Project Planning Phase

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

Date	27 JUNE 20
Team ID	LTVIP2025TMID42853
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis Using Advanced Machine Learning Techniques.
Maximum Marks	5 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	Data Collection and Preprocessing	USN-1	Understanding & loading data, Data cleaning, Exploratory Data Analysis (EDA)	2	High	Tarladi Somunaidu
Sprint-1	Feature Engineering	USN-2	Handling missing values and encoding categorical variables, Engineering features	1	High	Venna Ganesh Siva Satya
Sprint-1	Model Development	USN-3	Training the machine learning model, Evaluating the model	2	High	Yenumula Mohan Sai Praveen
Sprint-1	Model Development	USN-4	Creating a Flask app to deploy the model, Developing the front-end using HTML, CSS, and JS	2	High	Kovvuri Vijaya Durga
Sprint-1	Testing, Validation, and Final Deployment	USN-51	Testing the application, validating model predictions, Deploying on a cloud platform, Final testing	1	High	Tarladi Somunaidu

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	12	1 Days	19 Jun 2025	19 Jun 2025	12	19 Jun 2025
Sprint-2	12	2 Days	20 Jun 2025	21 Jun 2025	12	21 Jun 2025
Sprint-3	12	2 Days	22 Jun 2025	23 Jun 2025	12	23 Jun 2025
Sprint-4	12	3 Days	24 Jun 2025	26 Jun 2025	12	26 Jun 2025
Sprint-5	12	1 Days	27 Jun 2025	27 Jun 2025	12	27 Jun 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)

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

Velocity = (16+8)/2= 24/2

12 (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