# Project Design Phase-II Data Flow Diagrams and User Stories

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| Date | 20 July 2025 |
| Team ID | LTVIP2025TMID20285 |
| Project Name | TrafficTelligence – Advanced Traffic Volume Estimation Using Machine Learning |
| Maximum Marks | 4 Marks |

Data Flow Diagram (Level 0):

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| User (Web) | -------> | Web Interface | -------> | Flask Backend |  
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 | Input Preprocessor| | ML Model (Predictor) |  
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 | Prediction Logic | <----- | Stored Model (.pkl) |  
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 | Output (Volume UI) |  
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User Stories:

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| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance Criteria | Priority | Release |
| Web User | Data Input | USN-1 | As a user, I can enter the date, time, weather, and location to get traffic prediction | Form submission works; Data is passed to Flask backend | High | Sprint-1 |
| Web User | View Prediction | USN-2 | As a user, I receive Low/Medium/High volume output after submitting input | Volume category is shown in browser | High | Sprint-2 |
| Web User | View Confidence Score | USN-3 | As a user, I see prediction accuracy percentage | Confidence score displayed clearly | Medium | Sprint-2 |
| Admin | Model Update | USN-4 | As an admin, I can upload a new trained model to improve prediction | New .pkl file accepted and linked to backend | Low | Sprint-3 |
| Admin | Logs Monitoring | USN-5 | As an admin, I can view past prediction logs for analysis | Log file created per session and viewable | Medium | Sprint-3 |