Project Planning Phase

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

Date	26 June 2025
Team ID	LTVIP2025TMID59416
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	USN-1	Collect dataset of blood test report values of various patients	3	High	Data team
Sprint-1		USN-2	Implement data preprocessing pipeline	2	High	ML Team
Sprint-1		USN-3	Setup development environment and dependencies	1	High	DevOps Team
Sprint-1	Model development	USN-4	Implement Random Forest Algorithm architecture	5	High	ML Team
Sprint-2	Model training	USN-5	Train model on pre-processed dataset	5	High	ML Team
Sprint-2	Web application	USN-6	Save trained model in .h5 format, and developed Flask backend application	3	High	Backend Team
Sprint-3	Testing and deploying	USN-7	Conduct system testing and debugging	2	Medium	QA Team

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	7 Days	13 Jun 2025	20 Feb 2025	12	27 Jun 2025
Sprint-2	13	7 Days	14 Jun 2025	21 Jun 2025	13	27 Jun 2025
Sprint-3	11	7 Days	14 Jun 2025	21 Feb 2025	11	27 Jun 2025

Velocity:

Imagine we have a 3-day sprint duration, and the velocity of the team is 36 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

AV = 36 / 3 = 12 Story Points

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.