

**Project Design Phase**  
**Proposed Solution Template**

Date	29 June 2025
Team ID	LTVIP2025TMID59416
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Patients and healthcare professionals are facing growing challenges in detecting liver cirrhosis at an early stage. General physicians, especially in under-resourced areas, often lack access to advanced diagnostic tools like FibroScan or liver biopsy. To overcome these critical issues, our team has developed and deployed a machine learning-based web application that predicts the likelihood of liver cirrhosis based on clinical and biochemical data
2.	Idea / Solution description	Developing and deploying a model, which can be built by using advanced machine learning technologies to predict whether a patient is suffering with liver cirrhosis or not by considering their blood test sample reports
3.	Novelty / Uniqueness	Our proposed model can accurately detect whether the patient is suffering with liver cirrhosis disease or not by considering their Bilirubin, Albumin, Cholesterol parameters in their blood test reports
4.	Social Impact / Customer Satisfaction	Customers can use this model and can check whether they are suffering with liver cirrhosis disease or not
5.	Business Model (Revenue Model)	This model can be used by multi-speciality hospitals, Pharmaceuticals for their business purpose, without considering the patient's blood test report
6.	Scalability of the Solution	The proposed solution is highly scalable, that processes multiple input value parameters of the various blood test report values of multiple patients, and easily scales the user traffic, and predicts the accurate output