**PROJECT DESIGN**

**Data Flow Diagram**

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| Date | 28 JUNE 2025 |
| Team ID | LTVIP2025TMID59766 |
| Project Name | **TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning** |
| Maximum Marks | 4 Marks |

| **Data Flow Diagram:**  **Entity/Process** | **Description** |
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| External Data Sources | CSV files, APIs, Sensor data |
| User | Inputs queries and receives predictions |
| User Interface (UI) | Interface for input/output interaction |
| Data Preprocessing | Cleaning, normalization, splitting data |
| Train Data/Test Data | Splitted datasets for training and testing |
| Model Training/Algorithm | Model building using machine learning algorithms |
| Model Evaluation | Testing model accuracy with test data |
| Trained Model | Final model ready for predictions |
| Prediction Generation | Generates outputs based on user input |
| Display Result | Outputs predictions to the user |

