**Model Development Phase**

|  |  |
| --- | --- |
| Date | 15 March 2024 |
| Team ID | LTVIP2024TMID24892 |
| Project Title | Liver Patient Identification – prediction of liver patient |
| Maximum Marks | 5 Marks |

**Feature Selection Report :**

Feature selection plays a important role in Improves Model Performance, Reduces Training Time, Increases Model Interpretability, Facilitates Better Data Understanding.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature** | **Description** | **Selected (Yes/No)** | **Reasoning** |
| Age | Age is an important factor in liver disease diagnosis. | Yes | Liver disease can affect people of different ages. |
| Total Bilirubin | Total bilirubin is a key indicator of liver function. | Yes | Elevated levels can indicate liver disease. |
| Direct Bilirubin | Direct bilirubin is a specific type of bilirubin that is directly conjugated with glucuronic acid. | No | Elevated levels can indicate liver disease but not accurately. |
| Alkaline Phosphatase | Alkaline phosphatase is an enzyme that is elevated in liver disease | Yes | This feature can be used as a diagnostic marker. |
| Gender | Male or Female | Yes | - |
| Total Protein | Can be used to indicate liver disease | Yes | Elevated levels can indicate liver disease. |
| Alanine Aminotransferase | Alanine aminotransferase is an enzyme that is elevated in liver disease | Yes | This feature can be used as a diagnostic marker. |