Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID20676
Project Name	A Novel Method for Handwritten Digit Recognition System
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation

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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint-1	Importing libraries	USN-2	As a user, I have to implement necessary libraries in python packages.	4	Low	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C

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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint- 2	Compile the model	USN-6	As a user, compile the model for trained dataset.	2	Medium	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
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	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint-3	Building UI application	USN-9	As a user upload the input image that contains handwritten digits.	10	Medium	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint-3		USN-10	As a user, I can provide the fundamental details about the usage of application to customer.	5	Low	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint-3		USN-11	As a user, I can see the predicted or recognized digits in the application.	5	Medium	Siva Sankari V, Pillai Pratham Ramacharan, Ramya M, Gowtham C
Sprint-4	Train the model on IBM	USN-12	As a user train the model in IBM cloud and integrate the results.	10	High	Siva Sankari V, Pillai Pratham Ramacharan,

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	Ramya M, Gowtham C

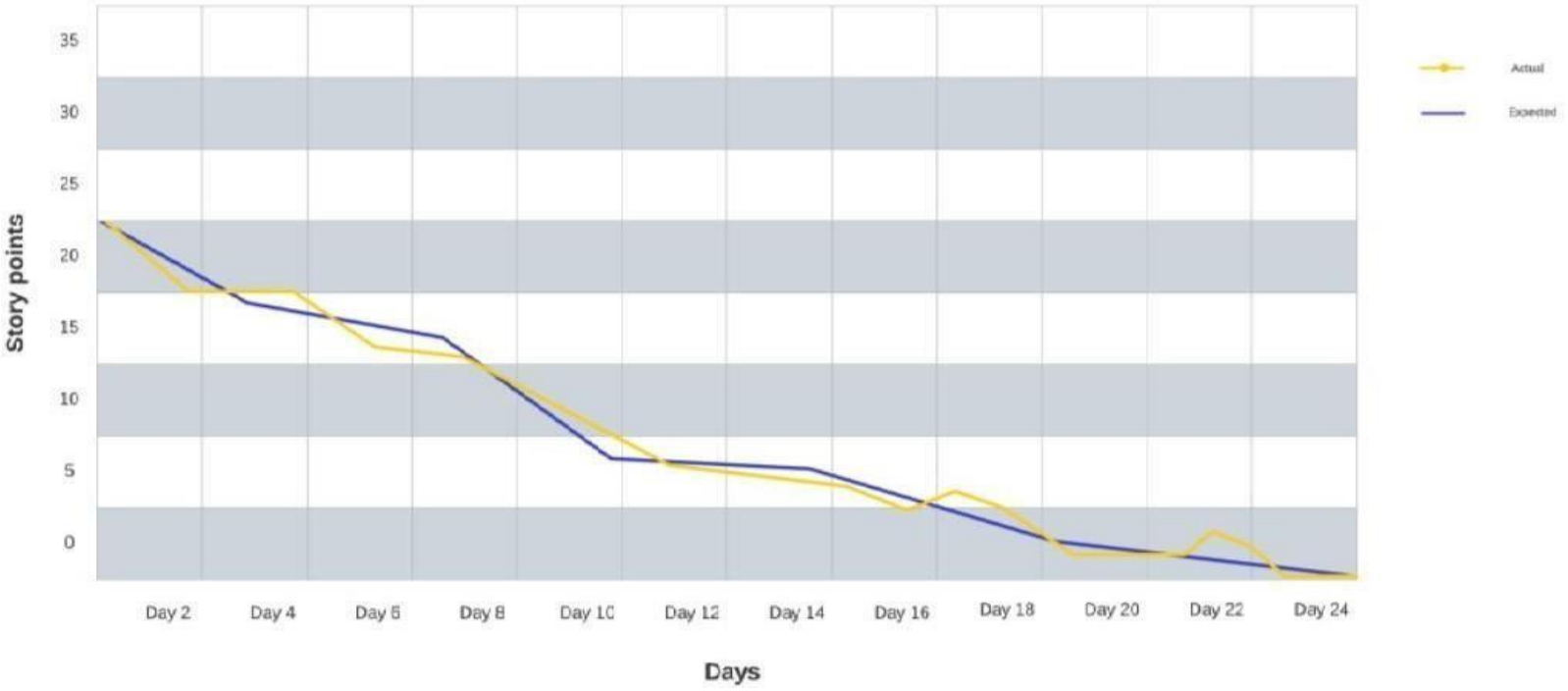
Project Tracker, Velocity & Burndown Chart: (4 Marks)

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)

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


Story points
35
30
25
20
15
10
5
0
Day 2
Day 4
Day 6
Day 8
Day 10
Day 12
Day 14
Day 16
Day 18
Day 20
Day 22
Day 24
Days
Actual
Expected