

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID45235
Project Name	A Novel 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	Find and Import required Libraries	USN-1	Collecting the required libraries for the development	2	High	Rashad, Arulnithi
Sprint-1	Data Pre-Processing	USN-2	Collected Data are pre-processed for Data Processing	2	High	Rashad, Arulnithi, Jayasarthi
Sprint-2	Normalizing the Data	USN-3	Data is normalized for clarity and higher quality	2	Medium	Rashad, Arulnithi, Riyas Mohamed
Sprint-2	Categorizing the data	USN-4	Labels are categorized	2	Medium	Rashad, Jayasarthi

Sprint-2	Building the model	USN-5	Model is built	2	High	Rashad, Arulnithi, Jayasarathy, Riyas Mohamed
Sprint-2	Training and testing the model	USN-6	The built model is trained with processed data and tested	2	High	Rashad, Arulnithi, Riyas Mohamed
Sprint-3	Improve the model	USN-7	Model is further refined for better experience	2	Medium	Rashad, Arulnithi, Jayasarathy
Sprint-3	Save the model	USN-8	Model is saved with final fixes and ready to integrate	2	High	Arulnithi, Jayasarathy Riyas Mohamed
Sprint-3	Build the User Interface	USN-9	The UI is built	2	Medium	Rashad, Arulnithi, Riyas Mohamed

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Integrate and train the model on IBM Cloud	USN-10	The model is integrated with IBM Cloud and trained	2	High	Rashad, Arulnithi, Jayasarathy, Riyas Mohamed
Sprint-4	Test the Application	USN-10	The application is tested	2	High	Rashad, Arulnithi, Jayasarathy, Riyas Mohamed

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

Sprint	Total Story Points	Duration (In Days)	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (As on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	2	6	18 Oct 2022	23 Oct 2022	2	25 Oct 2022
Sprint-2	2	6	25 Oct 2022	30 Oct 2022	2	30 Oct 2022
Sprint-3	2	6	01 Nov 2022	06 Nov 2022	2	06 Nov 2022
Sprint-4	2	6	07 Nov 2022	12 Nov 2022	2	12 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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

#### 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. Below is a burndown chart representing the work done by our team.

