Requirement Analysis

Data Flow Diagram

Date	29-06-2025
Team ID	LTVIP2025TMID39531
-Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
Maximum Marks	10 Marks

Data Flow Diagram - Liver Cirrhosis Prediction System

1. User Input:

- Inputs patient data (age, test results, symptoms)

2. Pre-processing Module:

- Validates and cleans the data
- Encodes and scales inputs

3. Machine Learning Model:

- Receives cleaned data and

Predicts liver cirrhosis likelihood

4. Output Display:

- Returns result to the user through the web interface

Data Pre-processsing User Input Module Healthcare professional • Missing value handling (Doctor or Technician) • Scaling/norrmalization Age • Encoding categorical • Liver test results variables • Other clinical data Machine Learning Model **Output Display** (Trained Classifier) (Frontend Interface) **Optional Enhancements** • Input: Cleaned data • Patient details • Prediction: Likely or ky • Prediction result • Database Storage (for Linunulicy (optional) Timestamp logging patient cases) • Output: Probability score or case ID • Model Retraining • User can reset (periodic updates with new data or input another patient case