

## Model Development Phase Template

Date	7th July 2024
Team ID	739719
Project Title	Garment Workers Productivity Predictions
Maximum Marks	5 Marks

### Model Selection Report

In the model selection report for briefly state the goal of predicting garment workers' productivity and the importance of selecting the optimal model and report, including the models considered and evaluation criteria.

Choose ARIMA for its robust performance in forecasting hourly productivity fluctuations, leveraging fatigue levels and task types effectively. ARIMA outperformed linear regression in accuracy and ability to capture temporal dependencies, essential for optimizing workforce management.

### Model Selection Report:

Model	Description
Model 1 Linear regression	Predict productivity using regression with worker experience, machine utilization, and order complexity.
Model 2 Randomforest Regression	Random Forest regression is a powerful machine learning technique that leverages the strengths of ensemble learning and decision trees for regression tasks