

Supplementary Specification

1. Objectives

The purpose of this document is to define requirements of the JagTrack system.

2. Scope

This Supplementary Specification applies to the JagTrack system which will be developed by the USA Spring 2012 CSC 331 class.

The JagTrack System will enable students to capture realtime or near-realtime information regarding JagTran routes, buses and estimated travel time between points on campus. It will allow administrators to track route/bus usage and capacity for route planning.

3. Functionality

3.1 System Error Logging

All system errors shall be logged. Fatal system errors shall result in an orderly shutdown of the system.

The system error messages shall include a text description of the error, the operating system error code (if applicable), the module detecting the error condition, a data stamp, and a time stamp. All system errors shall be retained in the Error Log Database.

4. Usability

4.1 Android Compliance

The user interface shall be Android compliant.

4.2 Design for Ease-of-Use

The user interface of the JagTrack System shall be designed for ease-of-use and shall be appropriate for a smartphone-enabled user community with no additional training on the System.

5. Reliability

5.1 Availability

The availability requirements will be defined in the next iteration.

5.2 Mean Time Between Failures

The MTBF requirements will be defined in the next iteration.

6. Performance

6.1 Database Access Response Time

The system shall provide access to the legacy course catalog database with no more than a 10 second latency.

6.2 Transaction Response Time

The system must be able to complete 80% of all transactions within 30 seconds.

7. Design Constraints

7.1 Platform Requirements

The client portion of the JagTrack System shall operate on any Android device running Android OS 2.2 (Frozen Yogurt) or higher with GPS and WiFi capabilities.