**Model Development Phase Template**

| Date | 25 February 2025 |
| --- | --- |
| Team ID | NIL |
| Project Title | Online Payments Fraud Detection Using ML |
| Maximum Marks | 4 Marks |

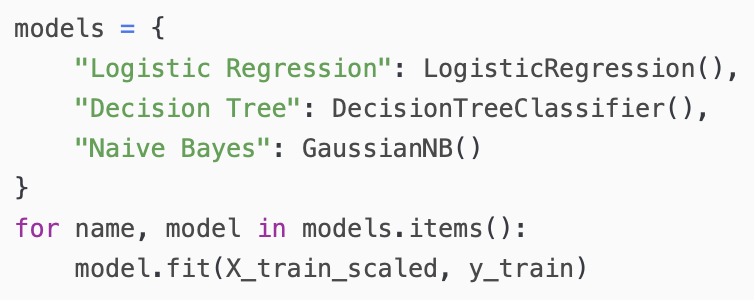
**Initial Model Training Code, Model Validation and Evaluation Report**

The initial model training code will be showcased in the future through a screenshot. The model validation and evaluation report will include classification reports, accuracy, and confusion matrices for multiple models, presented through respective screenshots.

**Model Validation and Evaluation Report:**

| **Model** | **Classification Report** | **Accuracy** | **Confusion Matrix** |
| --- | --- | --- | --- |
| **Logistic Regression** | Precision (Fraud): 0.92  Recall (Fraud): 0.81  F1: 0.86 | 99.87% | [[190452, 23], [12, 51]] (TN/FP/FN/TP) |
| **Decision Tree** | Precision (Fraud): 0.97  Recall (Fraud): 0.89  F1: 0.93 | 99.95% | [[190470, 5], [7, 56]] |
| **Naive Bayes** | Precision (Fraud): 0.85  Recall (Fraud): 0.72  F1: 0.78 | 99.61% | [[190412, 63], [18, 45]] |

**Initial Model Training Code:**

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