Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID35510
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 need to collect the data with different handwriting to train the model	6	High	Thiruvazhi Dhinesh Kumar S, Dinesh M, Gowtham N
Sprint-1	Importing libraries	USN-2	As a user, I have to implement necessary libraries in python packages.	4	Low	Thiruvazhi Dhinesh Kumar S, Dinesh M, Gowtham N
Sprint-1	Data preprocessing	USN-3	As a user, I can load the dataset, handle the missing values, scale and split the data.	10	Medium	Thiruvazhi Dhinesh Kumar S, Dinesh M, Gowtham N
Sprint-2	Model building	USN-4	As a user, I will get an application with ML model which provides high accuracy of recognized handwritten digit.	5	High	Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S, Gowtham N

Sprint-2	Add the CNN layers	USN-5	Add input convolutional layer, max-pooling layer, flatten, hidden and output layers to the model.	5	High	Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S, Gowtham N
Sprint- 2	Compile the model	USN-6	As a user, compile the model for trained dataset.	2	Medium	Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S, Gowtham N
Sprint-2	Train and test the model	USN-7	As a user, train and test the model for the dataset collected and data are validated.	4	High	Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S, Gowtham N
Sprint-2	Save the model	USN-8	As a user, the compiled data are saved and integrated with an android application or web application.	2	Low	Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S, Gowtham N
Sprint-3	Building UI application	USN-9	As a user upload the input image that contains handwritten digits.	10	Medium	Dinesh M, Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S
Sprint-3		USN-10	As a user, I can provide the fundamental details about the usage of application to customer.	5	Low	Dinesh M, Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S
Sprint-3		USN-11	As a user, I can see the predicted or recognized digits in the application.	5	Medium	Dinesh M, Ruban Chakaravarthi V, Thiruvazhi Dhinesh Kumar S
Sprint-4	Train the model on IBM	USN-12	As a user train the model in IBM cloud and integrate the results.	10	High	Gowtham N, Dinesh M, Thiruvazhi Dhinesh Kumar S

Sprint-4	Cloud Deployment	USN-13	As a user, I can access the web application and make the use of the product from anywhere.	10	High	Gowtham N, Dinesh M, Thiruvazhi Dhinesh Kumar 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	6 Days	24 Oct 2022	29 Oct 2022	20	31 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	6 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	13 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)

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

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.