

## Model Development Phase Template

Date	03-10-2024
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:

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.	<ul style="list-style-type: none"> <li>n_estimators</li> <li>criterion</li> <li>max_depth</li> <li>min_samples_split</li> <li>min_samples_leaf</li> </ul>	Accuracy = 84%

SVM	<p>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</p>	<ul style="list-style-type: none"> <li>• Kernel</li> <li>• C</li> <li>• Gama</li> </ul>	<p>Accuracy = 73%</p>
KNN	<p>KNN can handle high-dimensional data with ease, reducing the curse of dimensionality and improving model performance.</p>	<ul style="list-style-type: none"> <li>• n_neighbous</li> <li>• weights</li> <li>• P</li> </ul>	<p>Accuracy = 76%</p>