Project Planning Phase

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

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| --- | --- |
| **Date** | **12 November 2022** |
| **Team ID** | **PNT2022TMID46219** |
| **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  cloud | USN-1 | Setting up of IBM with Cloud service | 5 | High | Yogesh , Karthik |
| Sprint-1 | Dataset Gathering | USN-2 | Acquisition of the Natural disasters dataset, Loading into the Cloud, and perform the required Preprocessing | 15 | High | Sridhar, Navaneethakumar |
| 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 | Yogesh , Karthik |
| 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 | Yogesh , Karthik |
| 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 | Yogesh , Karthik |
| 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 | Sridhar, Yogesh , Karthik |
| 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 | Yogesh , Karthik |
| 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 | low | Sridhar,  Navaneethakuma 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 | Sridhar,  Navaneethakuma r |
| 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 | Yogesh , Karthik |

**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)

# Burndown Chart:

𝐴𝑉 = velocity/𝑠𝑝𝑟𝑖𝑛𝑡 𝑑𝑢𝑟𝑎𝑡𝑖𝑜𝑛 = 20/6 = 3. 33

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile [software development](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). However, burn down charts can be applied to any project containing measurable progress over time.

