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| **Use Case Name:** | Accept End User License Agreement | |
| **Scenario:** | User has to accept End User License Agreement | |
| **Triggering Event:** | Prerequisite to fully accessing mobile application | |
| **Brief Description:** | User has to read and agree to the ‘Terms of Use’ and ‘Privacy Policy’, and accept the license agreement | |
| **Actors:** | User | |
| **Related Use Cases:** | N/A | |
| **Stakeholders:** | User | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | User accepted or declined the End User License Agreement | |
| **Flow of Events** | **Actor** | **System** |
| 1. Opens mobile application | * 1. Prompts an End User License Agreement |
| 1. Either decline or Accept End User License Agreement |  |
| **Except Conditions:** | If user does not accept the agreement, application will not proceed.  If user does accept, then can get started on the application. | |

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| **Use Case Name:** | Enter Current Location | |
| **Scenario:** | User enters current location | |
| **Triggering Event:** | Be knowledgeable about traffic flow | |
| **Brief Description:** | User enters current location | |
| **Actors:** | User | |
| **Related Use Cases:** | View Today’s Traffic Prediction, View Traffic Prediction within a week | |
| **Stakeholders:** |  | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | User has a destination | |
| **Flow of Events** | **Actor** | **System** |
| 1. Enter Destination | * 1. Navigates coordinates |
| **Except Conditions:** | If user does not enter current location, then the moderator pauses this use case.  If user does enter, then can proceed to next use case. | |

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| **Use Case Name:** | Enter Destination | |
| **Scenario:** | User enters destinations | |
| **Triggering Event:** | Be knowledgeable about traffic flow | |
| **Brief Description:** | User enters destinations to gain awareness regarding traffic flows | |
| **Actors:** | User | |
| **Related Use Cases:** | View Today’s Traffic Prediction, View Traffic Prediction within a week | |
| **Stakeholders:** |  | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | User has a destination | |
| **Flow of Events** | **Actor** | **System** |
| 1. Enters Destinations | * 1. System displays Traffic Prediction |
| **Except Conditions:** | If user does not enter a destination, then the moderator pauses this use case.  If user does enter, then can proceed to next use case. | |

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| **Use Case Name:** | View Today’s Traffic Prediction | |
| **Scenario:** | View Today’s Traffic Prediction | |
| **Triggering Event:** | Anticipate today’s traffic flow | |
| **Brief Description:** | Anticipate today’s traffic flow | |
| **Actors:** | User | |
| **Related Use Cases:** | View Today’s Traffic Prediction, View Historical Traffic Information, View Traffic Prediction within a week | |
| **Stakeholders:** |  | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | User has a destination and current location | |
| **Flow of Events** | **Actor** | **System** |
| 1. Enters Current Location | * 1. Prompt ‘Today’s Traffic Prediction’ – page interface |
| 1. Enters Destination |  |
| 1. Scrolls through time bounds |  |
| **Except Conditions:** |  | |

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| **Use Case Name:** | View Traffic Prediction within a week | |
| **Scenario:** | User wants to view future traffic flow to make a better strategy out of his commute | |
| **Triggering Event:** | Anticipate future traffic flow within a week | |
| **Brief Description:** | User wants to view and | |
| **Actors:** | User | |
| **Related Use Cases:** | View Today’s Traffic Prediction, View Historical Traffic Information, View Traffic Prediction within a week | |
| **Stakeholders:** |  | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | User has a destination and current location | |
| **Flow of Events** | **Actor** | **System** |
| 1. Enters Destination | * 1. Prompt ‘Today’s Traffic Prediction’ – page interface |
| 1. Enters Current Location |  |
| 1. Scrolls through time bounds (every day within scope of a week) |  |
| **Except Conditions:** |  | |

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| **Use Case Name:** | Analyze Historical Data | |
| **Scenario:** | Retrieves historical data corresponding to traffic speed and volume data | |
| **Triggering Event:** | System wants to generate representative traffic flow information | |
| **Brief Description:** | System retrieves from database to generate representative traffic flow information | |
| **Actors:** | Admin | |
| **Related Use Cases:** |  | |
| **Stakeholders:** | Admin | |
| **Preconditions:** | N/A | |
| **Post-conditions:** | Admin has a data source and a database | |
| **Flow of Events** | **Actor** | **System** |
| 1. Gathers data from reliable resources | * 1. Stores into traffic observation center database |
| 1. Retrieve historical data corresponding to traffic speed and volume data |  |
| 1. Transform data into information |  |
| **Except Conditions:** | If user does not have a data, then the moderator pauses this use case. | |

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| **Use Case Name:** | Generate Predictions | |
| **Scenario:** | System generates prediction | |
| **Triggering Event:** | System want to calculate probabilities associated with the prediction | |
| **Brief Description:** | System calculates probabilities that can generate predictions | |
| **Actors:** | Admin | |
| **Related Use Cases:** |  | |
| **Stakeholders:** | Admin | |
| **Preconditions:** | Retrieved historical data | |
| **Post-conditions:** | Admin has a robust predictive model | |
| **Flow of Events** | **Actor** | **System** |
| 1. Gathers data from reliable resources | * 1. Stores into traffic observation center database |
| 1. Retrieve historical data corresponding to traffic speed and volume data |  |
| 1. Transform data into information |  |
| **Except Conditions:** | If user does not have a predictive model, then the moderator pauses this use case. | |