# Model Development Phase Template

| Date | 22 june 2024 |
|---|---|
| Team ID | 739802 |
| Project Title | Disease Prediction Using Machine Learning |
| 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) |
|---|---|---|---|
| KNN | It works based on the principle of finding the nearest neighbors to a data point in the feature space, it analyses the similarity between the medical profile of individuals. | - | Accuracy  score = 100% |
| Support Vector Machine | It use a hyperplane to separate patients with and without a disease based on selected features like medical history and test | - | Accuracy score =  100% |

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|---|---|---|---|
| | results. | | |
| Decision Tree Classifier | It uses a tree-like model where each internal node represents a feature, each branch represents a decision rule based on the feature. | - | Accuracy Score = 97% |
| Random Forest | It Utilizes an ensemble of decision trees to predict diseases, among trees to enhance accuracy and robustness in medical data analysis. | - | Accuracy Score = 97% |