PULL-UP

Technical Specification

San Jose State University

Department of Computer Science

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Team: Cool Kids

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Fall 2016 - CS160

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1. Introduction

1.1. Objective

This document will disclose the technologies being used by the development team of the Pull-Up Application. The intended purpose of this document is to ensure that all developers are familiar with the technologies being used throughout the development

process. Without an understanding of these technologies it may be difficult to acheive the goal of the Pull-Up Application.

1.2. References

- Apache Tomcat: Open Source Web Server Application
- MySQL: A relational database system.
- HTML/CSS: Language used to Build and style website.
- JavaScript(AngularJS): Structured scripting language for creating dynamic web pages.
- Java: concurrent, class-based, object oriented programing language.
- JDBC: Java API that can access tabular data stored in a database.
- SVN: Software Version Control for development.

1.3. Acronyms, and abbreviations

GUI: Graphical User Interface
SJSU: San Jose State University
UML: Unified Modeling Language

2. System overview

2.1 Problem Statement

This application hopes to solve the problem of having a hard time finding parking spots in compact cities such as San Francisco or San Jose. Pull-Up intends to ease the frustration that comes with not being able to find parking in parking garages or parking lots. This application will allow users to rent off their driveways or rent driveway parking spots.

2.2 Scope of the System

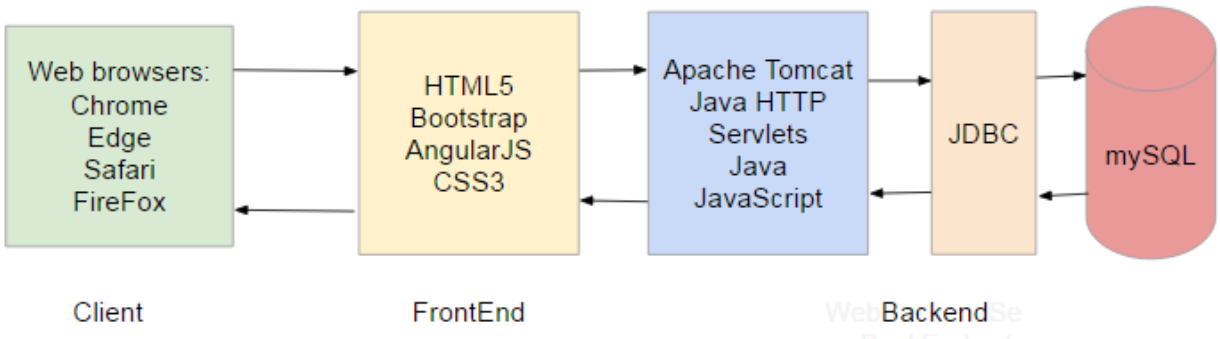
Due to a limited time constraint, this application will embody San Jose State University and its surrounding area. It's focus is to help SJSU students find parking when the three main garages are full and parking isn't available.

2.3 Technological Requirements

- Apache Tomcat will be used as the web server to host our HTML/CSS files.
- MySQL will be used as our relational database, this will store and organize our data in relational tables. We will then be able to access this data through Java Database Connectors.
- HTML/CSS will be the Language used to Build and style our user-interface. These files will be stored on our web server.
- JavaScript(AngularJS) will be used to construct dynamic web pages based on the situation.

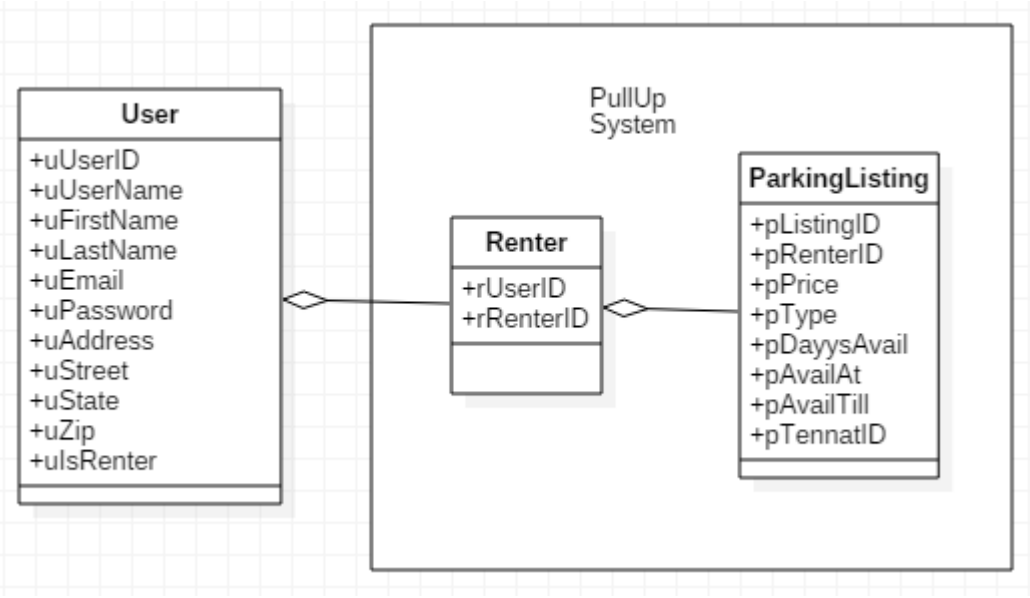
- JDBC (Java Database Connector) is a Java API that will be used to access tabular data stored in our relational database.
- Bootstrap, a popular framework used for the development of HTML, CSS and JavaScript web applications.
- Java: concurrent, class-based, object oriented programing language, this will be the programming language our JDBC is written in.
- SVN: Version Control for development, this will allow us to keep track of changes and version of our application.
- Java HTTP Servlets
- Web Browsers Firefox, Google Chrome, Internet Explorer for client side access to our application.

3. System Architecture



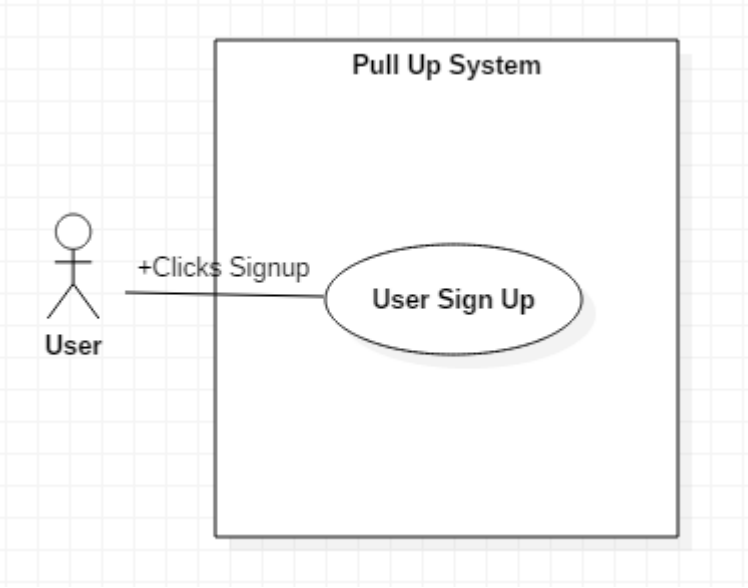
4. Detailed Design

4.1. Class UML Diagram

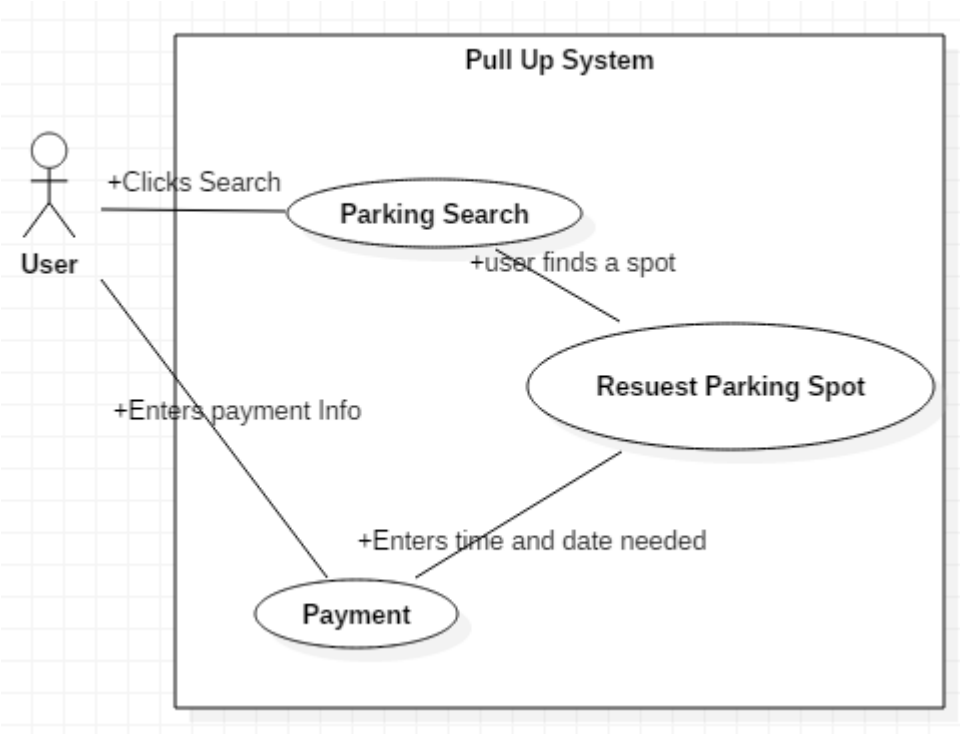


4.2. Use Case UML Diagrams

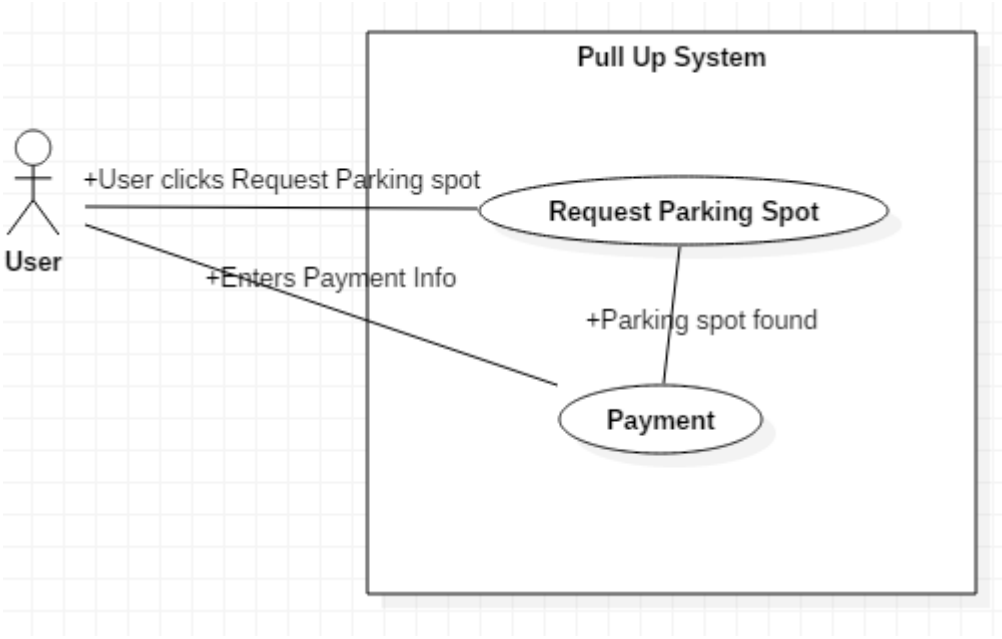
Use Case #1 - User Sign Up



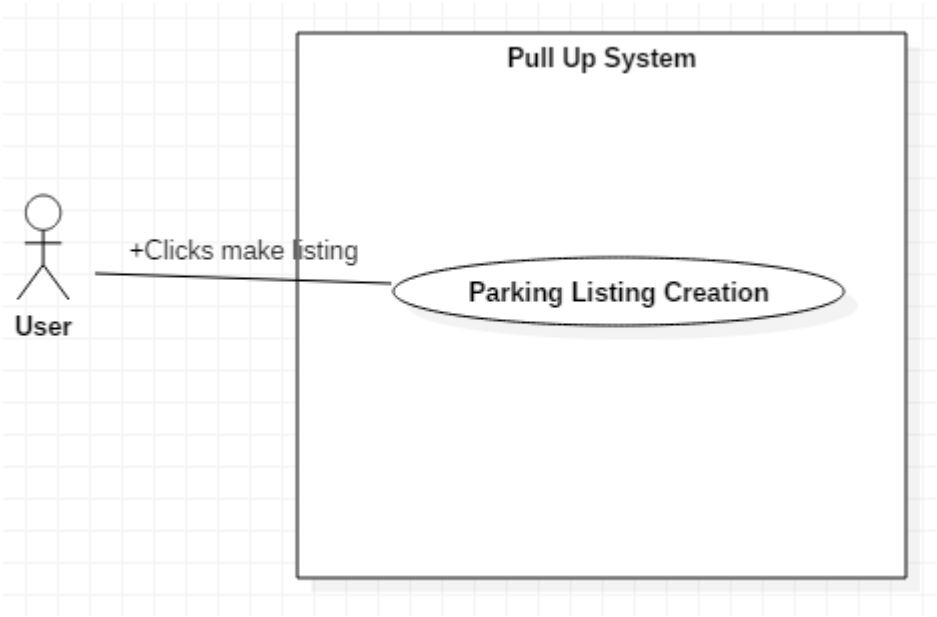
Use Case #2 - Parking Listing Search



Use Case #3 - Request Parking Spot

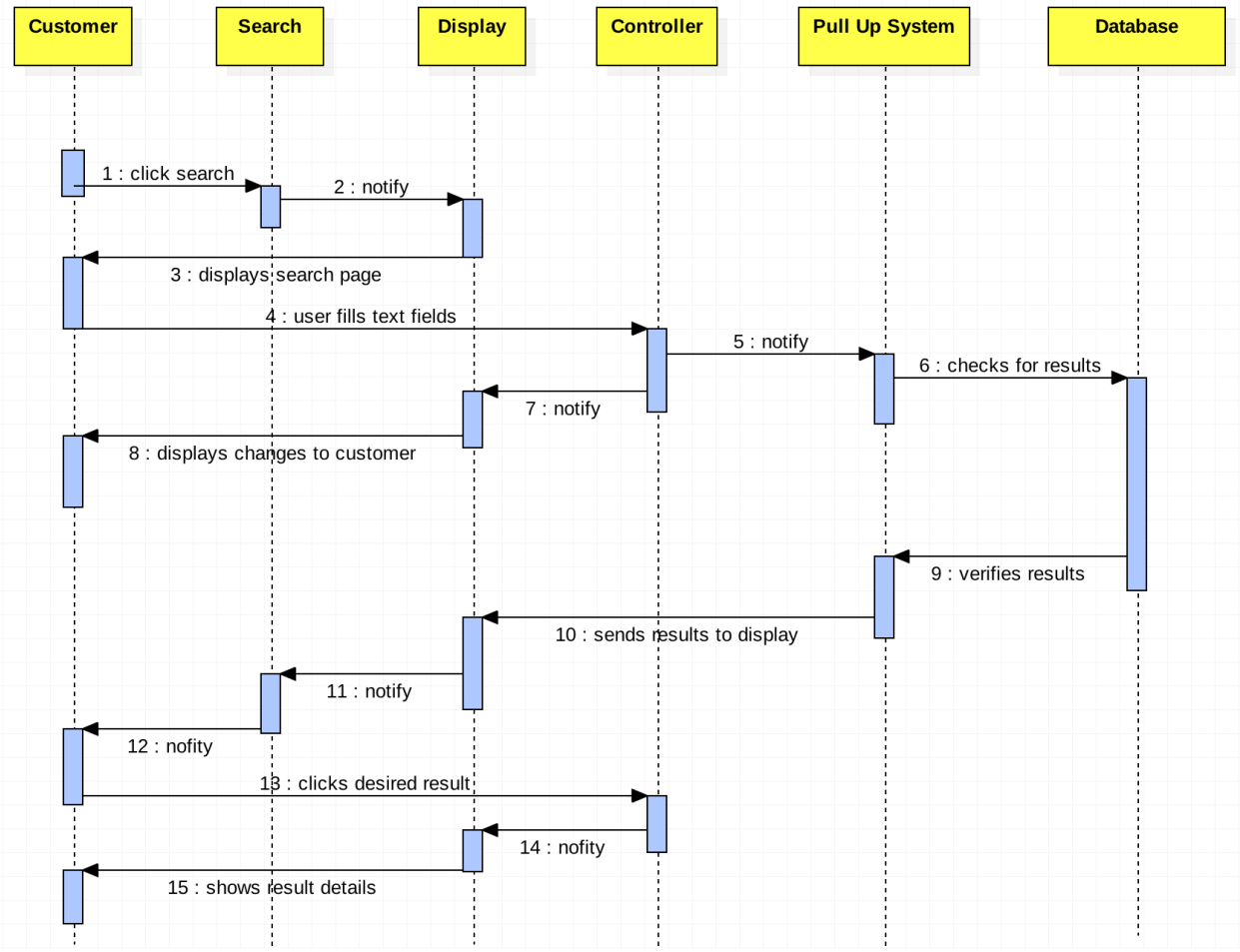


Use Case #4 - Parking Listing Creation

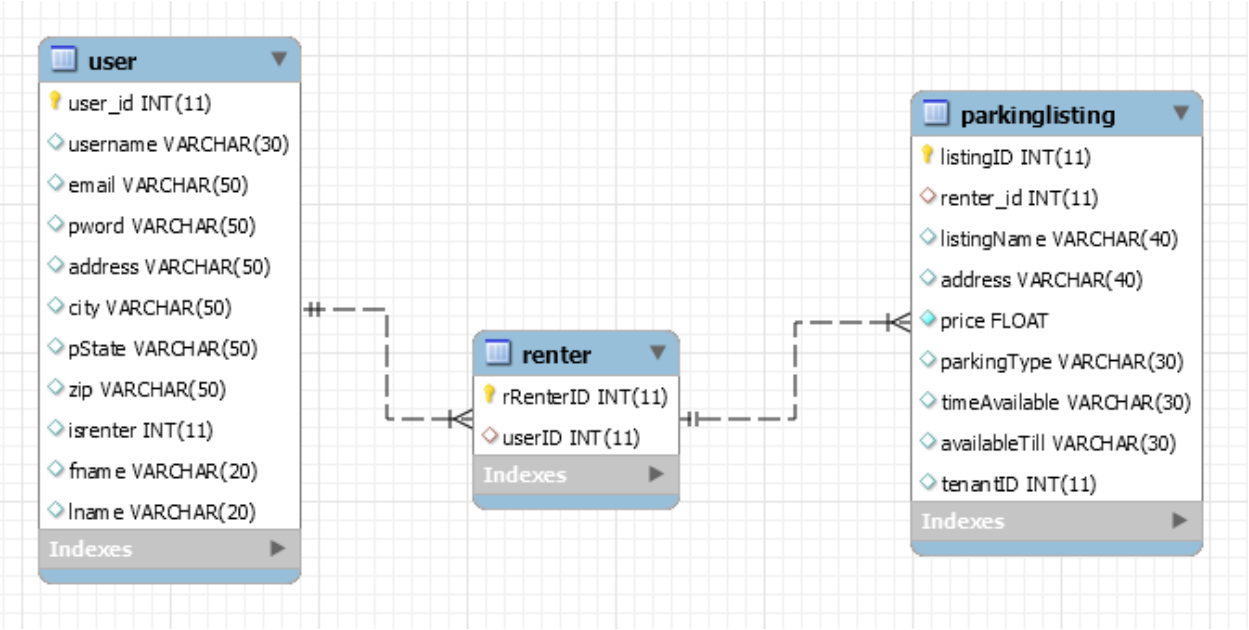


4.3. Sequence UML Diagram

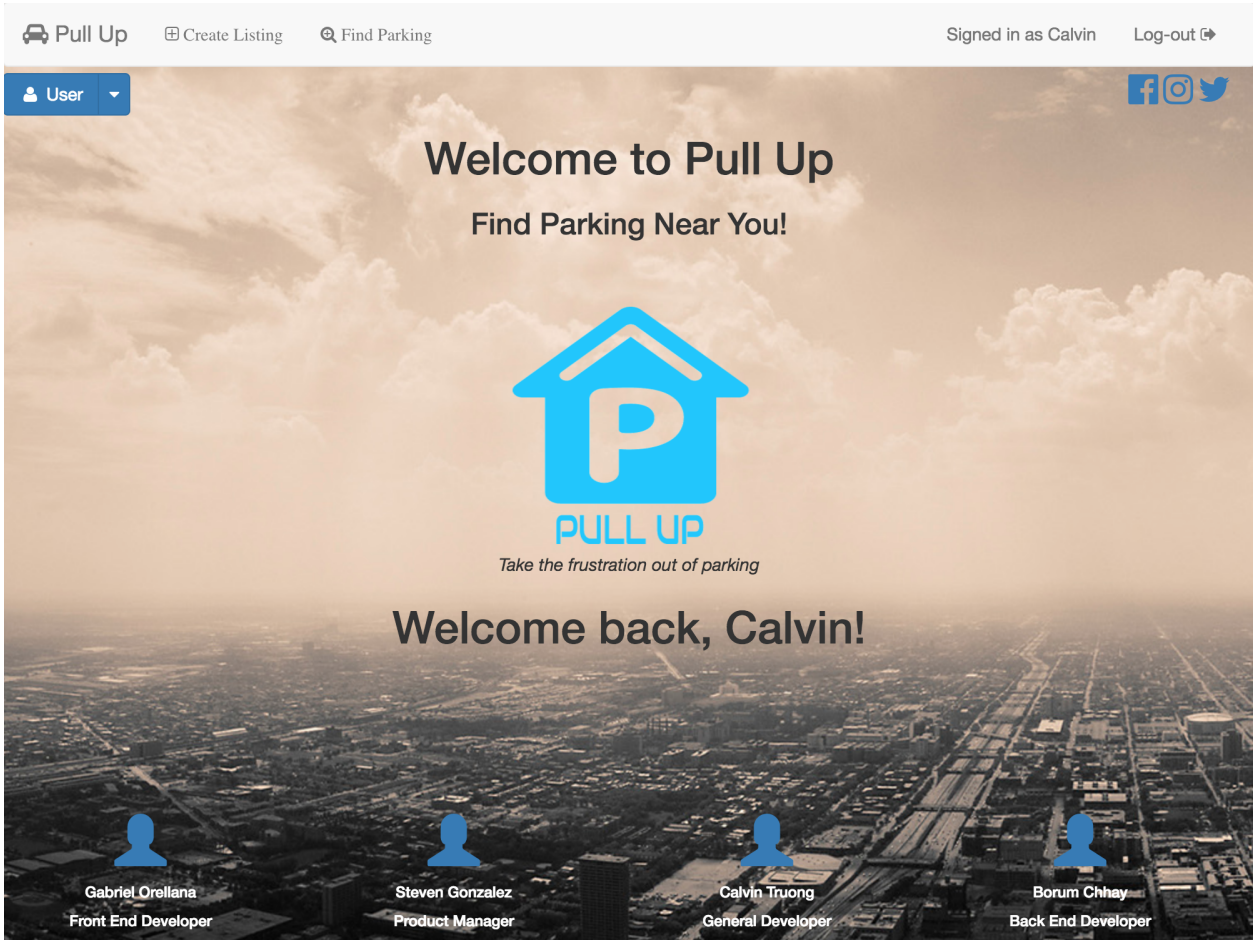
Parking Search Sequence Diagram:

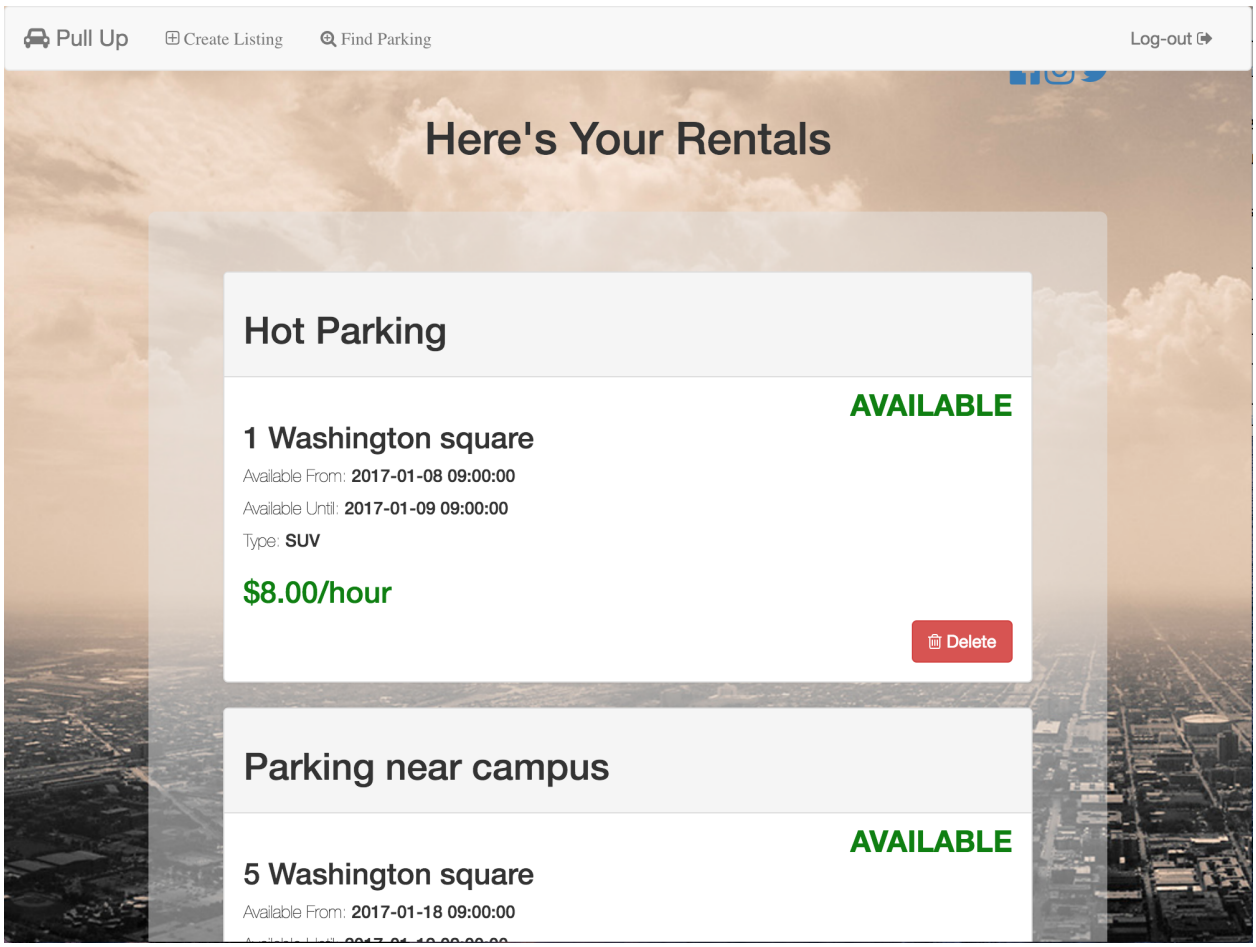


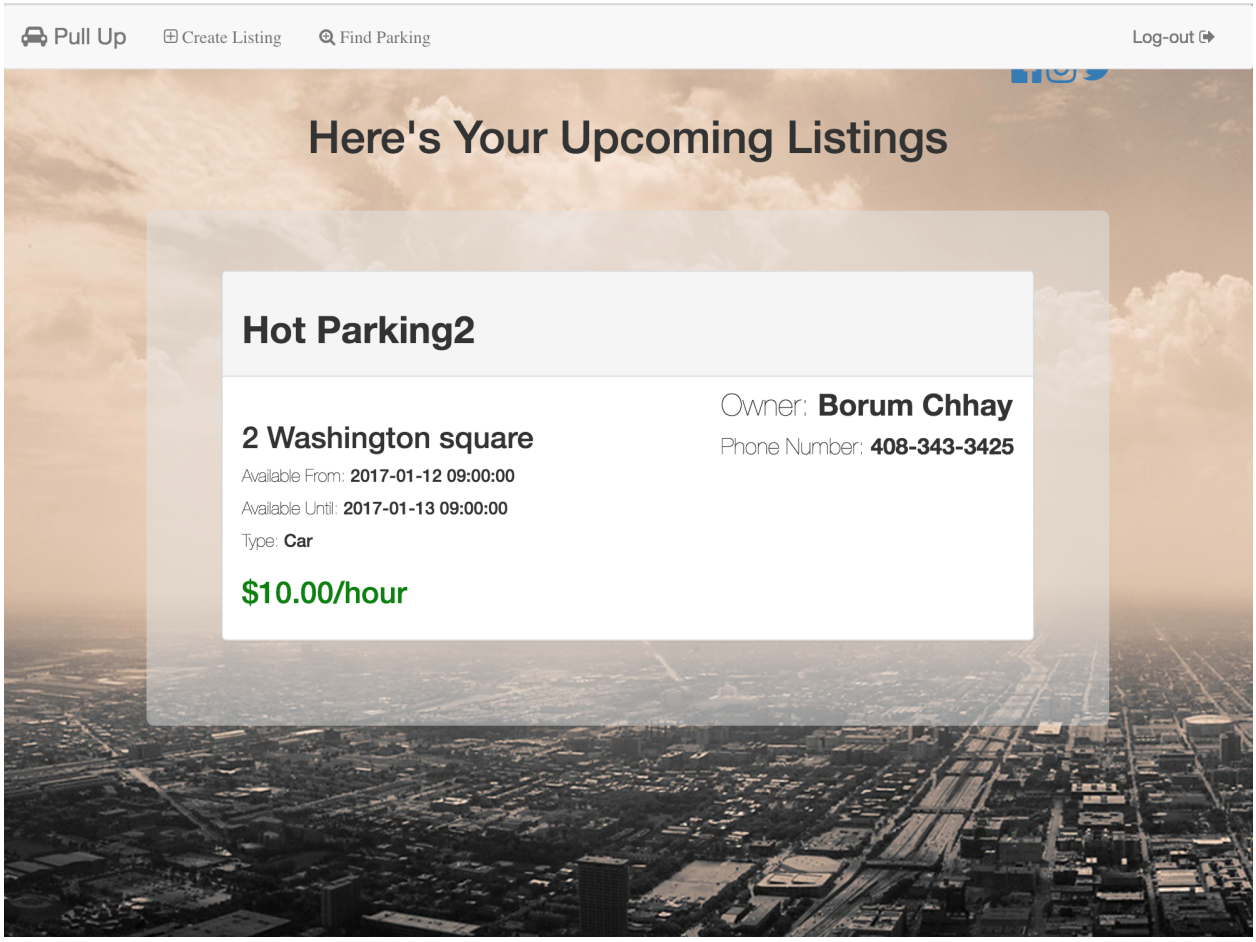
4.4. Database Architecture

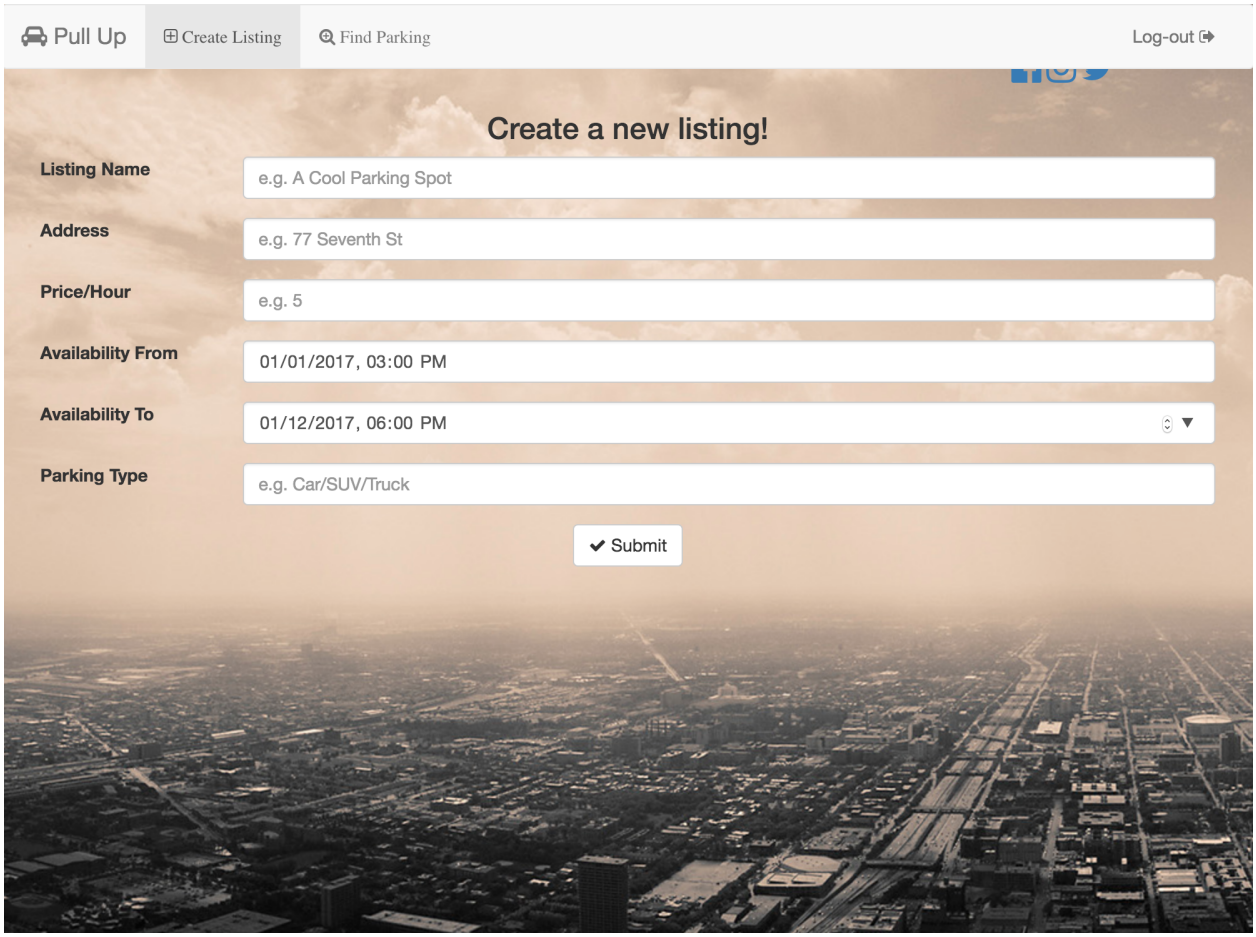


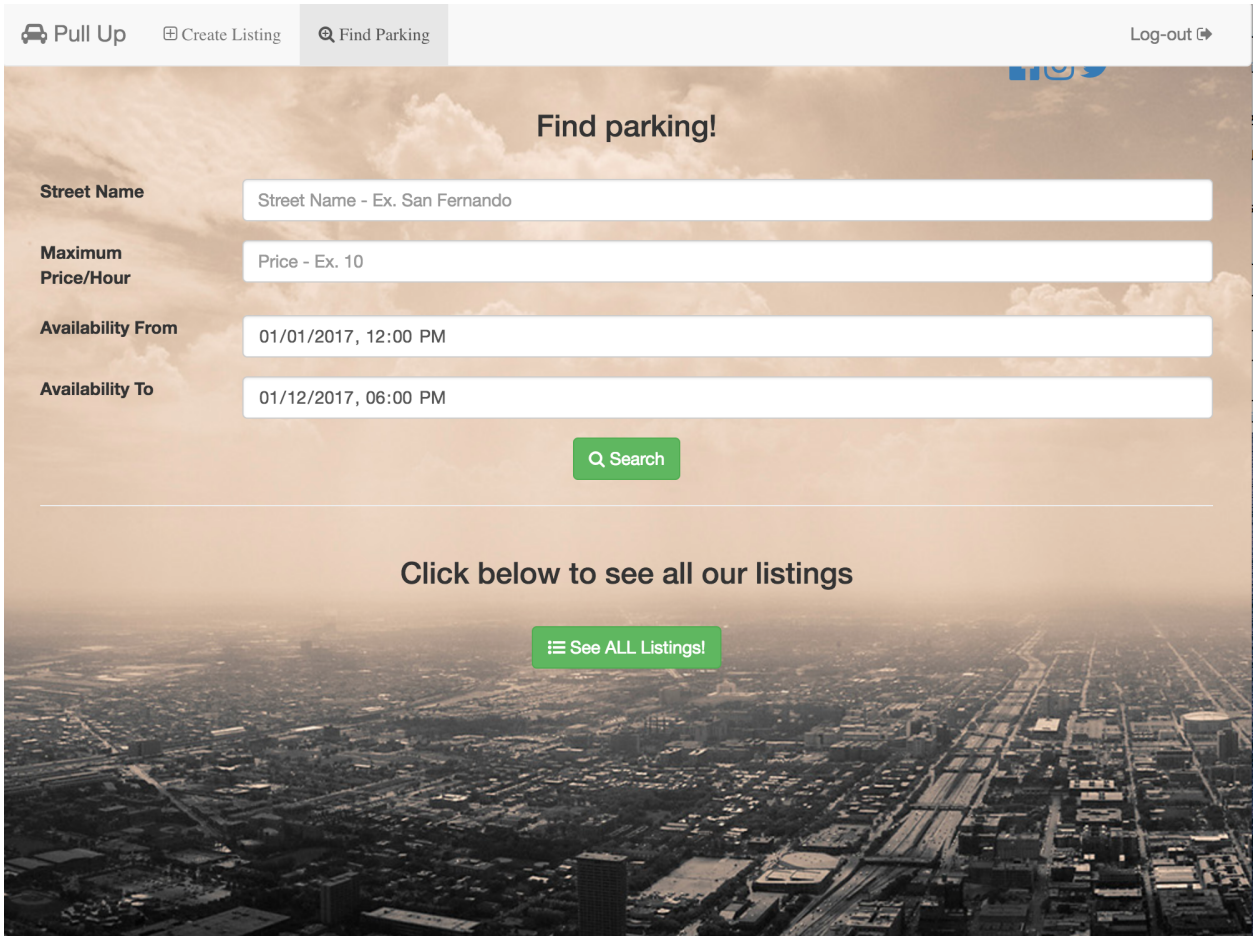
4.5. User Interface

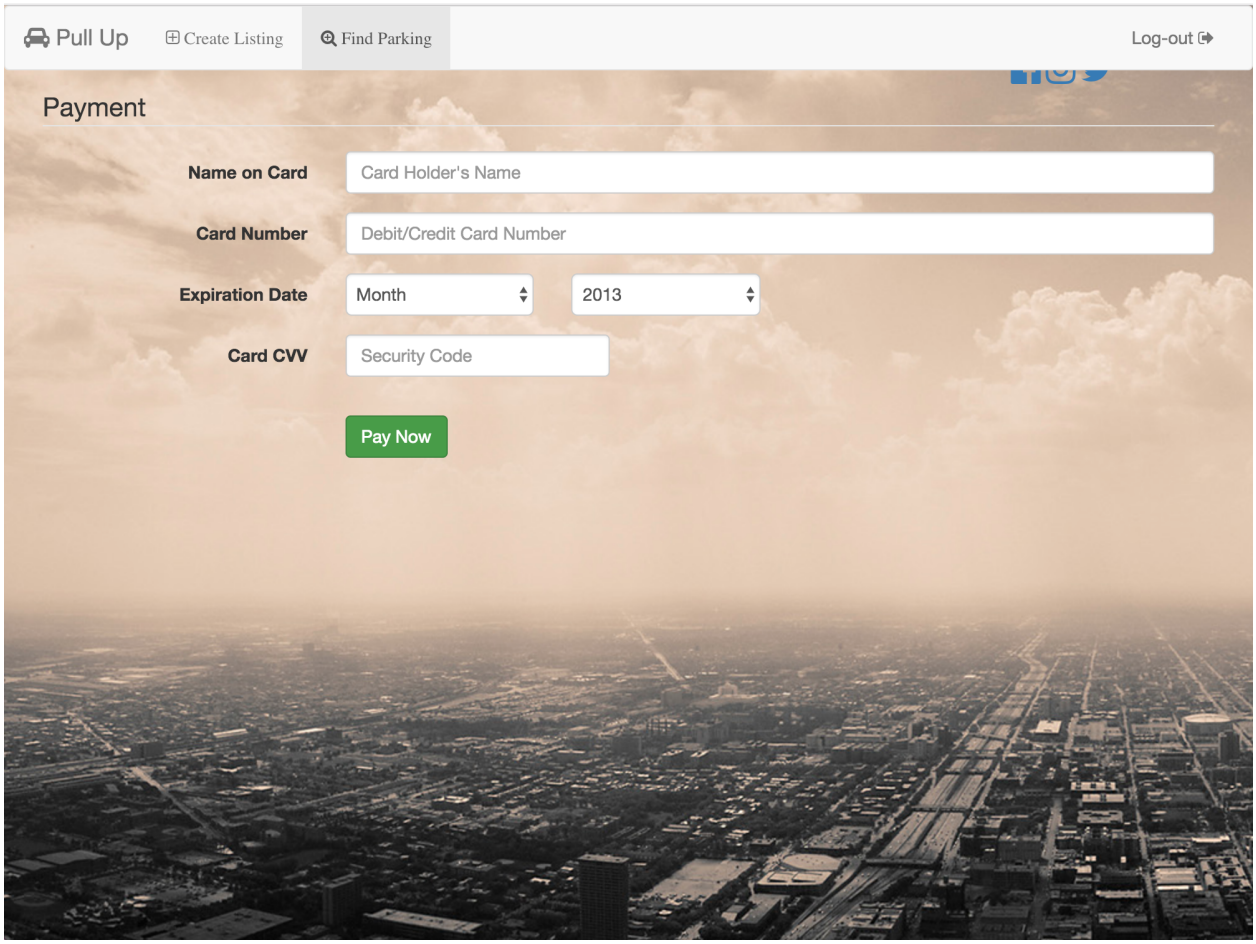

Pull Up
Create Listing
Find Parking
Signed in as Calvin
Log-out
User
Welcome to Pull Up
Find Parking Near You!
PULL UP
Take the frustration out of parking
Welcome back, Calvin!
Gabriel Orellana
Front End Developer
Steven Gonzalez
Product Manager
Calvin Truong
General Developer
Borum Chhay
Back End Developer

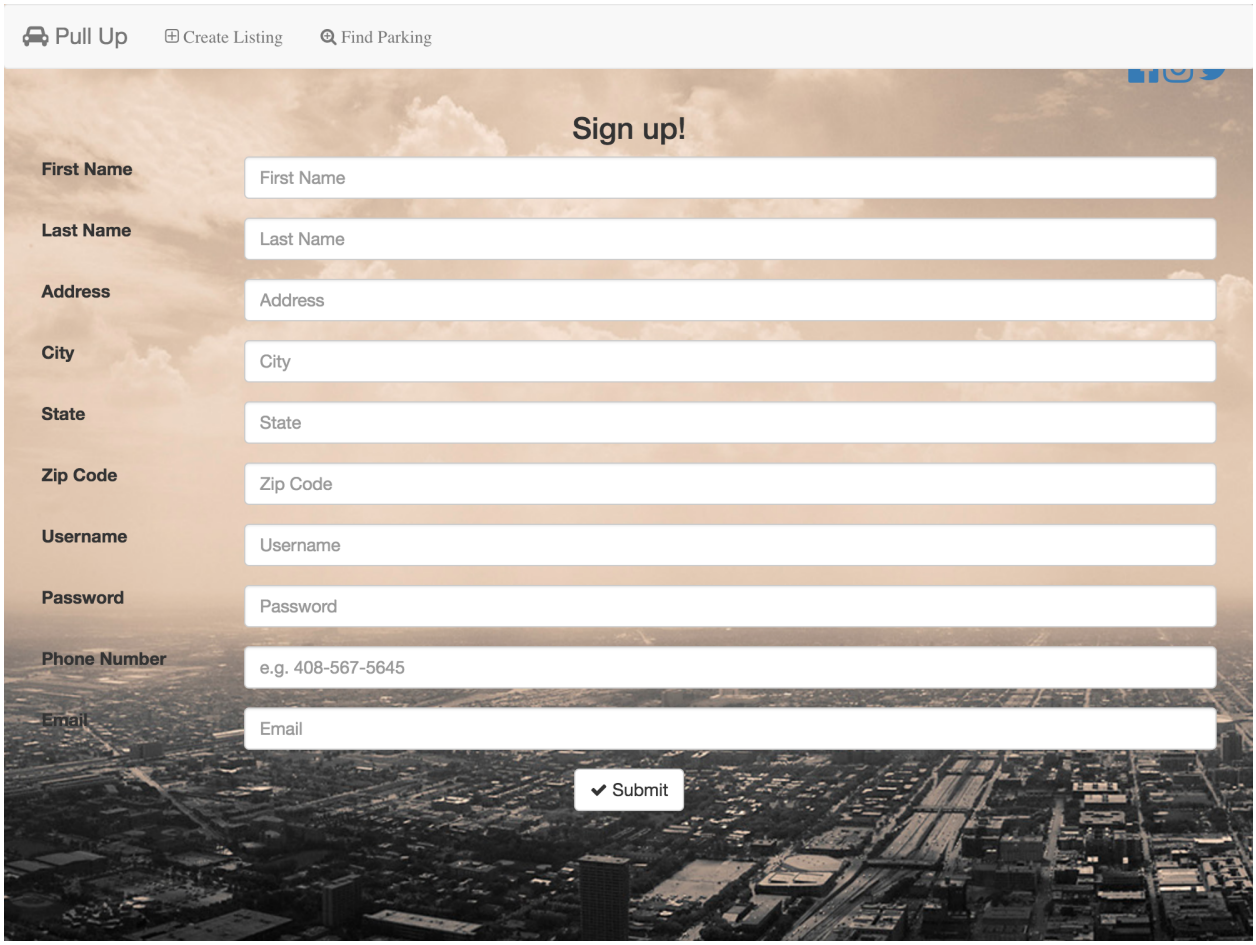

Pull Up
Create Listing
Find Parking
Log-out
Here's Your Rentals
Hot Parking
AVAILABLE
1 Washington square
Available From: 2017-01-08 09:00:00
Available Until: 2017-01-09 09:00:00
Type: SUV
$8.00/hour
Delete
Parking near campus
AVAILABLE
5 Washington square
Available From: 2017-01-18 09:00:00

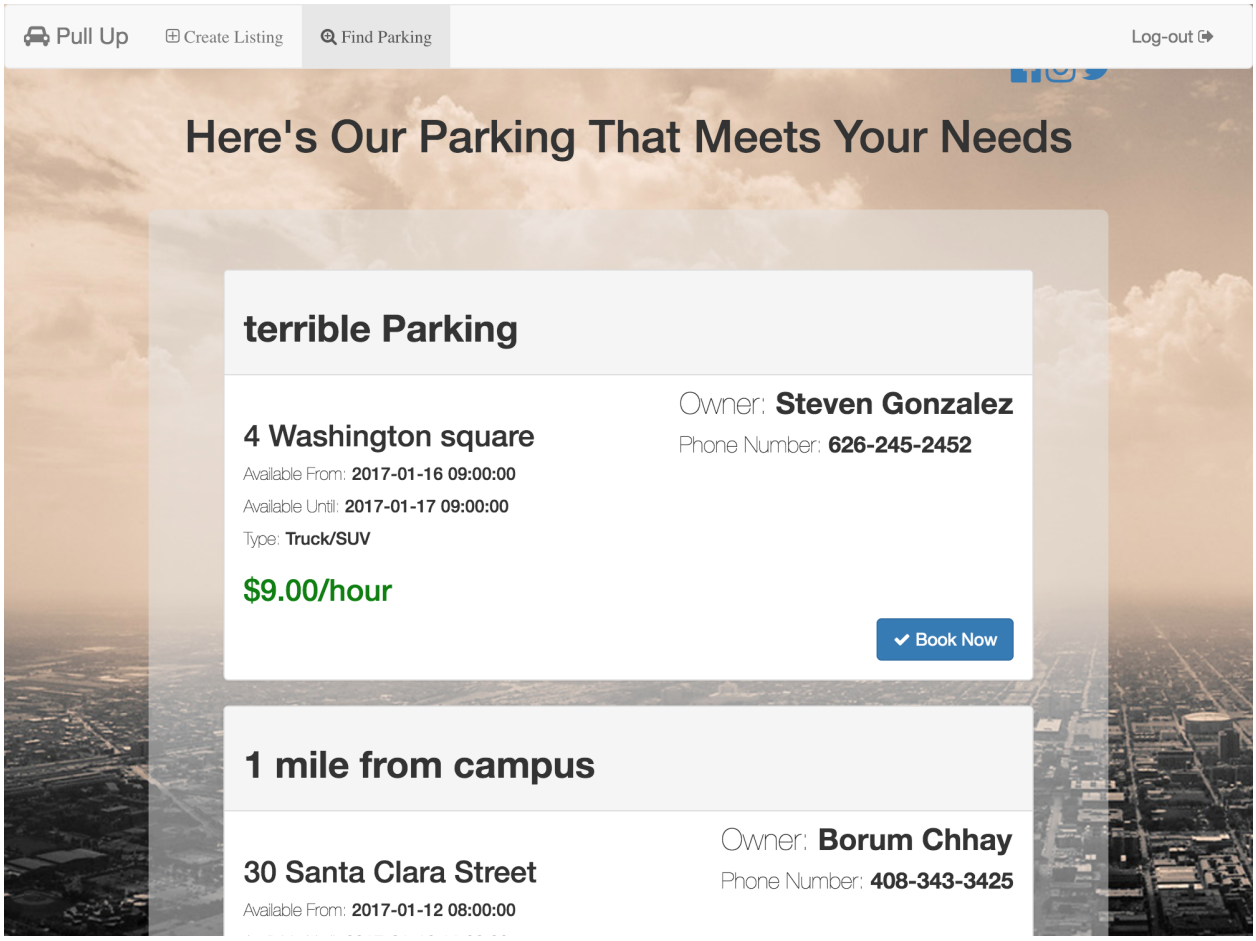

Pull Up
Create Listing
Find Parking
Log-out
Here's Your Upcoming Listings
Hot Parking2
2 Washington square
Available From: 2017-01-12 09:00:00
Available Until: 2017-01-13 09:00:00
Type: Car
$10.00/hour
Owner: Borum Chhay
Phone Number: 408-343-3425


Pull Up
Create Listing
Find Parking
Log-out
Create a new listing!
Listing Name
e.g. A Cool Parking Spot
Address
e.g. 77 Seventh St
Price/Hour
e.g. 5
Availability From
01/01/2017, 03:00 PM
Availability To
01/12/2017, 06:00 PM
Parking Type
e.g. Car/SUV/Truck
Submit


Pull Up
Create Listing
Find Parking
Log-out
Find parking!
Street Name
Street Name - Ex. San Fernando
Maximum Price/Hour
Price - Ex. 10
Availability From
01/01/2017, 12:00 PM
Availability To
01/12/2017, 06:00 PM
Search
Click below to see all our listings
See ALL Listings!


Pull Up
Create Listing
Find Parking
Log-out
Payment
Name on Card
Card Holder's Name
Card Number
Debit/Credit Card Number
Expiration Date
Month
2013
Card CVV
Security Code
Pay Now


Pull Up
Create Listing
Find Parking
Sign up!
First Name
First Name
Last Name
Last Name
Address
Address
City
City
State
State
Zip Code
Zip Code
Username
Username
Password
Password
Phone Number
e.g. 408-567-5645
Email
Email
Submit


Pull Up
Create Listing
Find Parking
Log-out
Here's Our Parking That Meets Your Needs
terrible Parking
4 Washington square
Available From: 2017-01-16 09:00:00
Available Until: 2017-01-17 09:00:00
Type: Truck/SUV
$9.00/hour
Owner: Steven Gonzalez
Phone Number: 626-245-2452
Book Now
1 mile from campus
30 Santa Clara Street
Available From: 2017-01-12 08:00:00
Owner: Borum Chhay
Phone Number: 408-343-3425