



THE WHEEL DEAL

Cristina Bindschatel, Jennifer Brown, Luke Jeries, Nicholas Sammut,
Taylor Shephard, Will Rieske, and Dan Wiseman

Scope

The App Does

- Identifies the car's make and model
- Provides GPS location of where the picture was taken.
- Uploads the pictures to a personal gallery.
- Has a system of points, weekly challenges and trophies.

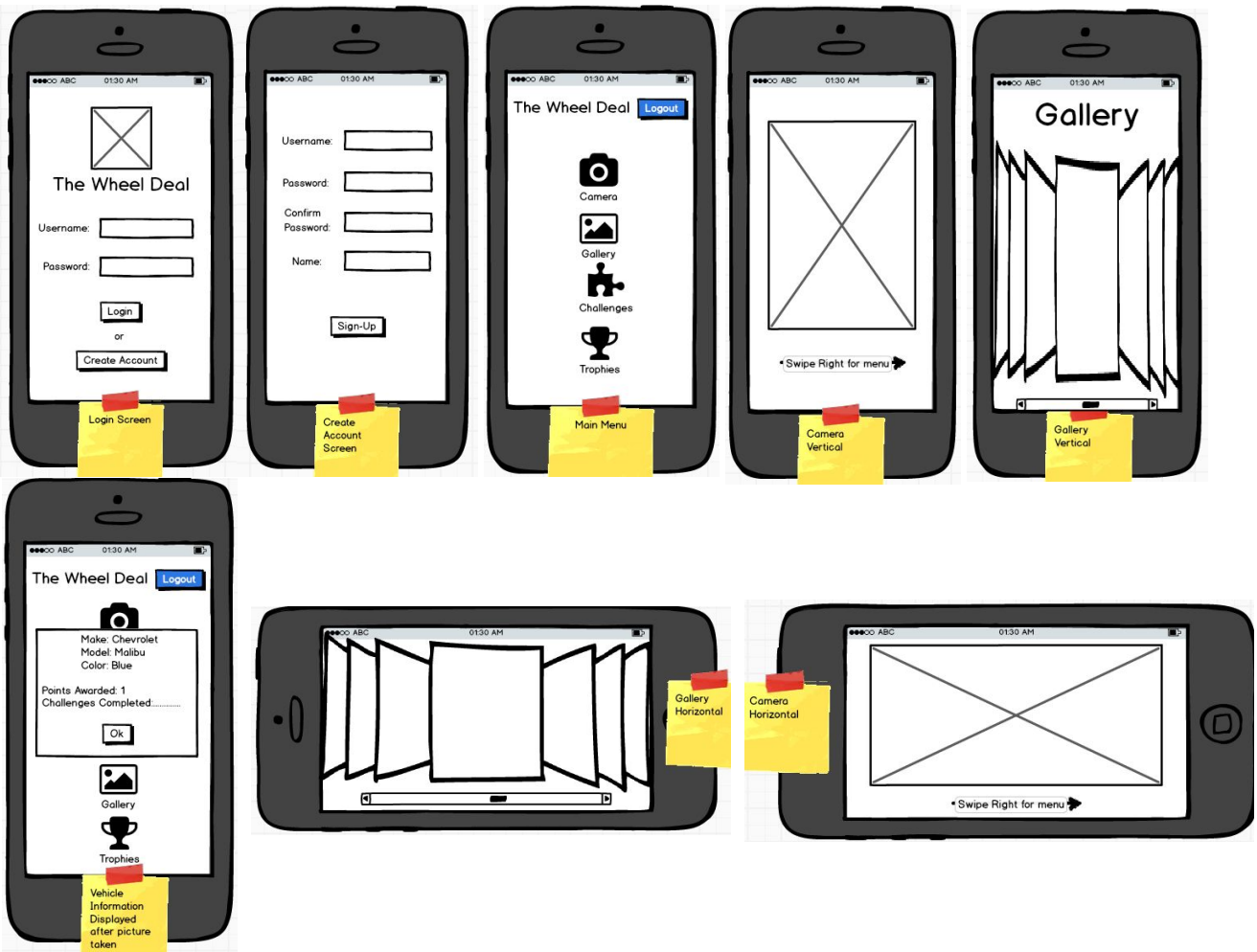
The App Does Not

- Detect the year of the car, or who the driver is.
- Tell you what the license plate number is.
- Allow you to manually input the car's information.



Storyboard

Balsamiq

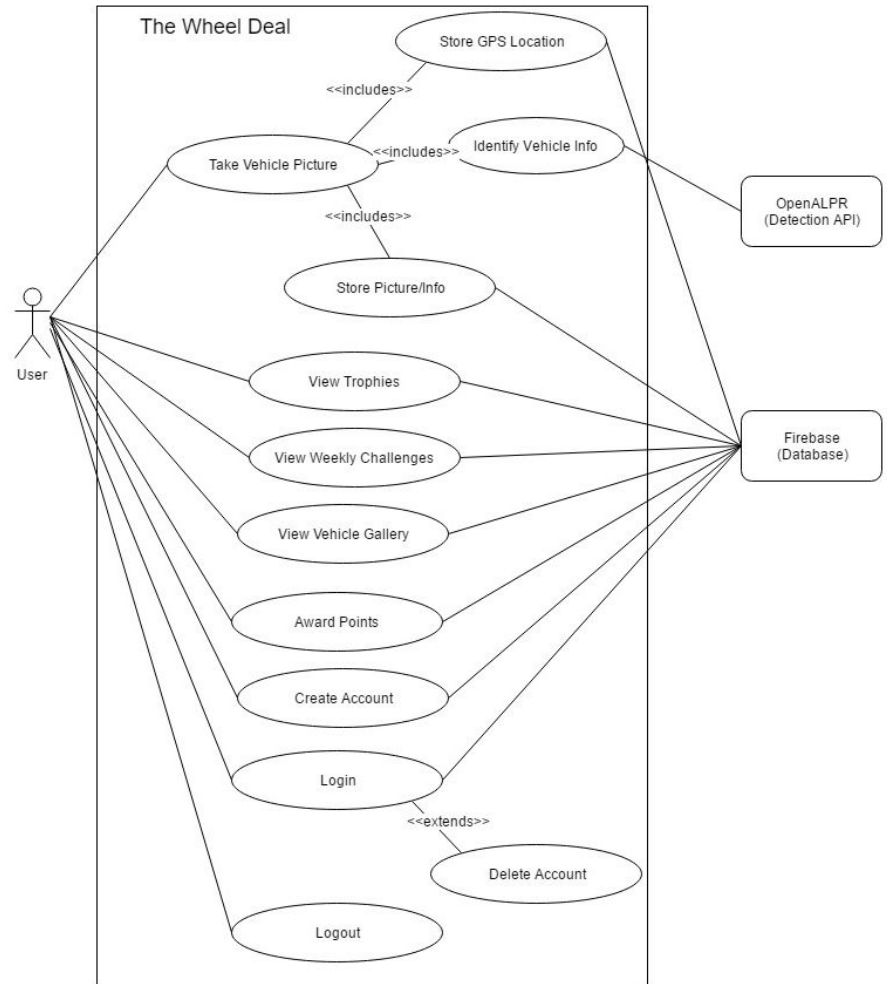


Personas



Name	Description
Sarah Clark	Loves Cars Likes searching games Very Competitive College Student Is on her phone most of the day
Bill Billerson	Vintage car enthusiast Loves identifying cars and testing his knowledge Works on cars in his spare time Just got a smartphone and wants something easy-to-use
Catherine Aberjeen	18 year old Tomboy No personal interest in cars Friends are all car enthusiasts Likes playing games with friends
Neil Edwards	21 year old Exotic car enthusiast Wants a place to store pictures of cars (rather than his smartphone) Works in a car shop Likes multiplayer videogames
Bill Jackson	48 years old Medically separated from Military Vehicle Mechanic Collects vintage car models Avid Car Show attendee

Use Case Diagram



Technologies Used



Android Phone

Hardware



Computer



Android
Studio

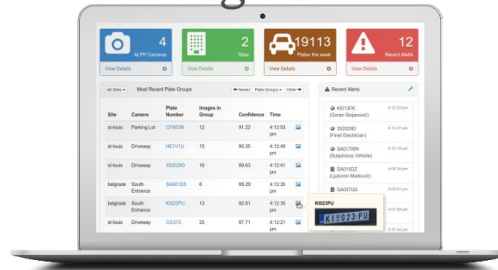


Firebase



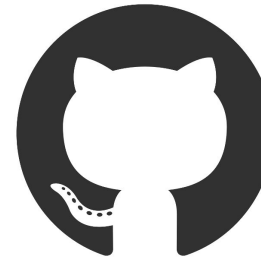
Software

OpenALPR
(Car Recognition API)

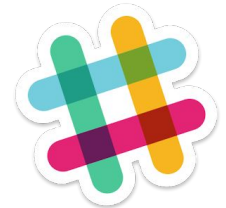


balsamiq®

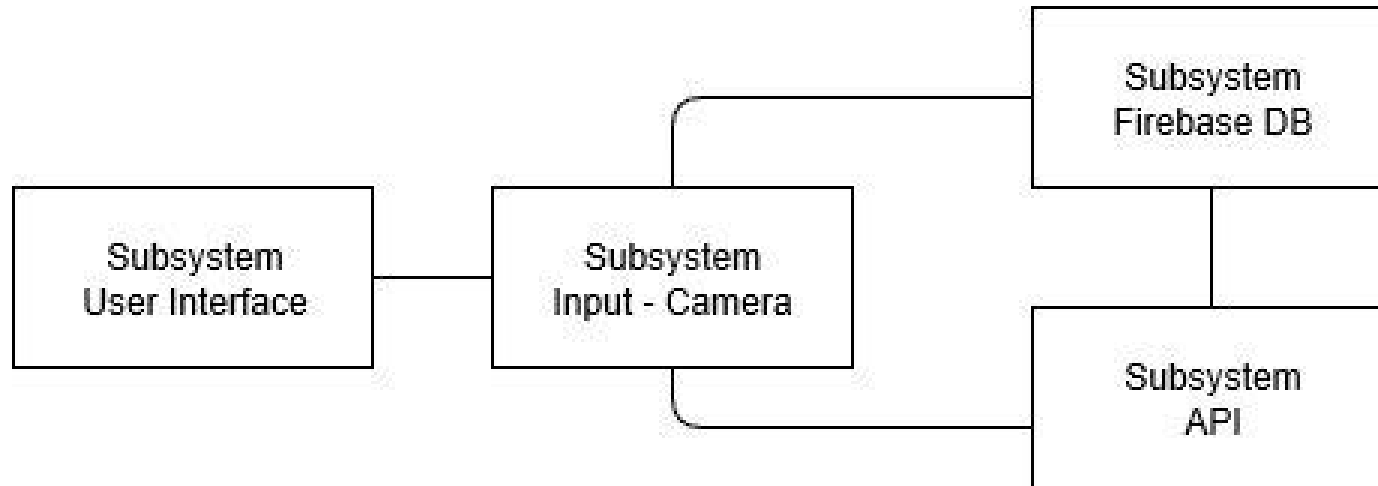
Github



Slack



Architecture Diagram



Challenges and Future Improvements

- Getting Firebase to work was challenging
- License plate must be readable for the API to work (Search for one that doesn't require this)
- We wanted to explore the option of using Google Play Store so that a user can use their ID to sign into the app
- Create leaderboards
- Add more features to the challenges and trophies



Android Classes Used

Picture Data Packet

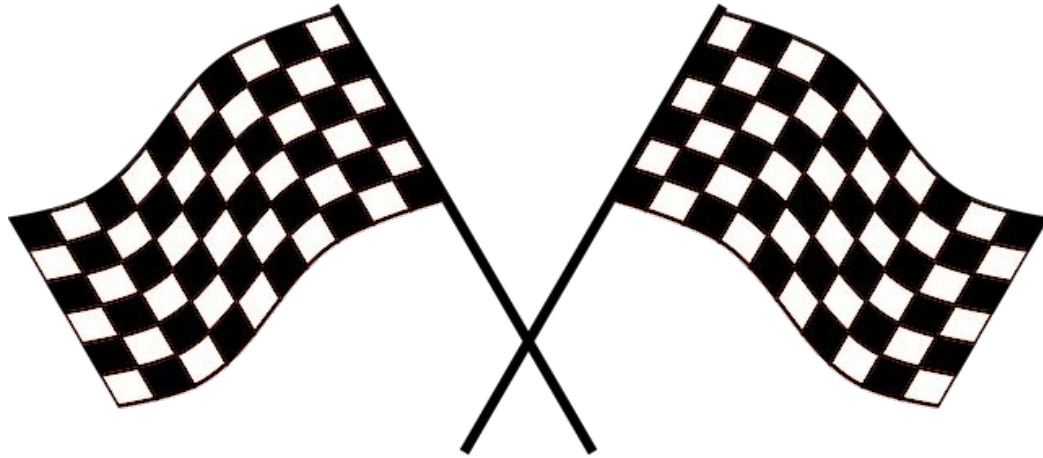
- Container class for picture information
- Saves location and processed Vehicle details

Vehicle

- Custom class used for OpenALPR API
- Saves make, model, color



The Demo



Backup:

<https://drive.google.com/file/d/0B6eobBTqbUC6ck1VZTJMN2xBMTQ/view?usp=sharing>

Firebase:

<https://console.firebase.google.com/project/thewheeldeal-40e3e/overview>

The Demo



The Demo



Questions?

<https://github.com/NSammut/TheWheelDeal>