Model Development Phase

Date	10 July 2024
Team ID	SWTID1720013031
Project Title	Prediction and Analysis of Liver Patient Data Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Age	Age of the patient	Yes	Age can be important because certain liver diseases, like cirrhosis, hepatitis, and liver cancer, have age-related risk factors
Gender	Gender of the patient (Male/Female)	Yes	Gender can also play a role as certain liver diseases, such as autoimmune hepatitis, may have a higher prevalence in one gender over another. Additionally, hormonal differences between genders can influence liver function.

Total_Bilirubin	Total amount of bilirubin in the blood	Yes	Elevated levels indicate liver dysfunction or disease, making it a key marker for liver health.
Direct_Bilirubin	Amount of direct bilirubin in the blood	Yes	It reflects liver's ability to process bilirubin, crucial for diagnosing conditions like cholestasis.
Alkaline_Phosphotase	Level of alkaline phosphatase enzyme in the blood	Yes	Elevated levels can indicate liver or bone disease, offering insights into liver function and health.
Alamine_Aminotransferase	Level of ALT enzyme in the blood	Yes	Sensitive marker for liver cell damage or inflammation, essential in diagnosing liver diseases like hepatitis.
Aspartate_Aminotransferase	Level of AST enzyme in the blood	Yes	Indicates general tissue damage, including liver cells, providing additional diagnostic clues.
Total_Proteins	Total amount of proteins in the blood	Yes	Reflects overall health and liver function, with deviations indicating nutritional status or liver disease.
Albumin	Level of albumin protein in the blood	Yes	Crucial for maintaining blood volume and transporting substances, low levels suggest liver disease or malnutrition.
Albumin_and_Globulin_Ratio	Ratio of albumin to globulins in the blood	Yes	Provides balance insights, changes indicating liver disease or inflammatory conditions.