

Team Name: Valet Parking

Emails and Name:

-Daniel Villarreal, dvill032@ucr.edu

-Marios Nicolaides, mnico005@ucr.edu

-Dylan Wong, dwong036@ucr.edu

-Aaron Hung, ahung005@ucr.edu

-Anthony Yip, ayip001@ucr.edu

Project: UCR Parking App

Communication Channel: hangouts

Tech Presentation: PostgreSQL

Mobile Parking App

Description:

R Parking is a mobile app designed to simplify the process of finding a UCR parking lot. It recommends the parking lot closest to your next class. Your nearest parking lot will be updated if it becomes full. You can choose to be notified of your nearest parking when it's almost time for your class.

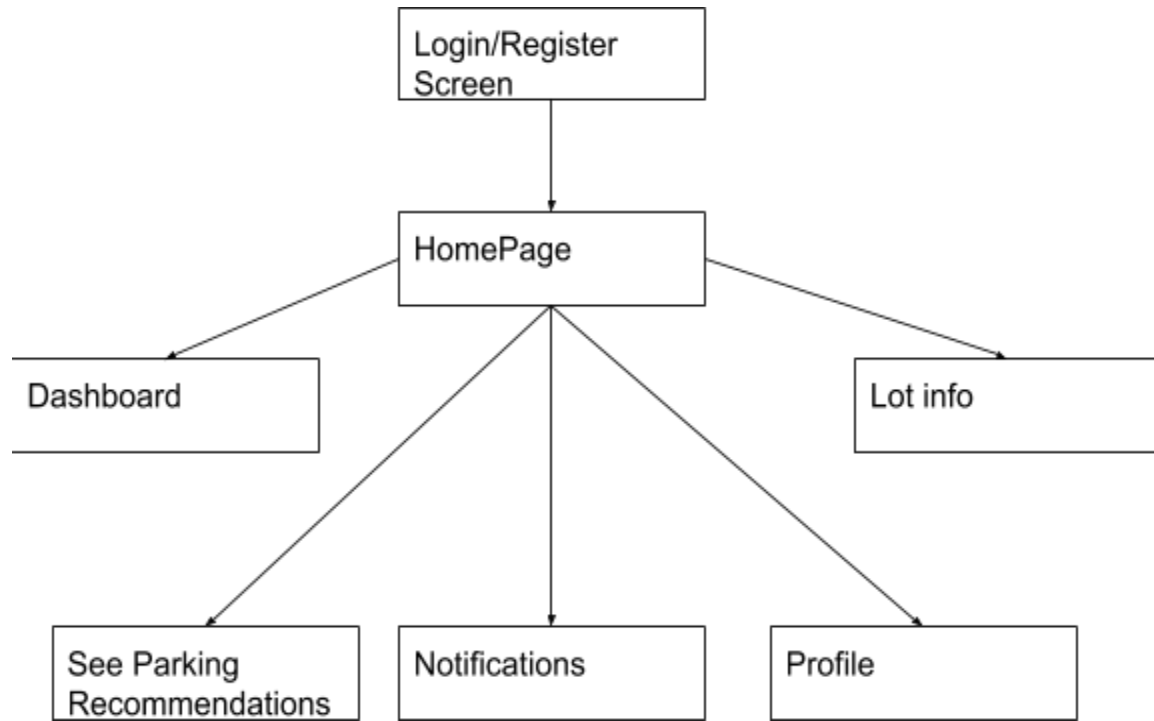
Links:

- Available parking spaces: <https://parkingapps.ucr.edu/spaces/>

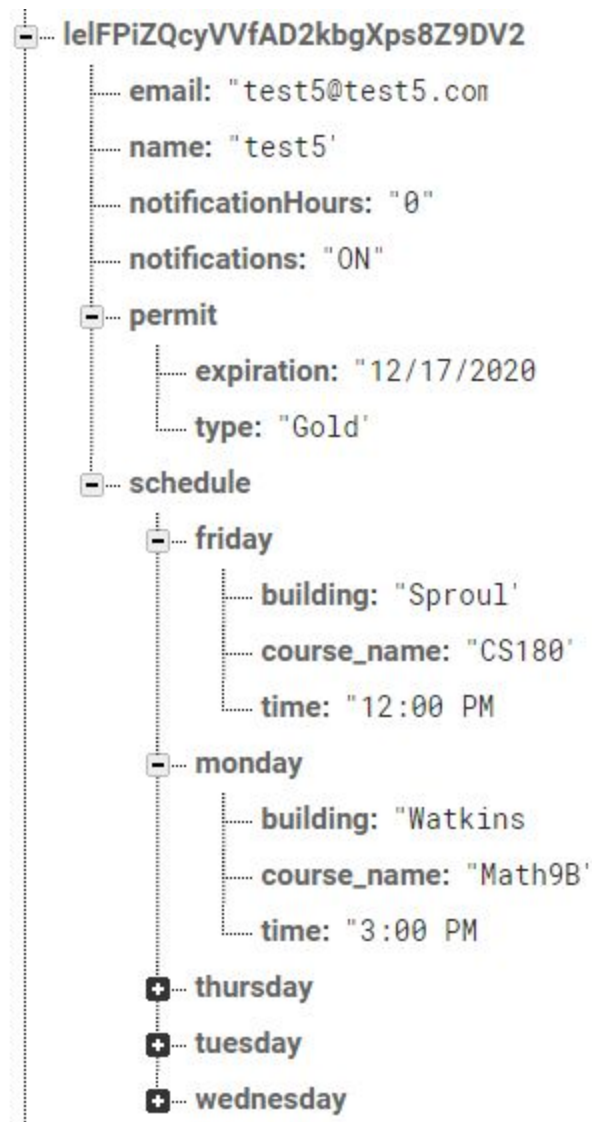
User Stories:

- **Authentication:** As a student, I want to be able to register so I can use the app. Then I should be able to login with email and password or existing google, facebook accounts.
- **Profile:** As a student, I should be able to have a profile to set my preferences and tie a schedule to it. Entering my permit information should make the app recommend spots I can park in.
- **See # of Available Parking:** As a student, I want to be able to see the number of available parking spaces of all UCR student parking lots
- **Parking Recommendations:** As a student, I want to input my first class of the day to get recommendations on where to park. Saving my class schedule will make it more convenient since we only have to add the classes one time. I want to know how long it takes to walk to class from the parking lot.
- **Navigate:** As a student, I want to be able to get directions to the recommended parking lot. By clicking on notification or a button, it should give directions on how to get there.
- **If Full:** As a student, I want to get warnings about full parking lots and get the next ideal lot. It should check the available spots and recommend the next available parking lot if available spots are taken.
- **Dashboard:** As a student, I want to be able to see all the important information regarding parking at UCR. It should show the best choices given based on rank, permit expiration time, navigation.
- **Notifications:** As a student, I would want notifications about important things I need to know. Notifications can be turned on/off. I can choose how long before my class to get notifications. An alert will be sent if parking time is close to expiring or if permit is expiring.
- **Lot Information:** As a student, I want to access information about the location of the parking lot and which building(s) are near the parking lot.

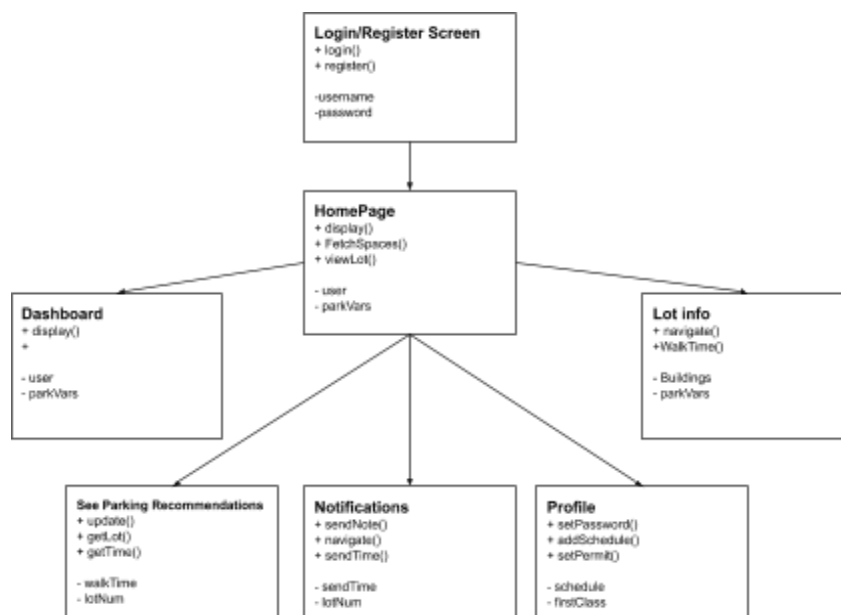
App Architecture



Data Model



UML Charts



Function Descriptions

- `fetchSpaces()`
 - Gets amount of spaces available for each lot
- `getRecommendedLot()`
 - Returns best lot available to park at
- `setRecommendation()`
 - Sets the recommended lot selected to the correct day
- `validateForm()`
 - Makes sure the form of the entries are correct when switching passwords
- `changePass()`
 - Changes password
- `changePermit()`
 - Changes permit type and expiration date
- `displayPermitInfo()`
 - Displays permit type and expiration date
- `loginUser()`
 - Checks password and email before logging in
- `RegisterUser()`
 - Registers a new user to the database

UI

8:48

LTE

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parking

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UCR Lots

Big Springs Structure (Big Springs Road)	100
Lot 6 (North Campus Drive)	199
Lot 24 (Canyon Crest Drive)	162
Lot 26 (3375 Rustin Avenue)	259
Lot 30 (UCR Lot 30)	1211
Lot 32 (UCR Lot 32)	100
Lot 50 (Everton Place)	134

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parking

Notification

Turn Notifications OFF/ON

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Hour(s) before notification

UPDATE

