Raritan Valley Rideshare App Design Manual

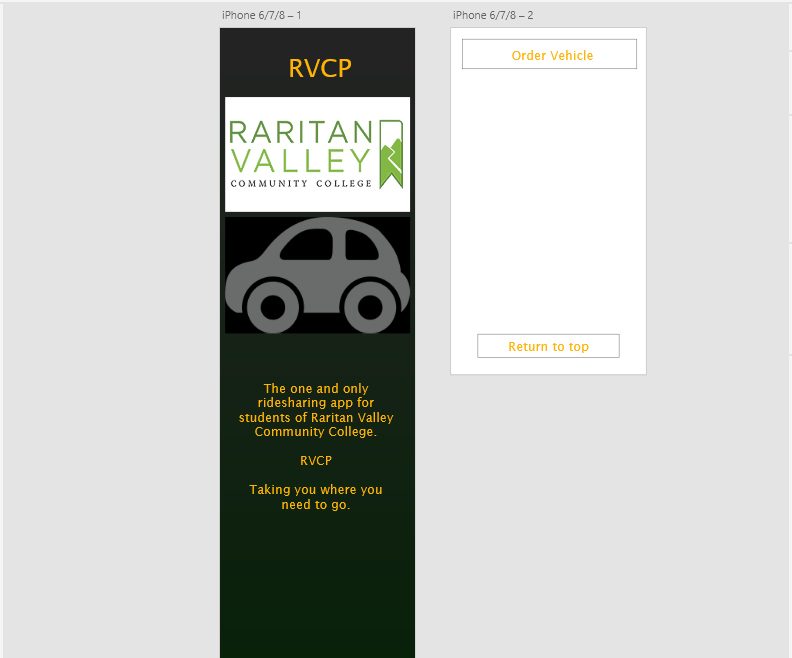
Team Knights of Sidetractia

Introduction

The purpose of this project is to create a ridesharing program for Raritan Valley Community College to make it easier for students without cars to get to class. Other goals include giving drivers the ability to commute at a lower cost by bringing other students with them. Finally, reducing the number of commuters will ease parking and reduce the school’s overall carbon footprint.

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1.0 **GENERAL INFORMATION**

The RVCC Ride Share App is a application available to Smart phones that allows its users to request rides to RVCC or Designated Drop Points. Or allows its users to serve as the drivers to both of the previously mentioned destinations.

1.1 **System Overview**

The RVCC Ride Share Application provides electronic map, and route planning service, that can only be accessed through a Smartphone. with locational directions, and an active student registry in Raritan Valley Community College for both levels of application access.

1.2 **Goals and Requirements**

Goals:

* Goal: Ability to set up rides beforehand.
* Goal: Ability to set up a one-time ride.

Requirements:

* Include precautionary safety warnings.
* Vehicle selection of some sort - seat numbers, luggage space.
* User profiles.
  + Use G numbers to sign in.
  + Do not display G number to other users.
* User rating system - riders and drivers.
* Tracking system to let riders know when and where the driver is arriving.
  + “leaving soon/currently traveling” status.
* Drivers can set up ride offer with their route and times.
* Riders can sign up for a driver’s route.
* Drivers can ok riders who apply for their route.
* An actual incentive to be a driver!
* A Save Me button in case it all goes horribly wrong.

1.3 **User Personas:**

Persona 1

Primary:

People who want to get to and/or from school, but don’t have convenient way to do so.

They need a convenient, consistent, and reliable method of transport to/from school.

Persona 2

People who are commuting to school, and would like to supplement their commute with some extra income without too much investment.

Persona 3

People looking for a job to make money. They are prepared to drive to and from school regularly if they can make more money from it.

Persona 4

People driving to school, who want to help out other students, friends, due to altruism, environmental concerns, or moral reasons.

Persona 5

People who normally have their own transportation, but find themselves unexpectedly without the ability to make it to/from school. They need a way to get to/from school more imminently, without the real need for a regular schedule or the ability to set it up in advance. Also, not a person who wants to pay the fees for regular taxi/uber/lyft.

Persona 6

People who would not normally have the transportation necessary to hold down a job. They need a more economic/reliable ride to work when they leave school.

**Context Scenarios**

**A student signs up for the app to be a rider**

Aines just enrolled at RVCC and sees that there is a ridesharing app available to students. Since she does not always have access to a car, she decides to get the app so she can join a rideshare later. She downloads the app and presses the button to register a new account. She puts in her name, phone number, and home address, then presses the button to create her account with the information she put in. Her account is created and she lands on the rider’s page.

**A Student signs up for the app to be a driver**

Harry is going to RVCC for his second semester of courses. He is friends with Aines, who always has trouble getting a ride. Harry lives just down the street, so setting up a rideshare with Aines would make sense. So he downloads the RVCC rideshare app. On the first screen, he presses to make a new account. He puts in his name, phone number and home address. Then because he intends to drive, he checks the box that indicates he will be a driver and a number of boxes appear. He enters license number. Then his car make, model, and year, as well as the color. Lastly is the car’s maximum occupancy, license plate number, and his insurance policy number. He presses ok to create the account.

**Student looking for a ride to school**

Jeff “Burns” Bridges is a second year student at RVCC, who is now well into his Computer science major. While he is able to drive himself, his family isn’t able to spare the car during his class times this year due to his mother needing it for work, going out from 9-6 in the other direction from RVCC. His class starts at 9, and his commute is a little under an hour away. Walking is definitely out of the question, Jeff decides to get in contact with his classmates, talking with them before the semester begins. He knows a few of them from his previous lab classes, and learns that he should try the RVCC Rideshare. He downloads the app from the app store and opens it, and registers to be a rider. Once registered, he searches for a rideshare in his area. He discovers at least two of his friends are designated drivers with available routes. He checks the timetables listed for the routes to find the one that best fits his schedule. His friend who shares the same morning class, Logan, is able to take him to school on the days he needs for his class. He taps to apply to be added to the weekly rideshare, and drops a marker for where he wants to be picked up each week. He will need to get up earlier to make sure he doesn’t make Logan wait for him outside of his neighborhood. But now he is able to attend his weekly lab without the strain on his working mother.

**Student looking for a ride home**

Pam “In a Can” Butters, was an art major, and often times she needed to stay in the studio longer than most, especially when they begin to use plasters. Pam was a meticulous student, she liked to immerse herself in the studio, with a desire for perfection in her work. While this detail orientation helped her grades, she often stressed on the time, due to her parents simply finding it more convenient to pick her up after they get out of work. While she doesn’t want her parents to drive home then out again at erratic times that could vary on the day of the week, she seeks an alternative. Because of this she feels she isn’t able to work to the best of her ability, when she can easily exploit open studio time. She talks to her classmates and learns that they have a Ride Share that meets up each week. So she downloads the app and makes an account. She taps the button to search for a weekly ride. She finds the route being driven by her friend and applies for the ride share. While she still has a time limit to work under, it is much more lenient than her previous one. After talking with her parents and then the driver, who still had an open space. She was able to catch a ride home, with some friends made along the way.

**Student looking to drive to school**

Box “Who wishes he wasn't a” Box, drives his younger 18 year old brother to RVCC each day of the week, since he it is simply more convenient for both of them. While Box Box, has plenty of experience driving he doesn't really consider much about it. Yet after so many times driving to school he realized that several other students were also in his neighborhood, driving around the same time he was driving. After class one day he approached some of the students, mentioning how odd it is that they essentially drive to school together. Box Box then mentioned that they should carpool, or atleast if it's convenient for them. While they would have been fine just doing that, Box Box decided that maybe he can help everyone if he can. Entering the RVCC Rideshare, he became a designated driver for his neighbors. While he doesnt drive for everyone at the same time, he does make the commute easier on everyone in the neighborhood.

**Student looking to drive home**

Beefus “Prime Cut” III, gets out of his Media and Design class each night at the same time, at 9:20 on the dot. He used to just wait for his ride to show up to drive him home, now with own car he is finally able to book it from the class, even if sometimes it's a bit early. Beefus’ best friend, Biffus, also takes the class with him, but Biffus takes the bus. While normally it takes Beefus a short 25 minutes to get to his house. Biffus takes a longer 45 to get home, due to frequent shuttle stops from other students. Biffus has expressed in the past a desire to drive on his own so he could get home. Beefus offered to use the RVCC Rideshare app so that he can not only help his friend get home, but also help lighten the strain he has on gas.

**Driver Setting up offer**

Driver Biff Wellington who signed up to become a driver for the RV Rideshare App, is able to access the app to post an offer. On his offer, he is able to establish a route from his town where he lives to his destination. Beefus posts his offer to the app and then waits for a request. This allows students to send him requests to join the car service.Though Beefus’ offer, other students who are need of a ride can contact him through the app and review his route and rating (5/5 Scale) as a driver.

**Driver reviewing rider application**

Ted Not-Bundy is preparing to leave from school for home when he sees a “ride needed” alert. He checks the alert and sees that the destination listed is not too far from where he lives, but sees that the rider has a 2.5/5 rating over the course of four rides. Feeling that he doesn’t want to risk any damage to his automobile, he does not accept the ride and continues on home.

**Rating another user**

As Kuu Kuu-Kachoo finished their ride, they stretched in the back of the car and grabbed their backpack, their driver smiling to them and telling them that it was nice to meet them. They nod and say it back, letting out a sigh of relief that they were actually able to get a ride to school. They can’t drive themself, and being able to get a reliable ride to work has been nice the last few weeks. This time, however, they ended up getting a different driver, meaning that they need to rank the driver and the ride.

They pull up the application on their phone, viewing the screen and the options presented to them. They can see the driver’s name, basic information, and five stars in view underneath. They had a fairly good ride, but it wasn’t perfect. They press the fourth star, “a good ride.”, then swiped left to get to the next page, which gave comment options. They type out a simple comment. “Was good for a quick one-time ride, was a slightly slower driver but still a good ride. Wasn’t late or anything.”, then hit submit.

**Rider applying for non-recurring ride**

Jenn Foppinshire can’t get a ride to class one day, so she opens the RV Rideshare app to call for a one-time rideshare ride. She selects the option for getting a ride, then the option that she needs a one-time ride. The app shows that it is searching for a driver who can take her, and she waits for a number of minutes for a driver to accept her request. Once one does, it sends a push notification to her phone letting her know that a driver is on their way to pick her up. The app shows her the profile of the driver coming to pick her up, as well as a list of any other riders who she will be sharing the ride with.

**Driver picking up rider**

Kevin Schnevin opens his RV Rideshare app as he is leaving for school. He marks that he is leaving to inform the riders in his rideshare. He drives along his usual route, turning off to pick up each of the riders at their previously agreed-upon pickup locations. With the riders, he continues to drive to school.

**Driver responding to non-recurring ride request**

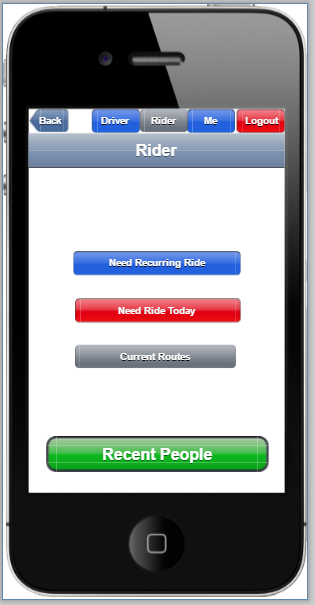
Munge Bimp on his way to do his regular route gets notified of a one-time route on his phone, he as a driver is able to review the one-time request if it is possible to alter his route, or if the request still keeps him on his route. Unless the request is accepted by another driver, Munge is able to accept or decline to pick up this student if they are able. If the request is declined, another driver is notified shortly after.

1.5 **System Summary**

section provides a general overview of the system. The summary outlines the uses of the system’s hardware and software requirements, system’s configuration, user access levels and system’s behavior in case of any contingencies.

1.6 **System Configuration**

The RVCC Ride Share App operates on the requirement mandatory connection to Internet when in use in order to properly use the service, internal GPS receiver in order to obtain coordinates automatically. Data of each ride will be monitored by overseers of the Driver and saved in a database.

1.7 **User Access Levels**

The points of accessibility within the application are dependant on the

The user’s purpose of use. Where they would select the Rider portal to access the ability to request a driver, with different circumstances. If they were a verified driver, they can instead access the Driver portal to see their route, and designated points.

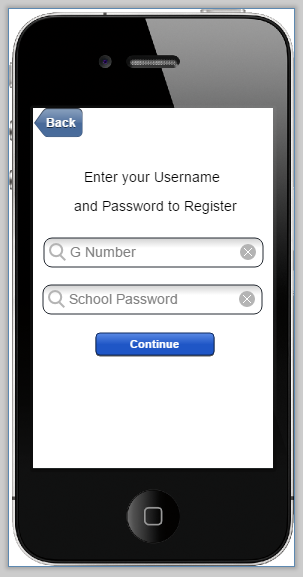
1.8 Contingencies

2.0 Getting Started

Enter the respective App Store of the Device respective to the user and search for “RVCC Ride Share” and install it on the device. Once installed, access the app and register your account with RVCC’s Database. To do so, basic information such as a users Name, Year, will be needed. More Private information, such as G# and Contact Information will also be needed to make an account for this application.

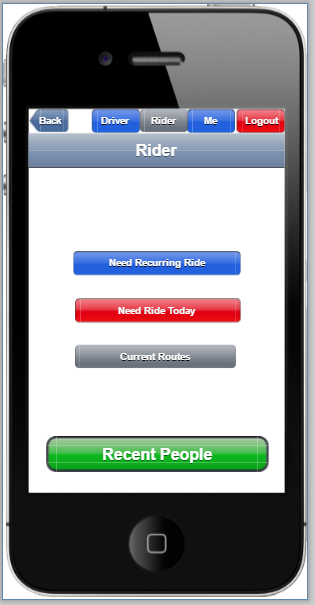
2.1 Installation and Logging-In

Users enter their G number and school password to log in.



2.2 System Menu

Riders have the option to request to join a recurring ride (scheduled ride), join a one-time ride or view their current routes. Drivers have the option to view their current routes or set up a new one.



2.3 Changing Password/Settings

Users can change profile picture (pending approval) and bio from the Settings page in the “me” tab. Password can’t be changed from within the app.



2.4 Exit System

Logout button is located in the upper right and goes back to the starting screen.

2.5 USING THE SYSTEM

2.6 Map/Designated Drop Point Tab

Rider selects a route they wish to enter and selects a point where they would like to be picked up. If the driver for the route accepts the ride request, the rider is added to the route.