Ideation Phase

Brainstorm & Idea Prioritization Template

Date	27-06-2025
Team ID	LTVIP2025TMID42872
-Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
Maximum Marks	4 Marks

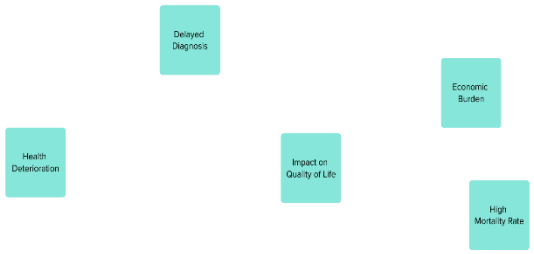
Brainstorm & Idea Prioritization Template:

To solve the problem of predicting liver cirrhosis using machine learning, we first listed all possible ideas like cleaning the data, selecting important features, training different machine learning models, and building a simple website for doctors to use. We then arranged these ideas based on how useful, easy, and urgent they are. The most important steps are preparing the data, building and testing the models, and creating a user-friendly web application for predictions. Other ideas, like handling unbalanced data or explaining predictions using feature importance, are also helpful and can be done next. This method helps us stay focused on the most important parts first to improve liver care through early and accurate detection.

Step-1: Select the Problem Statement:

Liver cirrhosis is a serious disease that damages the liver slowly over time. It is often not detected early because symptoms appear only in later stages. Traditional methods for diagnosing cirrhosis can be costly, slow, or not always accurate. This project aims to solve this problem by using machine learning to create a model that can predict liver cirrhosis early using patient data. Early prediction can help doctors take quick action, give better treatment, and improve the lives of patients.

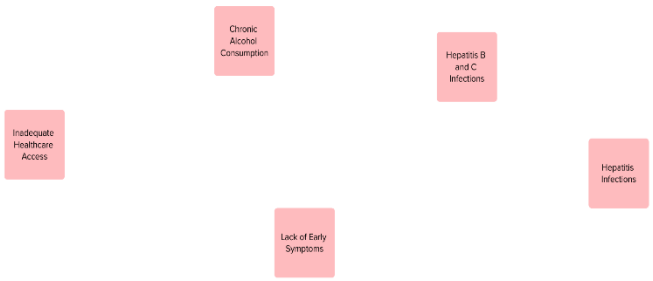
Milestone 1: Define Problem / Problem Understanding



What are effects of this problem? What else?

Liver cirrhosis is a severe liver disease that often goes undetected until advanced stages due to limitations in traditional diagnostics. This project addresses the need for early and accurate detection using machine learning techniques. The goal is to build a predictive model that leverages clinical data to improve diagnosis, personalize treatment, and enhance patient outcomes.

What are the root causes of this problem? What else?



See an example

Step-2: Idea Prioritization