Model Development Phase Template

Date	15 March 2024
Team ID	xxxxxx
Project Title	Forecasting Economic Prosperity: Leveraging Machine Learning For GDP Per Capita 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, F1 Score)
Linear Regression	A simple linear approach that assumes a linear relationship between inputs and the target variable.	Default	MSE: 21883733.766837504, R^2: -0.9441781713294894
Random Forest	An ensemble learning method that constructs multiple	n_estimators=100, random_state=42	MSE: 7133952.090909091, R^2: 0.36621080852875953

	decision trees and outputs the average prediction.		
Support Vector Regression	A regression model that uses the principles of Support Vector Machines (SVM) for regression tasks.	kernel='rbf'	MSE: 15330417.613966553, R^2: -0.3619733999691279