

Project Planning Phase

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

Date	27 November 2022
Team ID	PNT2022TMID45772
Project Name	Project - Natural Disasters Intensity Analysis And Classification Using Artificial Intelligence
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	Getting Hands on with IBM Watson Assistant	USN-1	Setting up of IBM Watson Assistant with Cloud service	5	High	Abinaya J, Indhumathi R
Sprint-1	Dataset Gathering	USN-2	Acquisition of the Natural disasters dataset, Loading into the Cloud, and perform the required Preprocessing	15	High	Mownika M, Sangeetha V
Sprint-2	Building the CNN Model	USN-3	Build a CNN Model for Classifying the Disasters by using the appropriate layers, and Split the preprocessed dataset	4	High	Sangeetha V, Abinaya J
Sprint-2	Train, Test, and Validate	USN-4	Train the model, Validate it using the Metrics and test the model on an anonymous image/video, using the partitioned dataset	8	High	Abinaya J, Indhumathi R
Sprint-2	Optimization and Intensity detection	USN-5	Improve on the Accuracy and time complexity of the model, and include features for predicting the intensity of classified disaster	8	High	Indhumathi R, Mownika M
Sprint-3	User Interface Dashboard and Login	USN-6	As a user, I can register for the application by entering my email, password, and verifying account via mail	10	Medium	Mownika M, Abinaya J
Sprint-3	Footage and Location retrieval service	USN-7	As a web user, I must capture and upload any image or video footage of Natural Disaster Occurrences with better clarity, and can also provide on the location of Occurrence	10	High	Mownika M, Indhumathi R
Sprint-4	Models Outputs through UI and alerts	USN-8	Ensure accurate classification of disaster, and provide the necessary alerts based on intensity to the user through the Web App	10	High	Sangeetha V, Indhumathi R
Sprint-4	Login using Third party Service Accounts	USN-9	As a user, I can use the feature of OAuth to login using Gmail or Facebook	5	Low	Indhumathi R, Abinaya J
Sprint-4	Web Page Optimization and customer support	USN-10	As a user, I must have a smooth interface for which the server should withstand huge loads, and get my queries solved and site failures rectified	5	Medium	Indhumathi R, Mownika M

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 6-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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{6} = 3.33$$

Burndown Chart:

A burndown 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.

