Project Planning Phase

Date	27-06-2025
Team ID	LTVIP2025TMID42872
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
Maximum Marks	5 Marks

Requirement Analysis:

Type and Requirement

Functional

The system must accept patient input data such as age, liver test results, etc.
The ML model must predict liver cirrhosis as likely or unlikely.
The web app must display the prediction result to the user.
Users should be able to enter multiple cases and get results each time.

Non-Functional

The prediction should be generated in less than 2 seconds.
The interface must be simple, clean, and user-friendly.
The system should handle invalid or missing inputs gracefully.

Technical

Use Python, Pandas, and Scikit-learn for ML model development.
Use Flask for backend and HTML/CSS (Bootstrap) for frontend.
Store and load the model using Pickle files (model.pkl, scaler.pkl).

User Requirements

Healthcare professionals should be able to use it without technical knowledge.
Inputs should match common medical test parameters.

Data Requirements

Dataset should include liver-related medical features and labels.
Missing data should be cleaned and pre-processed before training.