

Model Development Phase Template

Date	12 th july 2024
Team ID	SWTID1720086522
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
Linear regression	Simple, interpretable; predicts continuous outcomes based on linear relationships between features, prone to	...	67.68%

	overfitting with high-dimensional data, useful for understanding feature influence on loan approval predictions.		
Random forest regressor	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting through bagging, provides feature importance for accurate	...	81.39%
Support vector regressor	Maximizes margin; effective in high-dimensional spaces, uses kernel functions to model nonlinear relationships, sensitive to parameter selection, suitable for nuanced loan approval predictions	...	-16.47%