

## Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID30180
Project Name	A Novel Method for Handwritten Digit Recognition System
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Home Page UI	USN-1	As a user, I can view the home page and I can understand how it works	2	Low	Panneer Selvam B
Sprint-1			Creating the home page		High	
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Muhilan P
Sprint-2	Input of Hand Written digit	USN-3	As a user, I can input any hand written digits.	5	High	Panneer Selvam B
Sprint-2	Processing	USN-4	As a user, Once I upload my image, it will start processing	3	Medium	Ranjith M
Sprint-2			Input image by the user will be trained		High	
Sprint-2			Input image by the user will be tested		High	
Sprint-3			Input image will be evaluated from the trained model		Medium	
Sprint-3	API	USN-5	As a user, I will be able to see the progress of the processing bar	3	Medium	Panneer Selvam B
Sprint-2	IBM Cloudant DB		The input image will be stored in the database		High	
Sprint-3			The Input image will be evaluated with MNIST data which will be fetched from the DB		Medium	

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Output	USN-6	As a user, I will be able to see the desired output	5	High	Ranjith M
Sprint-3	IBM Cloud		Deploy the trained model on the cloud		High	
Sprint-4	Success	USN-7	As a user, I will be able to see the success image once the output is generated	2	Low	Ranjith M
Sprint-1		USN-8	As a user, I will get to know how the process works	2	Low	Muhilan P
Sprint-4		USN-9	As a user, I will be able to watch the video of how to use the software	2	Low	Muhilan P
Sprint-4		USN-10	As a user, I will be able to contribute to this software as an open source	3	Medium	Sakthidhari B
Sprint-3		USN-11	As a user, the uploaded image will get processed in the backend	5	High	Sakthidhari B
Sprint-4	Git and GitHub		Updating details on GitHub		Low	
Sprint-2	Python Flask API		Collecting the data from the API		Medium	
Sprint-2	IBM Watson Studio		Data Pre-processing and optimising the data		High	

#### 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	8	4 Days	22 Oct 2022	25 Oct 2022		
Sprint-2	8	6 Days	26 Oct 2022	31 Oct 2022		
Sprint-3	8	6 Days	01 Nov 2022	06 Nov 2022		
Sprint-4	11	8 Days	04 Nov 2022	11 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)

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

$$AV = 35 / 24 = 1.46$$

Burndown Chart:

We have so far started our first sprint and its burndown chart is the following

