**Software Requirements Specification**

**For The**

**Vanpool Service System**

By

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Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev #** | **Description** | **Prepared By** | **Date Approved** |
| 0 | Initial Issue | M. England | 2/28/19 |
| 1 | Updated to reflect the MVP that group discussed | M. England | 3/28/19 |
| 2 | Final updates | M. England | 5/3/19 |

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# 1 Introduction

## **1.1 Objectives**

This is the Software Requirements Specification for the Vanpool Service System, for use by the Fundamentals of Software Engineering Course. The Software Requirements Specification includes the functionality specifics of the Vanpool Service System.

## **1.2 Scope**

This Software Requirements Specification applies to the Vanpool Sharing System. The SRS will be updated on an incremental basis.

## **1.3 Assumptions**

The validation will be performed on a properly functioning computer with internet connection.

## **1.4 Exclusions**

There are currently no exclusions.

# 2 Acronyms and References

## **2.1 Acronyms and Definitions**

See below for the acronyms and definitions of terms utilized in the subsequent portion of this document…

SRS - Software Requirements Specification

VSS - Vanpool Sharing System

## **2.2 References**

See below for references used in this document, including those utilized to create this document…

[EDM SRS](https://www.slideshare.net/rnjohnso/EDM-Requirements-SpecificationSample)

# 3 System Overview

## **3.1 Descriptive Process Flow**

Users access a web page where they can login or create an account. From there they’ll be directed to either a driver, user, or system admin web page. These pages will allow the user to view rides, request to join a ride, and more.

## **3.2 System Analysis**

Stakeholders for this project are the professor and TA. They provided weekly feedback to help refine requirements and system functionality.

## **3.3 System Constraints**

Currently the system is only capable of being on a computer's web page. Being able to access from a mobile device is a future capability that we’re considering.

# 4 Requirements

## 4.1 Functional Requirements

### 4.1.1 Login Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.1.1 | The system shall provide access via a web-based client. |
| 4.1.1.2 | The system shall provide login identification for users, drivers, and system administrators. |

### 4.1.2 Logoff Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.2.1 | The system shall provide for user logoff from the application |

### 4.1.3 Account Creation Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.3.1 | Users shall establish two security questions for account validation. |

### 4.1.4 Account Update Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.4.1 | Users shall be able to change password by answering two security questions. |
| 4.1.4.2 | Users shall be able to update all account information including name, number, etc. |

### 4.1.5 Driver Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.5.1 | Drivers shall have the capability to view earnings. |
| 4.1.5.2 | Drivers shall be able to create a route. |
| 4.1.5.3 | Drivers shall be able to update payment info. |
| 4.1.5.4 | Drivers shall be able to edit account. |
| 4.1.5.5 | Drivers shall be able to see their current routes. |

### 4.1.6 User Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.6.1 | User shall be able to view active rides. |
| 4.1.6.2 | Users shall have the ability to join a ride. |
| 4.1.6.3 | Users shall have the option to search rides. |
| 4.1.6.4 | Users shall be able to view ride history. |
| 4.1.6.5 | Users shall be able to view balance. |
| 4.1.6.6 | Users shall have the ability to edit their account. |

### 4.1.7 System Admin Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.7.1 | System admin shall be able to manage/view vans. |
| 4.1.7.2 | System admin shall be able to delete accounts. |
| 4.1.7.3 | System admin shall be able to add a stop |

### 4.1.8 Billing Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.1.8.1 | Users shall agree to pay the maximum price for a ride. |
| 4.1.8.2 | Ride cost shall be a flat rate of $5. |

## 4.2 Data Requirements

### 4.2.1 Data Backup, Archival and Retrieval

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.2.1.1 | Deleted accounts shall have all information archived. |

## 4.3 Security Requirements

### 4.3.1 Application Security Requirements

|  |  |
| --- | --- |
| **ID/Number** | **Requirement Text** |
| 4.3.1.1 | The system shall limit access to authorized individuals by use of a login function. |
| 4.3.1.2 | Duplication of User IDs shall be prevented. |
| 4.3.1.3 | Passwords shall be encrypted. |
| 4.3.1.4 | Passwords shall be invisible. |
| 4.3.1.5 | Users shall define a password that includes a character, upper case letter, lower case letter, and a special character. Must also be at least 8 characters |
| 4.3.1.6 | Changed passwords shall have one or more characters changed from prior password. |