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calchoochoo

Description

calchoochoo is an android app that makes it easy to explore caltrain's schedule.

Intended User

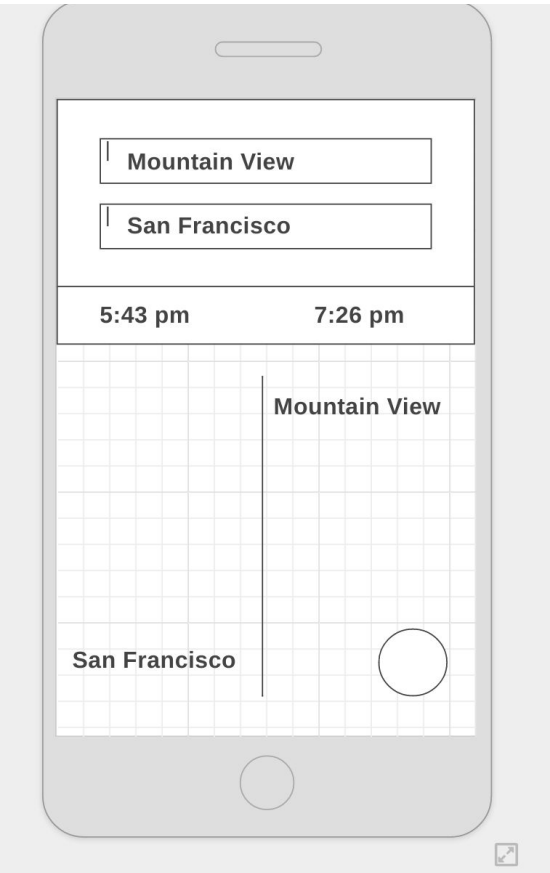
this app is for commuters in the bay area who appreciate clean and simple apps.

Features

- explore caltrain's schedule
- view recent tweets from caltrain
- see information about each caltrain stop

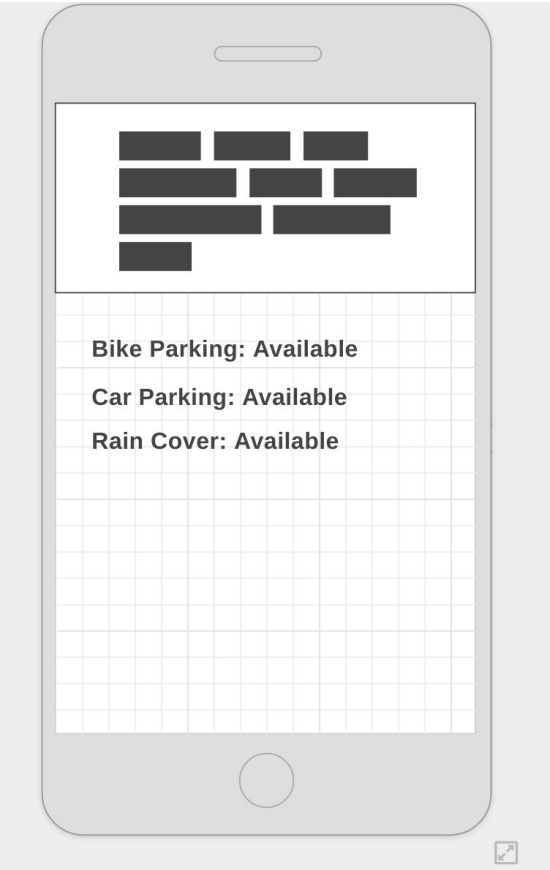
User Interface Mocks

Screen 1: Schedule Explorer



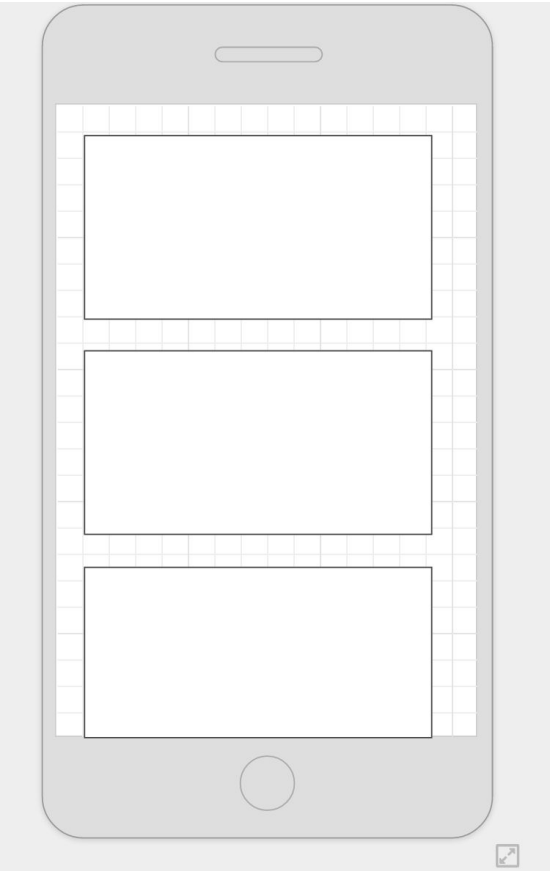
the schedule explorer allows for selecting two caltrain stations, a starting point and destination. a departing time an arrival time can also be selected afterwards. below the selection ui, a display of the stations that will be traveled through will appear. a call to action button will allow reversing the destination and starting stations. clicking on any station in the visual will bring up the station information activity. swiping to the right, will bring up caltrain tweets.

Screen 2: Station Info



this is the station info view. It will display basic information about what is available at the station.

Screen 3: Caltrain Tweets



this view has cards displaying recent tweets from caltrain

Key Considerations

How will your app handle data persistence?

i will store all information about the schedule in an sqlite database.

Describe any corner cases in the UX.

the user can swipe left/right to navigate between the schedule explorer activity and the tweet stream activity.

the user can click on station names in the schedule explorer to get to the station info activity. they will need to press the back button to get back to the schedule explorer.

Describe any libraries you'll be using and share your reasoning for including them.

i will use twitter4J to pull in caltrain's tweets to make it easy to manage twitters API.

Next Steps: Required Tasks

Task 1: Data Architecture

the biggest planning work will involve coming up with a database schema that will allow me to build an explorer for caltrain's schedule.

Task 2: Project Setup

i will need to setup a project that has a sqlite database and twitter 4J integrated

Task 2: Implement UI for Each Activity and Fragment

i will need to implement the activity for each of the three screens

- create schedule activity
- create train station info activity
- create twitter stream activity

Task 3: Implementation UI Navigation

i will need to integrate the activities to allow for navigation between them

- build swiping gesture between schedule and tweet stream
- clicking on a station in schedule leads to station info
- clicking back on the station info screen leads back to the schedule

Task 4: Build Helper Query Library

based on my data architecture, i will need to build a library to make it easy to abstract out some common queries i will have of the sqlite database. this will be used by the schedule screen and the station info screen.

Task 5: Integrate Google Analytics and Location

to meet requirements for the capstones, i will need to integrate google analytics for usage tracking and location to be able to select the nearest caltrain station to where you are currently.