

## Project Planning Phase

Team ID	PNT2022TMID26315
Project Name	A Novel Method for Handwritten Digit Recognition System

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

Sprint	Functional Requirement	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 handwriting s.	10	Low	Abhishek S Abinesh R Aneerudh V
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	Aneerudh V Ashwin Adhithya K
Sprint -2	Model Building	USN-3	As a user, I will get an application with ML model which provides high accuracy of recognized	5	High	Abhishek S Abinesh R Aneerudh V Ashwin Adhithya K

			handwritten digit			
Sprint-2	Add CNN layers	USN-4	Creating the model and adding the input, hidden, and output layers to it	5	High	Abinesh R Aneerudh V
Sprint-2	Compiling the model	USN-5	With both the training data defined and model	2	Medium	Abhishek S

			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	Abhishek S Abinesh R Aneerudh V
Sprint-2	Save the model	USN-7	As a user, the model is saved and integrated as an Android application or web application in order to predict something.	2	Low	Ashwin Adhithya K
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	Abinesh R Aneerudh V
Sprint-3		USN-9	As a user, I know the	5	Low	Abhishek S

			details of the fundamental details of the application.			
Sprint-3		USN-10	As a user,I can see the predicted or recognised digits inthe application.	5	Medium	Abinеш R Ashwin Adhithya K
Sprint-4	Train the modelon IBM	USN-11	As auser,I will trainmy model on IBM and integrate flask/Django with scoring end point.	10	High	Aneerudh V
Sprint-4	Cloud deployment	USN-12	As a user,I can accessthe web application and make use ofthe product from anywhere.	10	High	Abhishek S

#### 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)

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