

**Project Planning Phase**  
**Sprint delivery plan**

Date	02 November 2022
Team ID	PNT2022TMID36983
Project Name	Project - A Novel method for Handwritten digit recognition system.
Maximum Marks	8 Marks

**Product Backlog, Sprint Schedule, and Estimation.**

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Data preprocessing	USN-1	Collect and load the dataset, scaling and wrangling the data and split into train and test data.	20	Medium	Gopika Shree S, Kavitha P
Sprint-2	Model building	USN-2	Building the deep learning model with CNN to recognize the handwritten digit with higher accuracy.	10	High	Nafeesa Fathima S, Kokila M
Sprint-2		USN-3	Training and Testing the model with the split image dataset and refine the accuracy.	5	Medium	Nafeesa Fathima S, Gopika Shree S
Sprint-2		USN-4	Model save and used for further integration with the Flask web user interface.	5	Medium	Kokila M, Kavitha P.
Sprint-3	UI Application	USN-5	Building a Flask web application interface to upload the handwritten image by clicking the upload button.	5	Medium	Kokila M, Gopika Shree S.
Sprint-3		USN-6	Integrating the Flask web application with the saved deep learning model.	10	High	Nafeesa Fathima S, Kavitha P.
Sprint-3		USN-7	As a user, I can see the predicted digits with the accuracy in the web application.	5	Medium	Kavitha P.

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Train the model	USN-8	Train the model on IBM cloud and deploy the Flask web application with scoring and point.	20	High	Nafeesa Fathima S, Gopika Shree S, Kokila M

#### 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)

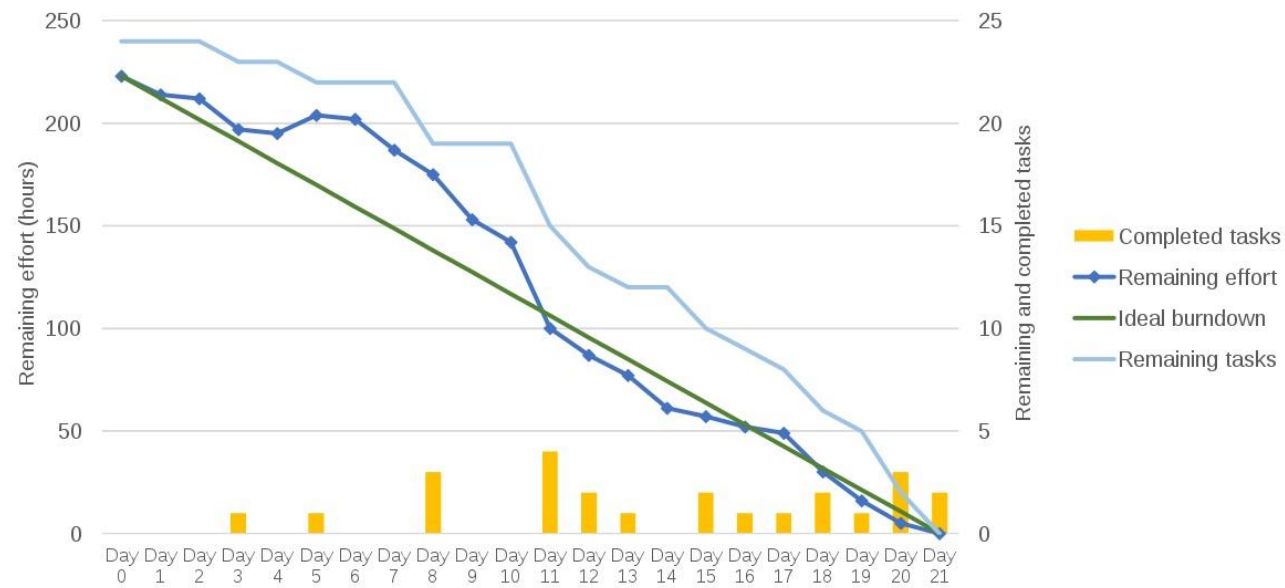
$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

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

Velocity 06

### 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.



An approximate work plan in burn down