**Master Plan**

**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 desired info | M. England | 3/28/19 |
| 2 | Final updates | M. England | 5/3/19 |

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# 1 Executive Summary

## 1.1 Mission Statement

The mission of the Vanpool Software Service is to offer an economically and user friendly transportation alternative.

## 1.2 Objective

Vanpool Software Service’s objective is to be a competitive app in the ride share service. Currently, the transportation services provided for commuting in the Iowa City area are out of date and difficult to use. By creating a new application that has a more friendly user interface and diverse features, the vehicle share service industry in the area will be revamped.

## 1.3 Company Information

The team came together by careful matching of skills and interests in our Fundamentals of Software Engineering course. Our team is comprised of highly motivated engineering students with diverse backgrounds both technically and personally. This allows our team to cohesively work as an efficient and progressive team.

## 1.4 Growth Highlights

Currently, less than 5% of University of Iowa employees are using the vanpool service that’s provided. This means that there is a 95% growth rate available for this service. Other growth areas with the increase of usage include less environmental impacts, lower costs, and more parking availability on campus.

## 1.5 Products

Vanpool Software Service provides a modern web application that allows for users, drivers, and system administrators. Users are able to search for rides, request rides, and pay for the rides they’ve been a part of. System administrators have the capability of adding routes, assigning drivers/passengers to rides, and adding/removing vehicles. Drivers can then view what routes they’ll be driving and who their passengers are.

# 2 Planning Process and Methodology

For this project our team decided it would be best to use a modified agile scrum development process. Our team meets every last Monday of the month to plan, demo, and have our project retrospective. During planning we create new stories on Trello that we then assign to team members, estimate, and set deadlines for. Another important event is our retrospectives which allow us to make changes to our planning processes to better work for our team. In addition, we have 2 weekly stand ups where we update on our progress (we found it was not helpful to do this daily since we often spend some time not working on tasks when we our prioritizing our other courses). However, we do constantly stay in contact through WhatsApp.

# 3 Schedule and Deliverables

## 3.1 Schedule

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Tasks | Responsible | Start | End | Days | Completed? |
| High Level Design (Lofi) - V1 | MF | 1/28 | 2/4 | 7 | x |
| URS - V1 | ME | 1/28 | 2/4 | 7 | x |
| SRS - V1 | ME | 1/28 | 2/4 | 7 | x |
| Project Plan - V1 | ME | 1/28 | 2/4 | 7 | x |
| Investigate Tools | All | 1/28 | 2/18 | 21 | x |
| High Level Design (Architecture - V1) | KP, MF | 2/11 | 2/18 | 7 | x |
| Landing Page Front End | MF | 2/11 | 2/18 | 7 | x |
| Database Setup | KP | 2/4 | 2/23 | 19 | x |
| Test Plans | ME | 2/4 | 2/23 | 19 | x |
| **Deliverable 1** |  | 2/23 | 2/24 | 1 | x |
| Update Documentation | ME | 3/3 | 3/10 | 7 | x |
| Create Account | KP | 3/3 | 3/10 | 7 | x |
| User Page | MF | 3/3 | 3/10 | 7 | x |
| Login | KP | 3/10 | 3/17 | 7 | x |
| Driver Page | MF | 3/10 | 3/17 | 7 | x |
| Logout | KP | 3/17 | 3/24 | 7 | x |
| Admin Page | MF | 3/17 | 3/24 | 7 | x |
| Security Questions | ME | 3/17 | 3/24 | 7 | x |
| User/Driver/Admin Separation | KP, MF | 3/24 | 3/29 | 5 | x |
| Forgot Password Page | ME | 3/24 | 3/30 | 6 | x |
| **Deliverable 2** |  | 3/30 | 3/31 | 1 | x |
| Forgot Password | ME | 4/1 | 4/7 | 6 | x |
| Create Ride | MF | 4/1 | 4/7 | 6 | x |
| Delete Acccount | KP | 4/1 | 4/7 | 6 | x |
| Update Account | KP | 4/1 | 4/7 | 6 | x |
| Search Rides | ME, MF | 4/7 | 4/14 | 7 | x |
| Payment for Rides | KP | 4/7 | 4/14 | 7 | x |
| View Available Rides - User | MF | 4/14 | 4/21 | 7 | x |
| View Rides - Driver | MF | 4/14 | 4/21 | 7 | x |
| Add Vehicle | KP | 4/14 | 4/21 | 7 | x |
| Finalize Documentation | ME | 4/21 | 4/27 | 6 | x |
| Bug Fixes/Additional Features/Fixes | All | 4/21 | 4/27 | 6 | x |
| **Deliverable 3** |  | 4/27 | 4/28 | 1 | x |

## 3.2 Deliverables

To meet the deliverables of the end of each month, we chose to set our launch dates for the last Sunday of each month (as seen in the schedule above). The goals for each deliverable are shown below.

|  |  |
| --- | --- |
| **Deliverable** | **Goals** |
| 1 | Rough documentation developed, back end established, landing/login pages created |
| 2 | Login/logout, create account, direct to user/driver/admin page, user pages completed, documentation updated |
| 3 | Forgot password/delete account/update account, user tasks, driver tasks, system admin tasks, finalize documentation |

# 4 Current Technology and Resources

## 4.1 Human Resources

* Megan England
* Marcus Fischer
* Karan Pahlani
* *TA:* Nabeel Ahmad Khan
* *Professor:* Raman Aravamudhan

## 4.2 Roles & Responsibilities

|  |  |  |
| --- | --- | --- |
| **Name** | **Roles** | **Responsibilities** |
| Megan England | Manager | Create and update all documentation, ensure project goals are being met, assist with development when needed |
| Marcus Fischer | Front End Developer | Set up UI for all pages, merge front end development with back end code, generate lo-fi sketches |
| Karan Pahlani | Back End Developer | Establish database, ensure state changes are correctly working, create database schemas |

## 4.3 Technology Stack

* Javascript Framework: React
* Backend Framework: node.js
* RDBMS: MySQL
* Version Control: GitHub
* Tracking: Trello
* Communication: WhatsApp

# 5 Technology Goals

* Extend team knowledge of technology at least one team member is already familiar with
* Allow for good tracking of project progress
* Familiarize team with good development process
* Create well developed software

# 6 Appendices

* [**Project Scope Van Pool**](https://drive.google.com/drive/u/0/folders/14vtVSh9ogpb1QAG1w2EUpAs_y9zZ33Mf)