

## Project Planning Phase

<b>Team ID</b>	<b>PNT2022TMID53383</b>
<b>Project Name</b>	<b>A Novel Method for Handwritten Digit Recognition System</b>

### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

<b>Sprint</b>	<b>Functional Requirement</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Data Collection	USN-1	As a user, I can collect the dataset from various resources with different handwritings.	10	Low	Shivaneer Ramesh Srilekha Y Shalini.s
Sprint-1	Data Preprocessing	USN-2	As a user, I can load the dataset, handling the missing data, scaling and split data into train and test.	10	Medium	Sadana U Srilekha Y
Sprint-2	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	Shalini.s Shivaneer Ramesh
Sprint-2	Add CNN layers	USN-4	Creating the model and adding the input, hidden, and output layers to it	5	High	Shivaneer Ramesh Sadana U
Sprint-2	Compiling the model	USN-5	With both the training data defined and model	2	Medium	Srilekha Y

			defined, it's time to configure the learning process.			
Sprint-2	Train and test the model	USN-6	As a user,let us train our model with our image dataset.	6	Medium	Srilekha Y Shalini.s
Sprint-2	Save the model	USN-7	As a user,the model is saved and integrated as android application or web application in order to predict something.	2	Low	Shivaneer Ramesh
Sprint-3	Building UI application	USN-8	As a user, I will upload the handwritten digit image to the application through upload option.	10	High	Sadana U Shalini s Shivaneer Ramesh
Sprint-3		USN-9	As a user, I know the details of the fundamental details of the application.	5	Low	Shalini.s
Sprint-3		USN-10	As a user, I can see the predicted or recognized digits in the application.	5	Medium	Sadana U Shalini s
Sprint-4	Train the model on IBM	USN-11	As a user, I will train my model on IBM and integrate flask/Django with scoring endpoint.	10	High	Shivaneer Ramesh
Sprint-4	Cloud deployment	USN-12	As a user, I can access the web application and make use of the product from anywhere.	10	High	Srilekha Y

**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	5 Days	31 Oct 2022	04 Nov 2022		
Sprint-2	20	5 Days	05 Oct 2022	09 Nov 2022		
Sprint-3	20	5 Days	10 Nov 2022	14 Nov 2022		
Sprint-4	20	5 Days	15 Nov 2022	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)

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