

**JagTrack**

## **Use-Case Specification: Boarding JagTran**

**Version 1.0**

JagTrack

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Date: 08/Mar/12

One of the two primary fully-dressed use cases for inception

## Revision History

Date	Version	Description	Author
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## **Use-Case Specification: Boarding JagTran**

### **1. Use-Case Name**

Boarding JagTran

#### **1.1 Brief Description**

This use case is going to capture the scenario that a user gets to a JagTran stop and uses the JagTrack application to figure out when the last bus left and when the next bus will arrive.

### **2. Actors Involved**

User (passenger)

### **3. Flow of Events**

#### **3.1 Basic Flow**

1. The User arrives at a stop and starts a query by requesting when the last bus left and when the next bus will arrive.
2. The system asks the user to choose a line color.
3. The user chooses the color of the line.
4. The system asks the user to choose a stop on the line.
5. The user chooses the stop on the line.
6. The system responds with departure time of the last bus and arrival time of next bus for the stop in seconds.

#### **3.2 Alternative Flows**

##### **3.2.1 < First Alternative Flow >**

2a. If the JagTran system currently is not scheduled, the system shows the user that there is no bus available at this time. The use case terminates.

##### **3.2.2 <Second Alternative Flow>**

3a. If the user chooses the color of the line mistakenly and tries to cancel the choice, the use case goes back to step 2.

##### **3.2.3 <Third Alternative Flow>**

5a. If the user chooses the stop on the line mistakenly and tries to cancel the choice, the use case goes back to step 4.

##### **3.2.4 <Fourth Alternative Flow>**

6a. If the system cannot retrieve data needed to calculate the result after a specified number of tries or a certain amount of time, it will display an error message to the user. Then the use case terminates.

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### 3.2.5 < Fifth Alternative Flow >

At any point of time in the basic flow, if the system is unable to get access to the Internet, it will display an error message to the user. Then the use case terminates.

## 4. Special Requirements

### 4.1 Performance

After the user has chosen both line color and stop, the system should take no longer than 5 seconds to display the result.

### 4.2 Dependability

Out of 1000 users' request, at least 999 should be responded to correctly and efficiently.

### 4.3 Technology and tools

Database, sensors, and GPS work in the way they are expected.

## 5. Preconditions

### 5.1 Launch

Before the use case begins, the user has launched the application successfully.

## 6. Postconditions

### 6.1 Bus arrival

The next bus arrives approximately at the time determined by the system.

### 6.2 Termination

The system is terminated by the user.

### 6.3 Ready again

The system is ready to provide another service.

## 7. Extension Points

There is no extension point associated with this use case currently.