

## Project Planning Phase

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

Date	JUNE 2025
Team ID	<b>LTVIP2025TMID40719</b>
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
Sprint-1	Data Collection	USN-1	As a user, I can upload and load healthcare data into the application.	1	High
Sprint-1	Data Preprocessing	USN-2	As a user, I will receive confirmation email once I have registered for the application	3	High
Sprint-1	Feature Engineering	USN-3	As a system, I can encode categorical features and normalize data.	2	Medium
Sprint-2	Model Building	USN-4	As a data scientist, I want to build and train ML models (Logistic Regression, Random Forest).	5	High
Sprint-2	Model Evaluation	USN-5	As a user, I want to evaluate models using accuracy, recall, F1-score, and confusion matrix.	3	High
Sprint-2	Deployment	USN-6	As a user, I want to use a web interface (Flask + HTML) to predict liver cirrhosis from input features.	5	High

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority
Sprint-2	Frontend Integration	USN-7	As a user, I can interact with the app via an intuitive HTML form to input data.	3	Medium

#### 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	6	5 Days	1 Jun 2025	5 Jun 2025	6	5 Jun 2025
Sprint-2	16	5 Days	6 Jun 2025	10 Jun 2025	16	10 Jun 2025

✓ **Team Velocity = 11 Story Points/Sprint**

**Burndown Chart:**

## Sprint Burndown Chart

