

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

Date	18 October 2022
Team ID	PNT2022TMID53497
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	Data Collection	USN-1	As a user, I can collect the dataset from various resources with different handwritings.	5	Medium	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-1	Data Pre-processing	USN-2	As a user, I can load the dataset, handling the missing data, scaling and split data into train and test.	5	Medium	Pratheeba R Sai Raksha V Sandhiya R Suriya R
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.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-2	Add CNN layers	USN-4	Creating the model and adding the input, hidden, and output layers to it.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R

Sprint-2	Compiling the model	USN-5	With both the training data defined and model defined, it's time to configure the learning process.	5	Medium	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-2	Train & test the model	USN-6	As a user, let us train our model with our image dataset.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-2	Save the model	USN-7	As a user, the model is saved & integrated with an android application or web application in order to predict something.	5	Low	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-3	Building UI Application	USN-8	As a user, I will upload the handwritten digit image to the application by clicking a upload button.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-3	Run the application	USN-9	As a user, I can know the details of the fundamental usage of the application.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-3	Digit Recognition	USN-10	As a user, I can see the predicted / recognized digits in the application.	10	Medium	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-4	Train the model on IBM	USN-11	As a user, I train the model on IBM and integrate flask/Django with scoring end point.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R
Sprint-4	Cloud Deployment	USN-12	As a user, I can access the web application and make the use of the product from anywhere.	10	High	Pratheeba R Sai Raksha V Sandhiya R Suriya R

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	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	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)

$$AV = \frac{\text{Sprint Duration}}{\text{Velocity}} = \frac{20}{6} = 3.33$$

Therefore, Average Velocity = $20 / 6 = 3.33$

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.

