Project Planning Phase

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

Date	27 October 2022
Team ID	PNT2022TMID592620
Project Name	Project - Green Classify: Deep Learning-based Approach for Vegetable Image Classification:
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	Image Data Source	USN-1	As a user, I can upload vegetable images to the application from local storage.	7	High	4
Sprint-1	Image Data Source	USN-2	As a user, I can provide URLs of vegetable images to the application for classification.	7	High	4
Sprint-1	Preprocessing	USN-3	As a user, I can see that the uploaded images are resized to a consistent dimension for classification.	6	Medium	4
Sprint-2	Deep Learning Model	USN-4	As a user, I can see that the model is initialized with pre-trained weights for accurate classification.	8	High	4
Sprint-2	Training Infrastructure	USN-5	As a user, I can monitor the training process and check the status of model checkpoints.	6	Medium	4
Sprint-2	Training Data	USN-6	As a user, I can view the partitioned training, validation, and test sets for model evaluation.	6	Medium	4

Sprint-3	Inference Engine	USN-7	As a user, I can submit new, unlabeled vegetable images for classification via a RESTful API.	10	High	4
Sprint-3	Inference Engine	USN-8	As a user, I can receive the predicted class label and confidence score for a submitted image.	10	High	4
Sprint-4	User Interface	USN-9	As a user, I can interact with the application's UI to upload and classify vegetable images.	7	High	4
Sprint-4	User Interface	USN-10	As a user, I can see the classification results displayed, including the predicted vegetable type and confidence score.	7	High	4
Sprint-4	Training Data Storage	USN-11	As a user, I can view and manage the structured training data in the RDBMS.	6	Medium	4
Sprint-5	Cloud Object Storage	USN-12	As a user, I can store and retrieve images in the cloud storage (e.g., Amazon S3).	10	Medium	4
Sprint-5	Machine Learning Model	USN-13	As a user, I can choose different machine learning models for classification.	10	Medium	4

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	3 Days	24 Oct 2023	26 Oct 2023	20	26 Oct 2023
Sprint-2	20	6 Days	27 Oct 2023	01 Nov 2023	20	01 Nov 2023
Sprint-3	20	3 Days	02 Nov 2023	04 Nov 2023	20	04 Nov 2023

Sprint-4	20	3 Days	05 Nov 2023	07 Nov 2023	20	05 Nov 2023
Sprint-5	20	2 Days	08 Nov 2023	09 Oct 2023	20	09 Oct 2023

Velocity:

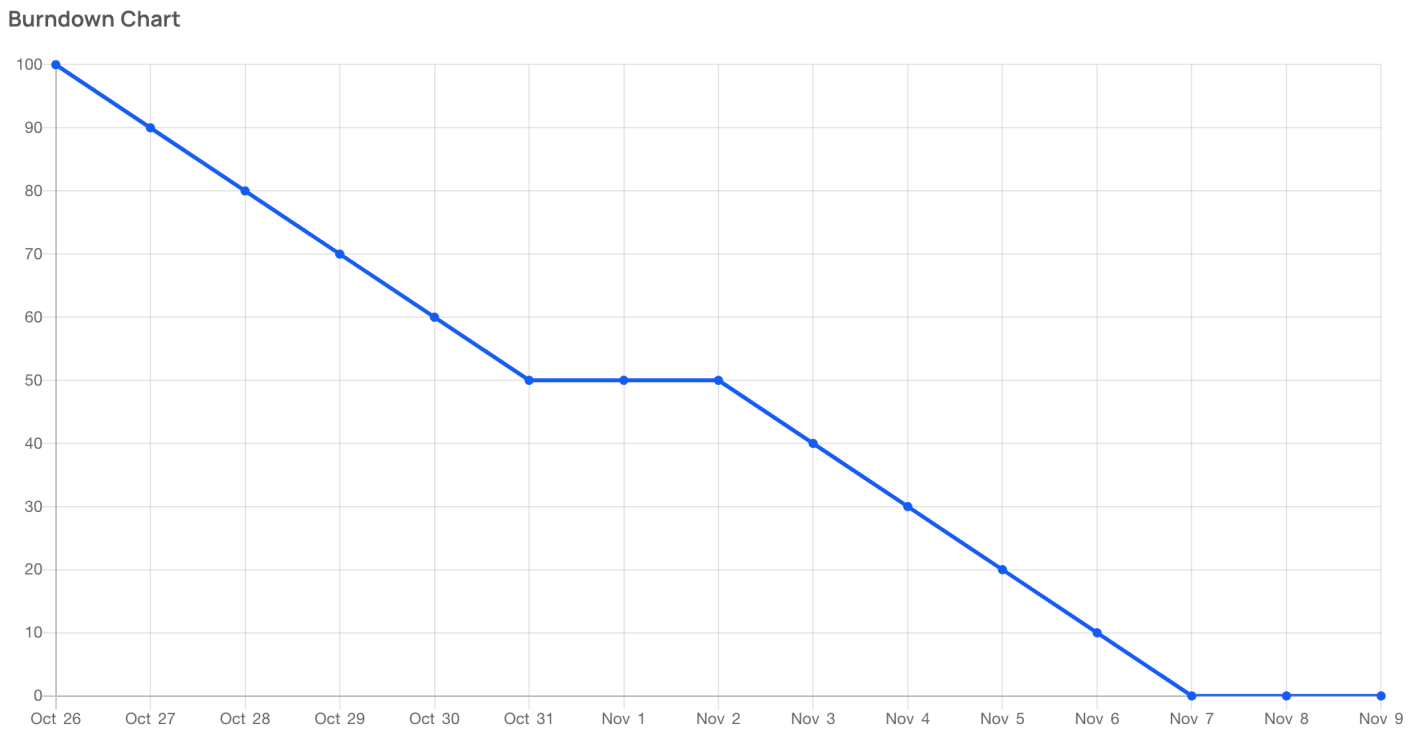
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

Velocity = 100 / 5 = 20 story points per sprint

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