

## MODEL DEVELOPMENT PHASE TEMPLATE

Date	5 July 2024
Team ID	team-740657
Project Title	Medical Cost Prediction
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)
Linear Regression	Linear model that assumes a linear relationship between features and target values.	-	78%
Random forest	Ensemble model of decision trees that reduces overfitting and improve accuracy.	-	83%
Support Vector Machine (SVM)	Effective for high-dimensional data by finding the optimal hyperplane classes.	-	57%
Gradient Boosting Machines (GBM)	Sequentially builds trees to correct errors of previous models, improving predictive performance.	-	84%

