Project Planning Phase

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

Date	**18 October 2022**
Team ID	**PNT2022TMID53145**
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	Collection of Dataset	USN-1	Acquisition of the Natural disasters dataset	5	High	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
Sprint-1	Dataset Preprocessing	USN-2	The natural disaster images should be preprocessed using ImageDataGenerator Library and configured using ImageDataGenerator Class.	15	High	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
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	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
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	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
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	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree

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	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
Sprint-3	Upload images to the application	USN-7	As a web user, I must capture and upload any images of natural disaster occurrences with better clarity.	10	High	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
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.	10	High	Abitha P, Meena Muthukumar, Madhuri Mahalingam,C. Vishnusree
Sprint-4	Login using Third party Service Accounts	USN-9	As a user, I can use the feature of OAuth to login using Gmail.	5	Low	Abitha P, Meena Muthukumar, Madhuri Mahalingam, C. Vishnusree

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)

$$AV = \underline{sprint}\ velocity/\ \underline{duration} = \underline{20/}6\ = 3.33$$

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.