Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2025TMID59401
Project Name	Smart SDLC
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	As a developer, I want to collect relevant datasets from public sources	2	High	Sujitha
Sprint-1	Data Collection	USN-2	As a developer, I want to load data into the system for preprocessing	1	Medium	Sujitha
Sprint-1	Data Preprocessing	USN-3	As a developer, I want to handle missing values to ensure data quality	3	High	Yashaswini
Sprint-1	Data Preprocessing	USN-4	As a developer, I want to handle categorical values using encoding techniques	2	High	Gowtham
Sprint-2	Model Building	USN-5	As a developer, I want to build a machine learning model using the cleaned dataset	5	High	Gowtham
Sprint-2	Model Testing	USN-6	As a developer, I want to test the model with evaluation metrics like accuracy, F1-score, etc.	3	High	Jaswanth
Sprint-2	Deployment	USN-7	As a developer, I want to create basic HTML pages for user interaction	3	Medium	Jaswanth
Sprint-2	Deployment	USN-8	As a developer, I want to deploy the	5	High	Gowtham

			ML model using Flask and make predictions accessible via a web app			

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	8	5 Days	16 June 2025	20 June 2025	8	20 June 2025
Sprint-2	16	3 Days	22 June 2025	26 June 2025	16	26 June 2025

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