

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID22043
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 Collection	USN-1	As a user, I can collect the dataset from various resources with different handwritings.	8	High	R.Samundeeshwary B.Yamuna S.Vinothini S.Nandhini
Sprint-1	Data Processing	USN-2	As a user, I can load the dataset, handling the missing data, scaling and split data into train and test.	8	High	R.Samundeeshwary B.Yamuna S.Vinothini S.Nandhini
Sprint-1	Model Building	USN-3	As a user, I will get an application with ML model which provides high accuracy of recognized handwritten digit.	5	High	R.Samundeeshwary B.Yamuna S.Vinothini S.Nandhini
Sprint-2	Home page	USN-4	Description about Handwritten Digit Recognition System	8	Low	R.Samundeeshwary B.Yamuna S.Vinothini S.Nandhini

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-5	As a user, the model is saved & integrated with an android application or web application in order to predict something	13	Low	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-3	Registration	USN-6	As a user, I can register for the application by entering my username, email, phone number, and password, and confirming my password.	3	Medium	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-3	Login	USN-7	As a user, I can log in to the web application by entering my email id & password.	5	Medium	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-3	Upload Image	USN-8	As a user, I submit the required image for the prediction.	5	Medium	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-3	Result	USN-9	Result will be displayed.	8	High	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-4	Deploy the model	USN-10	Deployment of ML model using IBM Watson Studio, object storage.	13	High	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini
Sprint-4	Integrate the web app with the IBM model	USN-11	Use flask for the integration purpose.	8	Medium	R.Samundeeswary B.Yamuna S.Vinothini S.Nandhini

### 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	21	6 Days	24 Oct 2022	29 Oct 2022	21	29 Oct 2022
Sprint-2	21	6 Days	31 Oct 2022	05 Nov 2022	21	05 Nov 2022
Sprint-3	21	6 Days	07 Nov 2022	12 Nov 2022	21	12 Nov 2022
Sprint-4	21	6 Days	14 Nov 2022	19 Nov 2022	21	19 Nov 2022

#### Velocity:

We have a 6-day sprint duration, and the velocity of the team is 21 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{21}{6} = 3.5$$

## 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 methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

