# **JagTran**

# JagTran Software Architecture Document

Version 1.0

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# **Revision History**

Date	Version	Description	Author
04/03/12	1.0	Document Created and written	Nguyen, Matthew

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# **Software Architecture Document**

#### 1. Introduction

#### 1.1 Purpose

This document provides a comprehensive architectural overview of the system, using a number of different architectural views to depict different aspects of the system. It is intended to capture and convey the significant architectural decisions which have been made on the system.

#### 1.2 Scope

The Software Architecture Document affects the overall entirety of the programming base of the application.

#### 1.3 Definitions, Acronyms, and Abbreviations

Refer to Glossary.

#### 1.4 References

- Glossary
- Use Cases
- Deployment Plan
- Development Case
- Analysis and Design Model

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# 2. Architectural Representation

## 3. Use-Case View

#### 3.1 Use-Case Realizations

Primary functionality use cases:

#### 3.1.1 JT-Use\_Case\_1

This use case describes the one of the main functions the JagTrack should be to provide the user with.

#### 3.1.2 Corrected - He Zhang---use case

This use case describes a function that should be available to any and all users.

## 3.1.3 RA Team 1 Brief Use Cases by Xingyu Wang: Brief UC 2

Use case 2 from this document should be a functionality of the JagTrack application.

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## 4. Logical View

[See package diagram]

#### 5. Process View

[See Use Case Realizations]

## 6. Deployment View

[See Deployment Diagram]

# 7. Implementation View

# 8. Data View (optional)

Data, such as the time left for a JagTran to reach the next stop, shall be kept on a server and be transferred to any device with the JagTrack application as necessary.

#### 9. Size and Performance

Application should take minimal space possible, and performance should only use the necessary memory needed to run. This allows for maximum battery life in the device as well. Additionally, JagTrack time readings should be accurate within 30 seconds.

#### 10. Quality

The system should be able to be accessed anywhere, anytime, and on most systems. It should be compatible with Android, and on an internet browser from a computer. Eventually, service may extend to iOS and other devices. The system should be available all throughout the day, and maintenance should only be done after midnight, and must be up before 6 am. If such an occurrence were to occur where downtime must be longer than those times, or done before those time, a notice will be sent out to all users will the application and on the website to alert for downtimes.