**Project Planning Phase**

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

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| --- | --- |
| Date | 18 October 2022 |
| Team ID | PNT2022TMID19246 |
| Project Name | Emerging methods for early detection of forest fire |
| 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 | Data collection and prepocessing | USN-1 | Collecting the dorest fire dataset | 2 | High |  |
| Sprint-1 |  | USN-2 | Labelling the dataset according to class | 1 | High |  |
| Sprint-1 |  | USN-3 | Someof the forest fire is labeled accordingly | 2 | Low |  |
| Sprint-1 |  | USN-4 | Dataset will contain forest fire prediction | Qsz1z | Medium |  |
| Sprint-1 | Preprocessing | USN-5 | To prepare raw data in a format that the network can accept | 1 | High |  |
| Sprint-1 |  | USN-6 | Scaling is used for making data points generalized |  |  |  |
| Sprint-1 |  | USN-7 | Shear range image will be disorted along an axis,mostly to create or rectify the perception angle |  |  |  |
| Sprint-1 |  | USN-8 | Zoom augmentation will randomly zoom the image and adds new pixels for the image |  |  |  |
| Sprint-1 |  | USN-9 | Flipping the entire pixells of an image |  |  |  |
| Sprint-2 | Training ,Testing and Creating a model | USN-10 | Start initial the model |  |  |  |
| Sprint-2 |  | USN-11 | Adding difference layers of cnn |  |  |  |
| Sprint-2 |  | USN-12 | Creating compiling with adam optimizer |  |  |  |
| Sprint-2 |  | USN-13 | Creating metrics |  |  |  |
| Sprint-2 |  | USN-14 | Train the data with 20 epoch |  |  |  |
| Sprint-2 |  | USN-15 | Testing the model |  |  |  |
| Sprint-2 |  | USN-16 | Save the model |  |  |  |
| Sprint-2 | Flask and frame workdesign | USN-17 | Creating backend framework with flask |  |  |  |
| Sprint-3 |  | USN-18 | Importing the model file |  |  |  |
| Sprint-3 |  | USN-19 | Server startup,request and service in aloop |  |  |  |
| Sprint-3 | Frontend web application developemen | USN-20 | Creating a html template with css file |  |  |  |
| Sprint-3 |  | USN-21 | User can import forest fire in webpage |  |  |  |
| Sprint-4 |  | USN-22 | Predicting where is fireoccurred for the given input |  |  |  |
| Sprint-4 |  | USN-23 | User can classify as forest fired or not |  |  |  |
| Sprint-4 |  | USN-24 | Alert the admin about the predection with the gmail |  |  |  |

**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 | 3 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 10Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 17 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)

