Project Documentation: Predicting Liver Cirrhosis Using AI/ML

1. Introduction

Project Title: Revolutionizing Liver Care: Predicting Liver Cirrhosis Using AI/ML

Team Members and Roles:

- Keerthi Sudha - AI/ML Engineer

- Lakshmi Prasanna - Frontend Developer

- Deeraswani - Backend Developer

- Pavithra - Database & Integration Engineer

2. Project Overview

Purpose:

To provide early detection of liver cirrhosis through machine learning models, enabling preventive care and timely medical intervention.

Features:

- Upload patient medical data

- Predict likelihood of liver cirrhosis

- Visualize prediction results

- Secure login for doctors and researchers

- Patient history and report management

3. Architecture

Frontend:

Built using React.js with a component-based architecture. State management via Context API or Redux.

Backend:

Node.js and Express.js, RESTful APIs for predictions and user management.

Database:

MongoDB to store users, predictions, and patient data.