Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID39636
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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	5	Low	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-1	Sign up page	USN-2	As a user, I will receive confirmation email once I have registered for the application	4	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password	6	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-1	Data collection	USN-4	As a user, I need to collect the data with different hand writing to train the model	8	Medium	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data preprocessing	USN-5	As a user, I can load the dataset, handling the missing data, scaling and split data into train and test	6	Medium	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-2	Model Building	USN-6	As a user, I will get an application with DL model which provides high accuracy of recognized handwritten digit.	5	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-2	Add the CNN layers	USN-7	Add input convolutional layer, max-pooling layer, flatten, hidden and output layers to the model	4	Medium	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-2	Compile the model	USN-8	As a user, compile the model for trained dataset.	12	Low	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-2	Train and test the model	USN-9	As a user, train and test the model for the dataset collected and data are validated	8	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-2	Save the model	USN-10	As a user, the compiled data are saved and integrated with web application	6	Medium	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Building user interface application	USN-11	As a user, upload the input image that contains handwritten digits	10	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
		USN-12	As a user, I can provide the fundamental details about the usage of application to the customer	8	Low	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
		USN-13	As a user, I can see the predicted or recognized digits in the application	6	Medium	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana
Sprint-4		USN-14	As a user, train the model in IBM cloud and integrate the result	20	High	Pavithra,Dhanusha, Haritha Tharini, Hemapriya,Ishwarya, Keerthana

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	29Oct 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)

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

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.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts