Model Development Phase Template

Date	15 March 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%

	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%