Cloud depending on the project	2	Medium	Karthik Sri Sakthi Degala
Sprint-4		USN-3	Training of the AI model in the cloud with the preprocessed data and saving them.	2	High	Srinithi Samyuktha S J
Sprint-4		USN-4	Integrating the cloud trained AI model with webpage, OpenCV and Twilio API services.	4	High	Srinithi Samyuktha S J

Sprint-4		USN-5	Final deployment of the entire integrated model	6	High	Karthik Sri Sakthi Degala, Jeevaprakash T, Srinithi Samyuktha S J, Priya Dharshini R
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#### 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).

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