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| --- | --- | --- | --- |
|  | | **Model Development Phase Template** | |
|  |  | |  |
| Date |  | | 20 June 2025 |
|  |  | |  |
| Team ID |  | | SWTID1750057522 |
|  |  | |  |
| 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:**

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





Gradient

Boosting

Classifier

sequential trees minimizing error.

Default params (e.g., n\_estimators=100), StandardScaler, SimpleImputer(mean)

