Project Design Phase Solution Architecture

Date	26 June 2025
Team ID	LTVIP2025TMID60884
Project Name	Revolutionizing Liver care: Predicting Liver Cirrhosis using Advanced machine learning Techniques.
Maximum Marks	4 Marks

Solution Architecture

Solution architecture is a structured approach that bridges the gap between the healthcare challenge of delayed liver cirrhosis detection and the deployment of a robust machine learning-based prediction system. It encompasses multiple layers and processes to ensure an accurate, scalable, and reliable solution. Its primary goals for this project include:

Identifying the most suitable machine learning and data processing technologies to detect liver cirrhosis at early stages.

Describing the technical structure and data flow of the system to stakeholders including medical professionals, data scientists, and developers.

Defining system components such as data ingestion, pre-processing, model training, and prediction interface across different development phases.

Example - Solution Architecture Diagram:

