UC SANTA CRUZ Baskin Engineering

Rent-A-Driveway (R.A.D)

Korbie Sevilla, Henry Dang, Scott Melero, Adithya Somasundaram, Ivy La

JA J R.A.D

Abstract

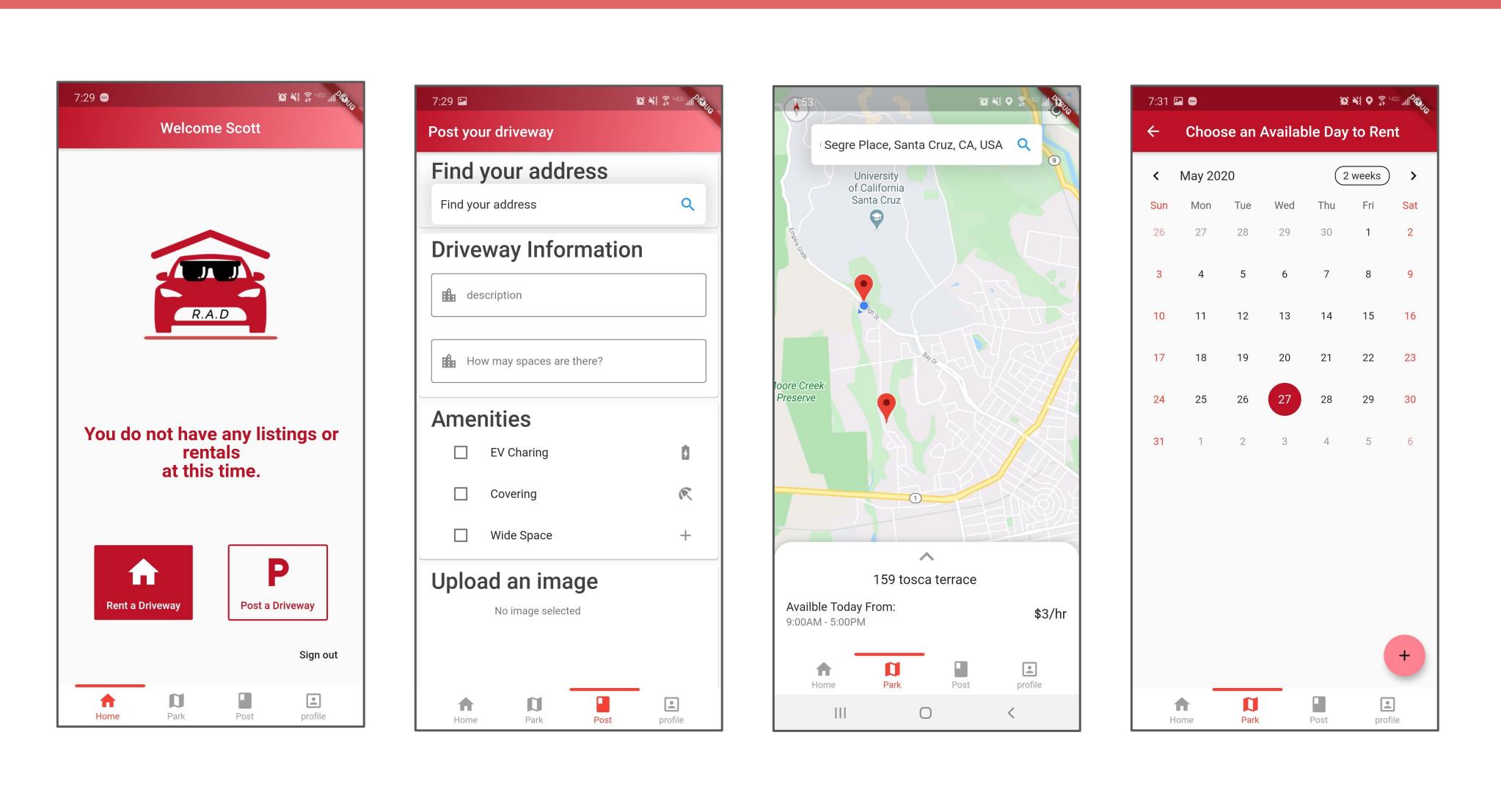
Rent-A-Driveway allows the community to post and rent driveways for parking; making it easier to connect drivers in crowded areas to homeowners with open spaces available! This is accomplished through the R.A.D mobile app which uses a combination of Google API services to search for and create parking spaces.

Why a Parking App?

In the United States, the average driver spends approximately **17** hours per year searching for parking at a cost of \$345 per driver.

At UCSC, 2898 students
purchase parking permits,
roughly 600 students are on the
waitlist for those permits, and
about 20,000 parking citations
occur each academic year. The
demand to increase parking
accessibility can be addressed by
monetizing and opening access to
driveways.

How R.A.D Works



Landing screen

Post your driveway

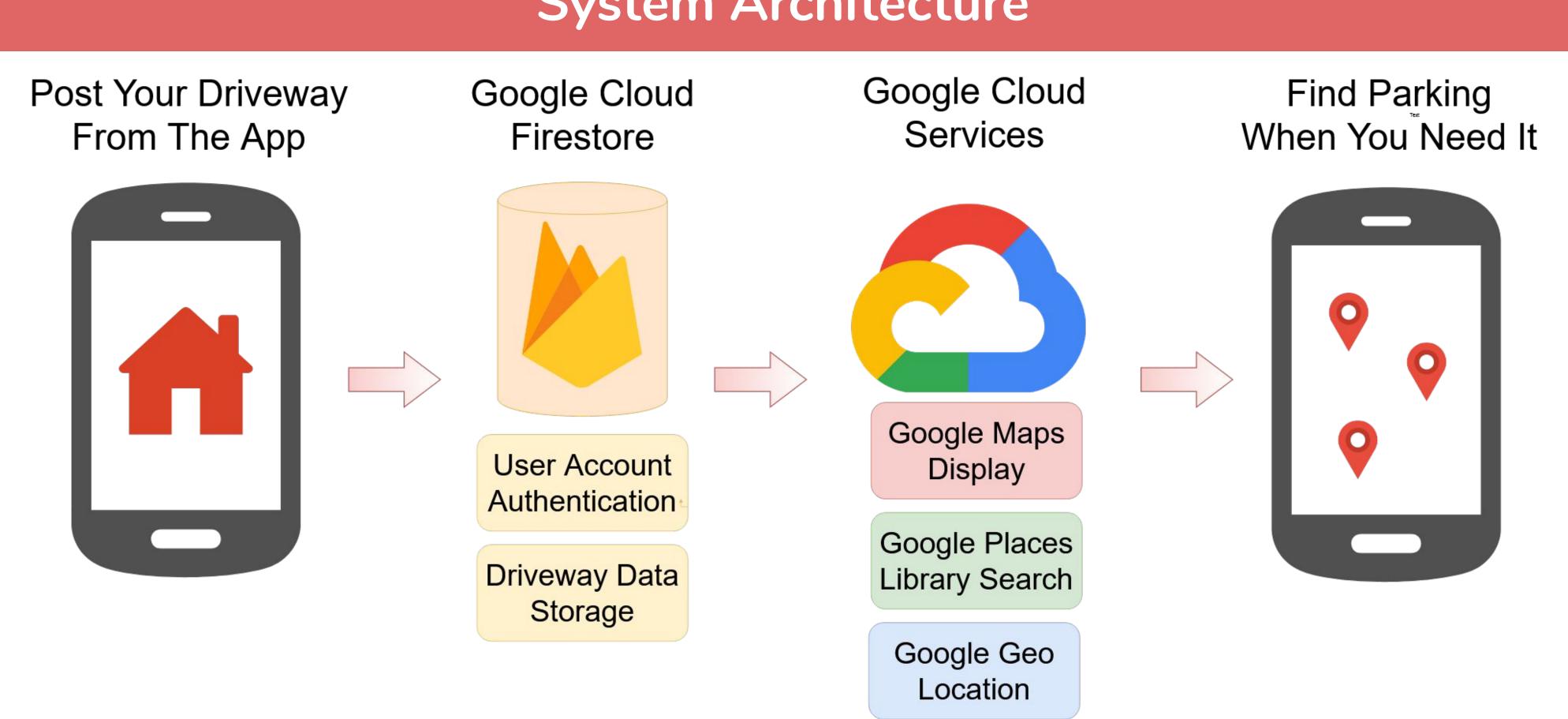
View open driveways

Schedule a time to rent

Features

- Post your driveway for users to rent, bringing more money to your wallet.
- Interactable map to search and filter through available parking spaces and vehicle specific utilities such as electronic charging.
- "Park now" Find available spaces near you, for you, in real time.
- Smart pricing algorithm that suggests a spots worth based on time-of-day demand.
- Driveway Schedule to reserve parking for a later date.

System Architecture



Our application was designed with Adobe XD and Supernova Studio. It uses a Google Firebase backend, a Flutter front-end, and Google cloud services to handle the functionality.

Future Work

Next year, R.A.D will implement security features such as transactions and proof of residency.

Many thanks to:

Richard Jullig,
Police Chief Oweis Nader,
Faeze Brahman,
Scott Davis,
Golam Muktadir