**Model Development Phase Template**

| Date | 12 JULY 2024 |
| --- | --- |
| Team ID | 740118 |
| Project Title | Ecoforecast AI-powered prediction of carbon monoxide levels |
| Maximum Marks | 10 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 a summary and training and validation performance metrics for multiple models, presented through respective screenshots.

**Initial Model Training Code (5 marks):**

Paste the screenshot of the model training code

**Model Validation and Evaluation Report (5 marks):**

| **Model** | **Summary** | **Training and Validation Performance Metrics** |
| --- | --- | --- |
| Model 1 | Logistic regression model typically include accuracy, precision, recall, F1 score to evaluate its predictive performance and generalization capability. |  |
| Model 2 | Random forest classifier model often encompass accuracy, precision, recall, F1 score to measure its prediction quality and robustness. |  |
| Model 3 | Decision tree classifier model commonly include accuracy, precision, recall, F1 score which help assess the model's prediction accuracy and generalizability. |  |
| Model 4 | K-nearest neighbors classifier model typically include accuracy, precision, recall, F1 score to evaluate its prediction performance and generalization ability. |  |