

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID40372
Project Name	Statistical Machine Learning Approaches to Liver Disease Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">• Patients with liver disease have been continuously increasing because of excessive consumption of alcohol, inhale of harmful gases, intake of contaminated food and drugs.• To detect disease, Health care professionals need to collect samples from patients which can cost both time and money.• The main problem is Doctors cannot diagnose on the basis of variations in test results.
2.	Idea / Solution description	<ul style="list-style-type: none">• For perfect estimation, we collect some data from the user and analyse by using Machine learning to give more accurate result.• Using better Machine Learning Algorithm will result in perfect estimation.• Our goal is the collected dataset the train the dataset in Machine Learning, then classify the accurate result.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Due to affected this disease our body is more burden to digestion.• Our goal is Collect the dataset then train a machine learning model to classify them. Most accurate result will be estimate.• In this project, we are using the web application of Liver disease Prediction to predict automatically liver disease based on LFT report.• For perfect estimation, we collect some data from the user and analyse by using Machine learning to give more accurate result.

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Early disease prediction will help in diagnosis and related treatment of the patients. • Hence Customer will not suffer from serious effects of Liver disease.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Health Care Sector (Hospitals). • Can generate revenue through direct customers. • Can collaborate with health care sector and generate revenue from their customers. • Can make an advertisement of hospitals that have special treatment of Liver Disease, and if patients allow, we share the details of the patients to that hospital for medication.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • In this application, by using patient records that includes blood test report results, we will determine which patients have liver disease and which ones do not in an accurate and faster way. • An application is developed where data about patients are recorded and suggest some medication if they have Liver Disease. • Due to improvement in accuracy of detection, user will trust the application and very helpful for doctors to treat the patients at earlier stage. • We are using better machine learning algorithms will predict most accurate result.