Project Design Phase-II Data Flow Diagram & User Stories

Date	27 June 2025
Team ID	TVP2025TMD42853
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Liver Cirrhosis Prediction Project Start User inputs 34 features in HTML form Form data sent to Flask backend via POST Flask reads input and processes values Input is cleaned and encoded Input is normalized using Normalizer Random Forest model predicts risk Prediction result returned to frontend End

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Doctor / Health Staff	Input Data Collection	USN-1	As a user, I can enter 34 medical inputs for the patient including age, gender, blood reports, etc	Form fields are visible and can be filled	High	Sprint-1
Doctor / Health Staff	Prediction Request	USN-2	As a user, I can click "Submit" to generate liver cirrhosis risk prediction based on inputs	Clicking submit gives an output within 1 second	High	Sprint-1
Doctor / Health Staff	View Result	USN-3	As a user, I can see the prediction as a clearly displayed result with color indication (e.g. red for risk)	Result is shown after submission	High	Sprint-1
Admin	Model Management	USN-4	As an admin, I can view and verify the trained model and normalizer used in the backend	Backend loads .pkl models successfully	Medium	Sprint-2