



## MODEL DEVELOPMENT PHASE TEMPLATE

Date	5 July 2024	
Team ID	740102	
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)	Sequentiallly builds trees to correct errors of previous models, improving predictive performance.	-	84%



