

## Ideation Phase

### Define the Problem Statements

DATE	6 October 2022
TEAM ID	PNT2022TMID00269
PROJECT NAME	Statistical Machine Learning Approaches to Liver Disease Prediction
MAXIMUM MARK	2 MARKS

The main objective of this project is to analyze the parameters of various classification algorithms and compare their predictive accuracies so as to find out the best classifier for determining the liver disease. Here we are building a model by applying various machine learning algorithms to find the best accurate model and integrate it to a flask-based web application. User can predict the disease by entering parameters in the web application.

ML algorithms are new techniques to handle many hidden problems in medical data sets. This approach can help healthcare management and professionals to explore better results in numerous clinical applications, such as medical image processing, language processing, and tumor or cancer cell detection, by finding appropriate features. Several statistical and machine learning approaches (e.g., simulation modeling, classification, and inference) have been used by researchers and lab technicians for better prediction. The clinical results are more data-driven than model-dependent.

Problem Statement (PS)	I am (Customer)	I am trying to	But	Because	Which makes me feel
PS-1	Patient	Examine Liver disease	The implementation of this idea is difficult	Some Algorithm will give you the less accuracy	Miserable
PS-2	Patient	Make use of modern technologies	The implementation of this project is difficult	Accuracy varies with the Algorithm chosen	Slack

