

Project Initialization and Planning Phase

Date	19 July 2025
Team ID	LTVIP2025TMID41526
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis Using Advanced Machine Learning Techniques.
Maximum Marks	2 Marks

Define Problem Statements (Customer Problem Statement Template):

Liver cirrhosis is a serious condition where liver tissue scars due to long-term damage, highlighting the importance of early detection and intervention for improved patient outcomes and complication prevention. By analysing comprehensive patient data including medical history, lab results, imaging scans, and lifestyle factors, our predictive model will assess the likelihood of liver cirrhosis. This will enable healthcare professionals to make informed decisions, offering timely care and personalized treatment plans to patients at risk, thus enhancing overall healthcare quality and patient management.

Customer Problem Statement Template

I am

Patient concerned about his liver health.

I'm trying to

Whether I have liver cirrhosis or not.

But

Current methods often detect cirrhosis late or rely on unclear symptoms.

Because

Early detection is crucial for effective treatment and preventing serious health issues.

Which makes me feel

Uncertain and anxious about my future health, needing clear information and proactive steps to manage my liver health effectively.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A patient concerned about liver health	Understand if I might have liver cirrhosis	Existing diagnostic methods are often late-stage or unclear	Early detection allows for better treatment and health management	Worried and seeking clear guidance and reliable prediction for my liver health
PS-2	A person with family liver disease history	Get early screening and know my personal risk	Tests aren't always accessible, and symptoms show up late	Recognizing risks early helps prevent severe liver issues	Anxious about risks and unsure how to take preventive action for a healthier future.