**Model Development Phase Template**

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| Date | 15 March 2024 |
| Team ID | SWTID1749710222 |
| Project Title | Unlocking Silent Signals: Decoding Body Language with Mediapipe |
| 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:**

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| **Model** | **Description** | **Hyperparameters** | **Performance Metric (e.g., Accuracy, F1 Score)** |
| Logistic Regression | a linear classifier that models class probabilities. | max\_iter=1000, default solver (lbfgs), StandardScaler, SimpleImputer(mean) |  |
| Ridge Classifier | linear classifier with L2 regularization. | Default params, StandardScaler, SimpleImputer(mean) |  |
| Random Forest Classifier | ensemble of decision trees for classification. | Default params (e.g., n\_estimators=100), StandardScaler, SimpleImputer(mean) |  |
| Gradient Boosting Classifier | sequential trees minimizing error. | Default params (e.g., n\_estimators=100), StandardScaler, SimpleImputer(mean) |  |