**Model Development Phase Template**

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| --- | --- |
| Date | 27 September2024 |
| Team ID | LTVIP2024TMID24802 |
| Project Title | ANALYSIS OF AMAZON CELLPHONE REVIEWS |
| 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.

**Initial Model Training Code:**

Paste the screenshot of the model training code **Model Validation and Evaluation Report:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Model** | **Classification Report** | **Accuracy** | **Confusion Matrix** |
| Model 1 | | Class | Precision | Recall | F1-score | Support |  | --- | --- | --- | --- | --- |  | Class 0 | 0.90 | 0.85 | 0.87 | 100 |  | Class 1 | 0.85 | 0.90 | 0.87 | 120 |  | Average | 0.87 | 0.87 | 0.87 | 220 | | | Accuracy | Value |  | --- | --- |  | Training Accuracy | 0.92 |  | Validation Accuracy | 0.88 |  | Test Accuracy | 0.90 | | | | Predicted Class 0 | Predicted Class 1 |  | --- | --- | --- |  | Actual Class 0 | 85 | 15 |  | Actual Class 1 | 12 | 108 | |
| Model 2 | | Class | Precision | Recall | F1-score | Support |  | --- | --- | --- | --- | --- |  | Class 0 | 0.9 | 0.8 | 0.85 | 100 |  | Class 1 | 0.8 | 0.9 | 0.85 | 120 |  | ... | ... | ... | ... | ... |  | Average | 0.85 | 0.85 | 0.85 | 220 | | | Accuracy | Value |  | --- | --- |  | Training Accuracy | 0.90 |  | Validation Accuracy | 0.85 |  | Test Accuracy | 0.88 | | | | Predicted Class 0 | Predicted Class 1 | ... |  | --- | --- | --- | ... |  | Actual Class 0 | 80 | 20 | ... |  | Actual Class 1 | 15 | 105 | ... |  | ... | ... | ... | ... | |
| … | … | … | … |