Project Planning Phase

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

Date	27 June 2025
Team ID	LTVIP2025TMID37185
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)

Product backlog and sprint schedule:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Acquisition & Cleaning	USN-1	As a data scientist, I want to load and inspect liver function data for preprocessing.	5	High	G. Lakshmi Bindhu
Sprint-2	Feature Engineering	USN-3	As a data analyst, I want to perform feature selection and transformation.	2	Medium	G. Chandana
Sprint-2	Exploratory Data Analysis (EDA)	USN-4	As a team, we want to generate visual insights and detect outliers from the data.	3	Medium	G. Chandana

Sprint-3	Model Building	USN-5	As a developer, I want to implement classification algorithms to predict liver disease.	4	High	V. Mounika Jaya
Sprint-3	Evaluation	USN-6	As a QA engineer, I want to evaluate model accuracy using cross-validation.	3	High	V.Mounika Jaya
Sprint-4	Deployment	USN-7	As a developer, I want to deploy the model via a web interface for user interaction.	3	Medium	Sanjana .M
Sprint-4	Report Generation	USN-8	As a user, I want to generate a report summarizing patient liver status and risk.	2	Low	M. Kavya

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	5	5 Days	4 June 2025	9 June 2025	5	10 June 2025
Sprint-2	5	5 Days	10 June 2025	15 June 2025	5	15 June 2025

Sprint-3	7	5 Days	16 June 2025	21 June 2025	7	21 June 2025
Sprint-4	5	5 Days	22 June 2025	27 June 2025	5	27 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)

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