Requirements Description

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1   Version History

Date	Author	Version	Changes Made	Rationale
08/20/2013	SK	1.0	Original for CS 477; Tailored from ICSM REQ Template	To fit CS 477 Course Content
09/14/2013	Team 1	1.0.1	First version	Project Requirements

2   Capability Requirements

2.1   Platform

1. The application shall be compatible with the iOS and Android mobile platforms.

2. The application shall support a web interface for other mobile devices.

2.2   User Accounts

1. If it is a users first-time opening the application, the application shall prompt the user to enter an email address, password, and credit card information.

   (a) If the account is created successfully, the application shall send a confirmation to the users stored email address.

   (b) If the account creation is not successful, the application shall display an error message that prompts the user to reenter their information and will not be logged in.

2. If a returning user opens the application, it shall prompt the user to enter their log-in information.

   (a) If the log-in attempt fails, the application will display an error message that prompts the user to reenter their log-in information.

   (b) If the log-in attempt succeeds, the user will be shown a transit management screen.

2.3   Usage

1. If the application loses connectivity, the application shall display an error message.

2. The application shall retrieve the users location at intervals of 120 ± 10 seconds.

3. If the user is within 150 feet of a train-stops geo-location coordinates, the train-stops name, ticket price, and incoming train information shall be displayed on the user interface.

4. If train stop information is being displayed on the applications user interface, the application shall update the train stops incoming train information at intervals of 30 ± 5 seconds.

2.4   Payments

1. If the user selects to purchase a ticket, their stored credit card will be charged for the price of the train stops ticket. If the card does not process, an error message shall by display and the order shall not be accepted. If the transaction succeeds, the application shall create a virtual ticket.

2. If the user selects to use their ticket, the application shall signal the gate up to a maximum of 3 attempts at 20 ± 5 second intervals to open. If the application is unsuccessful on the 3rd attempt, an error message shall be displayed.

3. The application shall store unused virtual tickets for at least 1 year.

4. The application shall store used virtual tickets for at least 30 days.

5. The application shall allow the user to change their email address.

6. The application shall allow the user to change their password.

7. The application shall allow the user to change their credit card information.

3   Level of Service Requirements

3.1   Subsection

1. Requirement

2. Requirement