**Model Development Phase Template**

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| Date | 20 June 2024 |
| Team ID | 740026 |
| Project Title | Optimizing Sleep Efficiency: Harnessing Machine Learning For Enhanced Restorative Rest |
| 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** | **Regression Report** | **R2\_score** | **Confusion Matrix** |
| LinearRegression |  | 0.7908813330628066 | Regression is not allowed confusion matrix |
| DecisionTreeRegressor |  | 0.7052744252299563 | Regression is not allowed Screenshot of the confusion matrix |
| RandomforestRegressor |  | 0.8446870685866765 | Regression is not allowed Screenshot of the confusion matrix |