

Project Planning Phase

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

Date	15 November 2022
Team ID	PNT2022TMID52078
Project Name	Project- Emerging Methods for Early detection of forest fire
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points		Team Members
Sprint-1	Download data set	USN-1	The data is downloaded from the Kaggle website and then the data set is classified into training and testing images.	10	High	S. Kamalakar

Sprint-1	Image pre-processing	USN-1	<p>In Image processing technique the first step is usually importing the libraries that will be needed in the program.</p> <p>Import Keras library from that library and import the ImageDataGenerator Library to your Python script.</p> <p>The next step is defining the arguments for the ImageDataGenerator. Here the arguments which we are given inside the image data generator class</p>	10	High	S. Kamalakar S. Shaamini C. Selshia Mary R. Maharaj
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			<p>are, rescale, shear_range, rotation range of image, and zoom range that we can consider for images.</p> <p>The next step is applying the ImageDataGenerator arguments to the train and test dataset.</p>			
Sprint-2	Training image	USN-2	<p>In this training phase the ImageDataGenerator arguments is applied to the training images and the model is tested with several images and the model is saved.</p>	20	High	S. Kamalakar S. Shaamini C. Selshia Mary R. Maharaj

Sprint-3	Testing image and prediction	USN-3	In this testing phase the Image processing techniques is applied to the testing images and executed for prediction.	20	High	S. Kamalakar S. Shaamini C. Selshia Mary R. Maharaj
Sprint-4	Video analysis ,Sending Alert message and web application	USN-4	In this phase video is given as input and fire is detected when the fire is detected alert message is sent using twilio service and a frontend application is created.	20	High	S. Kamalakar S. Shaamini C. Selshia Mary R. Maharaj

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).

$AV = \text{Sprint Duration} / \text{velocity} = 20/6 = 3.33.$