**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 18 November 2022 |
| Team ID | PNT2022TMID42609 |
| Project Name | Developing A Flight Delay Prediction Model Using Machine Learning |
| 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 Preprocessing | USN-1 | As a user, I am unable to engage with anything. | 1 | Medium | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |
| Sprint-2 | Build Python Pages | USN-2 | As a user, I am unable to engage with anything | 2 | High | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |
| Sprint-2 | Execute And Test Your Model | USN-3 | As a user, I can predict flight delays using the best created ML models. | 2 | High | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |
| Sprint-3 | Integrate Flask with Model | USN-4 | As a user, I can predict flight delays using the user interface. | 1 | Medium | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |
| Sprint-3 | Train The ML Model | Usn-5 | As a user, I can predict flight delays using the best created ML models | 2 | High | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |
| Sprint-4 | Model Deployment on IBM Cloud using IBM Watson | USN-6 | As a user, I can use the model by requesting the deployed model on Cloud. | 2 | High | Shafna Azmi M  Rochanaa E  Varun Prasath S  Arun Prasath M |

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

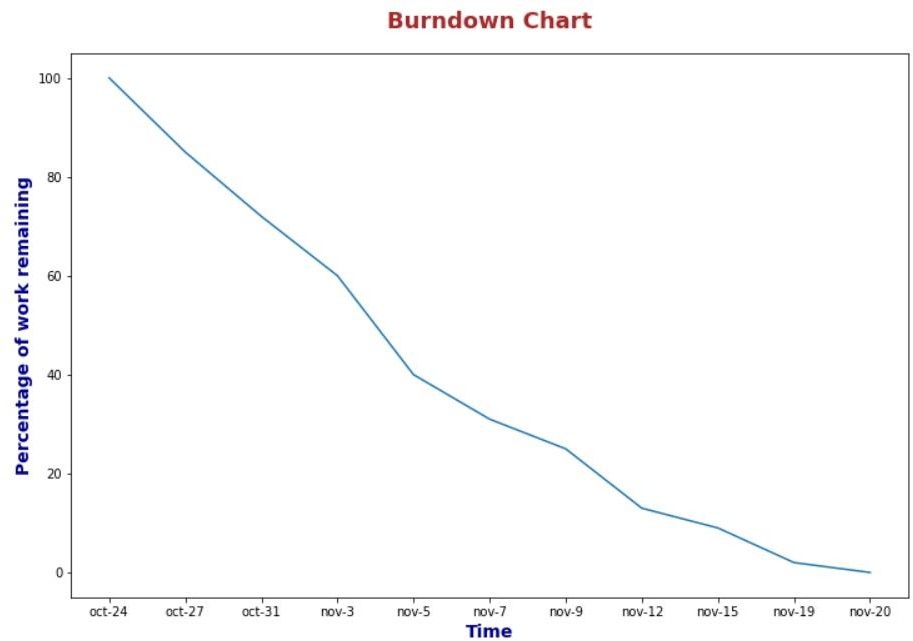
| **Sprint** | **Total Story Points** | **Duration** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed (as on Planned End Date)** | **Sprint Release Date (Actual)** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 20 | 07 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)



**Burndown Chart:**

A burn down 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