MODEL BUILDING

SAVE THE MODEL

DATE	21- NOVEMBER- 2022
TEAM ID	PNT2022TMID36295
PROJECT NAME	STATISTICAL MACHINE LEARNING APPROACHES TO LIVER DISEASE PREDICTION

DATA SET MODEL:

- Age : Integer
- Gender :Object
- Alkaline Phosphotase : Integer
- Direct Bilirubin : Float
- Total Bilirubin : Float
- Alamine Aminotransferase : Integer
- Albumin and Globulin Ratio : Float
- Albumin : Float Dataset : Object
- Total Proteins : Integer
- Aspartate Aminotransferase : Float

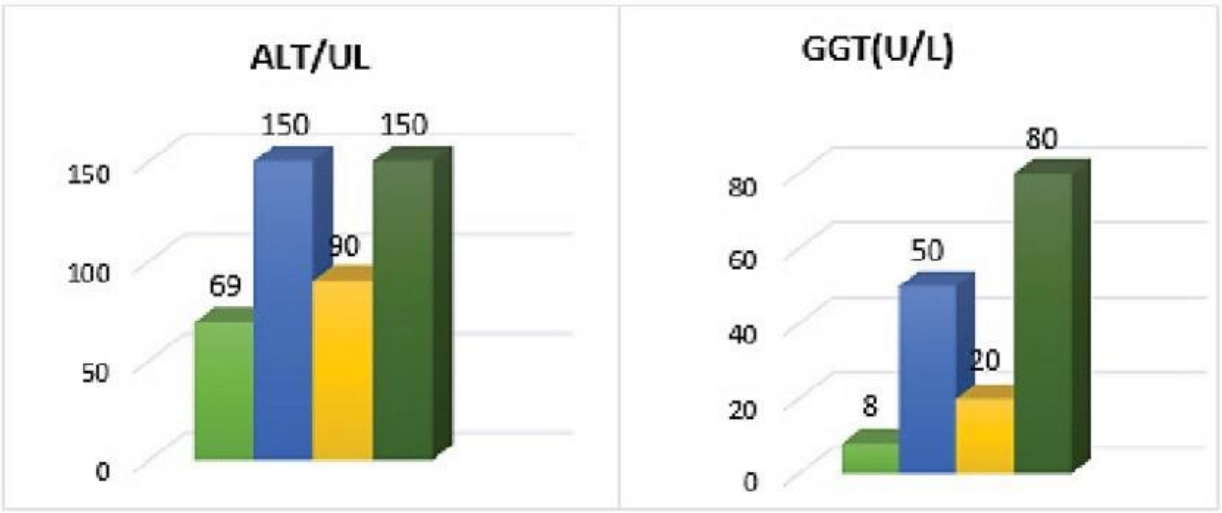
1. Liver failures are at high rate of risk among Indians. It is expected that by 2025 India may become the World Capital for Liver Diseases. The widespread occurrence of liver infection in India is contributed due to deskbound lifestyle,

increased alcohol consumption and smoking. There are about 100 types of liver infections.

2. With such alarming figures, it is necessary to have a concern towards tackling these diseases. After all, we cannot expect a developed and prosperous nation, with unhealthy youths. In this project we have taken UCI ILPD Dataset which contains 10 variables that are age, gender, total Bilirubin, direct Bilirubin, total proteins, albumin, A/G ratio, SGPT, SGOT and Alkphos and contains 415 as liver disease patients and 167 as non liver disease patient.As we got through the next parts of this paper we will explain what process as taken place for the selection of best model and building necessary system for the prediction of liver disease.

The major outcomes that can be expected through this project are:

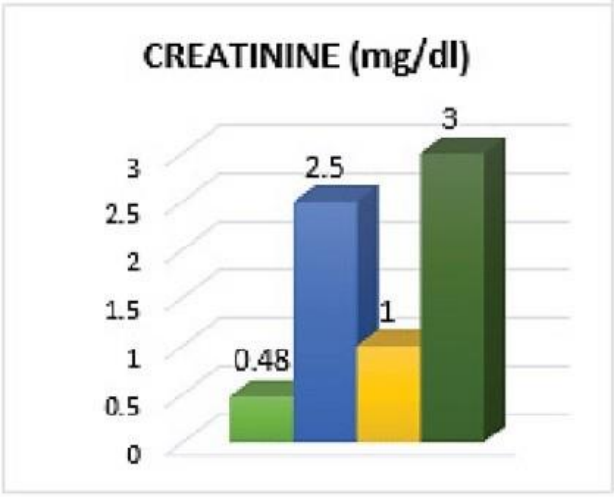
- Increased convenience for predicting a liver disease


ALT/UL
150
100
50
0
69
150
90
150

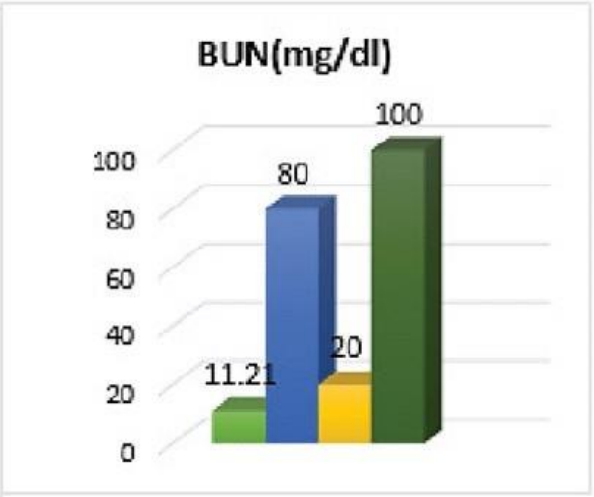
(a)

GGT(U/L)
80
60
40
20
0
8
50
20
80

(b)


CREATININE (mg/dl)
3
2.5
2
1.5
1
0.5
0
0.48
2.5
1
3

(c)


BUN(mg/dl)
100
80
60
40
20
0
11.21
80
20
100

(d)