**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 2 November 2022 |
| Team ID | PNT2022TMID37375 |
| Project Name | A Novel Method for Handwritten Digit Recognition System |
| 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 Pre-processing | USN-1 | Collect and load the dataset and split into train and test data. | 20 | Medium | Swetha CJ, Sangamiithra.D |
| Sprint-2 | Model Building | USN-2 | Build a Deep Learning Model with CNN to recognize the handwritten digit with high accuracy. | 10 | High | Rajasri.N,  Arthy.M |
| Sprint-2 |  | USN-3 | Train and test the model with the split image dataset. | 5 | Medium | Swetha CJ, Sangamiithra.D |
| Sprint-2 |  | USN-4 | Models are saved and used for further integration with the Flask web user interface. | 5 | Medium | Rajasri.N,  Arthy.M |
| Sprint-3 | UI Application | USN-5 | Build a flask web application interface to upload the handwritten image by clicking the upload button | 5 | Medium | Sangamiithra.D,  Arthy.M |
| Sprint-3 |  | USN-6 | Integrating the flask web application with the saved deep learning model(CNN) | 10 | High | Rajasri.N,  Swetha.CJ |
| Sprint-3 |  | USN-7 | User can see the predicted digits with the accuracy, in the web application that has been created. | 5 | Medium | Sangamiithra.D,  Arthy.M |
| Sprint-4 | Train the model on IBM | USN-8 | Training the model on IBM Cloud and deploy the Flask web application with scoring end point. | 20 | High | Rajasri.N,  Swetha.CJ |

**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 | 2 Nov 2022 | 7 Nov 2022 | 20 | 7 Nov 2022 |
| Sprint-2 | 20 | 6 Days | 4 Nov 2022 | 09 Nov 2022 | 20 | 10 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 09 Nov 2022 | 14 Nov 2022 | 20 | 14 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)

