**Model Development Phase Template**

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| Date | 15 March 2024 |
| Team ID | LTVIP2024TMID24892 |
| Project Title | Liver Patient Identification – prediction of liver patient |
| Maximum Marks | 6 Marks |

**Model Selection Report**

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

**Model Selection Report:**

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| **Model** | **Description** | **Hyperparameters** | **Performance Metric (e.g., Accuracy, F1 Score)** |
| Random forest | Random Forest can be effectively used in a liver patient identification model to improve diagnosis accuracy, reduce costs, and enhance patient outcomes. | * n\_estimators * criterion * max\_depth * min\_samples\_split * min\_samples\_leaf | Accuracy = 82% |
| SVM | SVMs can handle high-dimensional data with ease, improving model performance. This is particularly useful in liver patient data, which often involves a large number of features | * Kernel * C * Gama | Accuracy = 67% |
| KNN | KNN can handle high-dimensional data with ease, reducing the curse of dimensionality and improving model performance. | * n\_neighbous * weights * P | Accuracy = 75% |