Kyle Oliver
Jay Hurst
Mia Than
Charlie Chernawsky

SUMMARY

Unipark is a dedicated mobile application that helps university goers easily find and pay for parking. By allowing those who use the app the ability to reserve their spot ahead of time, UniPark offers them the most enjoyable parking experience.

GOALS

Create an all-in-one application that revamps parking on college campuses. In order to do that, UniPark provides real-time information to accommodate users on spots that fit their needs. As well as, giving them the choice to reserve , extend their parking session and provide driving directions within the app.

COMPETITION

PAYBYPHONE

An app that allows any driver parking in a fare required space the option to pay through credit card via the use of their phone. This is a lot more convenient than inserting cash into a parking meter. PayByPhone is our biggest competitor, however we stand out from then by allowing the user the ability to see which spaces are open or vacant on our interactive map.

PARKAM

Parkam uses security cameras to locate parking spots and allows the user to pay for them within the app. Parkam also features real-time tracking to predict which spots will be open by the time a driver arrives. It offers a real time video surveillance to see which spots are available and the size of the spot. Since it is not US based, we see them as one of our indirect competitors. They also are a general parking system, whereas we focus on university parking.

SPOTHERO

SpotHero is a digital marketplace which connects drivers to nearby parking lots and garages. It is offered in 300 cities in the USA and Canada. Similar to Unipark, Spothero offers a map for users to interact with. However, it does not show which sports are open in the lot, it simply shows you which lots and parking garages are currently offering parking.

DIFFERENTIATION STRATEGY

Product Uniqueness. While there are apps that allow you to pay for and reserve parking spots. There is no app that allows you to see the availability and capacity of parking lots. On top of this, our app will look and feel sleek, concise, and familiar. There will be minimal buttons and pages allowing our user's to have a simple and intuitive experience. Since the main audience is drivers, we do not want them to have to go through many screens.

USER RESEARCH

With the goal of understanding our **user needs**, we chose to implement the qualitative **research approach**. We recruited 12 individuals who are involved with activities on UM campus and who might be interested in such a product. Our mission was to broaden our horizons by interviewing those of **varying ages**, from 19 years old students to 46 years old staff.

USER PERSONAS

JOHN LEVY

MAJOR

Finance

HOMETOWN

Morristown, NJ

AGE

21

SCENARIO:

John is a finance major who lives 15-minutes off campus. He drives a 2017 Toyota Camry, a normal sized sedan. He is a student manager for the University of Miami's men's baseball team. As well as his sporting commitments, John is also very busy with school. Having to deal with Miami's everyday neighborhoood traffic, bad parking and small lots, John finds himself growing impatient. He is tired of wasting time in the parking lot and being late to his responsibilities on campus.

GOALS

- Park in a timely manner
- Get to class and practice on time
- Alleviate stress by focusing less time on the parking lot

FRUSTRATIONS

- Parking taking forever
- Arriving to class and practice late
- Spots being poorly parked in

ASHLEY WINTERS

MAJOR

Creative Advertising

HOMETOWN

Los Angelos, CA

AGE

19

SCENARIO:

Ashley is a communication student who lives off-campus. She has a fairly short commute to campus which is only 5-10 minutes. She drives a BMW X5, an SUV that usually has an easy time getting into parking spots. However, when she gets to campus, she sometimes has a hard time finding parking on the busy days. The spots are very narrow, and alot of people park over the lines. Since she is often busy and in a rush, she cannot afford to waste time searching for perfectly open spots.

GOALS

- Get to class on time
- Not have a far walk to his building
- Find parking spots that are easy to park in

FRUSTRATIONS

- Paying for parking
- Cramped spots and people overparking
- Driving around aimlessly looking for spots

MYLES GREEN

JOB

Sports Adminstration Professor

HOMETOWN

Chicago, IL

AGE

43

SCENARIO:

Professor Green is a Sports Adminstration Lecturer who lives across the street from campus. He drives a Ford F150, a large pickup truck that makes it nearly impossible for him to park in any parking spot with a car next to it. That beign said, he has to take this into account when timing his trip to campus. This forces him to leave an extra 10-15 minutes early in order to find an open spot with no cars next to him and be on time to lectures.

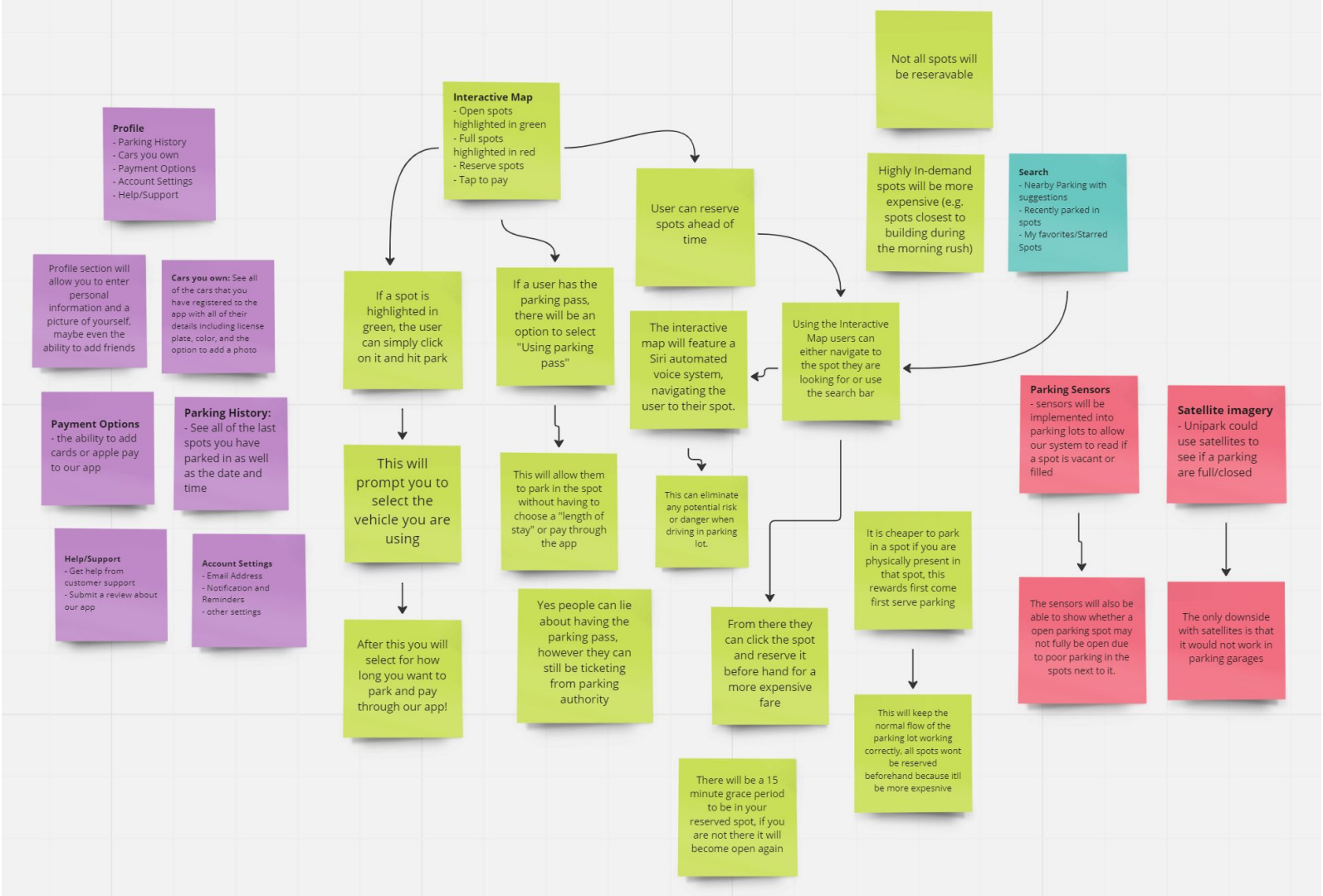
GOALS

- Not have to leave early
- Find spots that fit his large truck
- See ahead of time if the lot is crowded

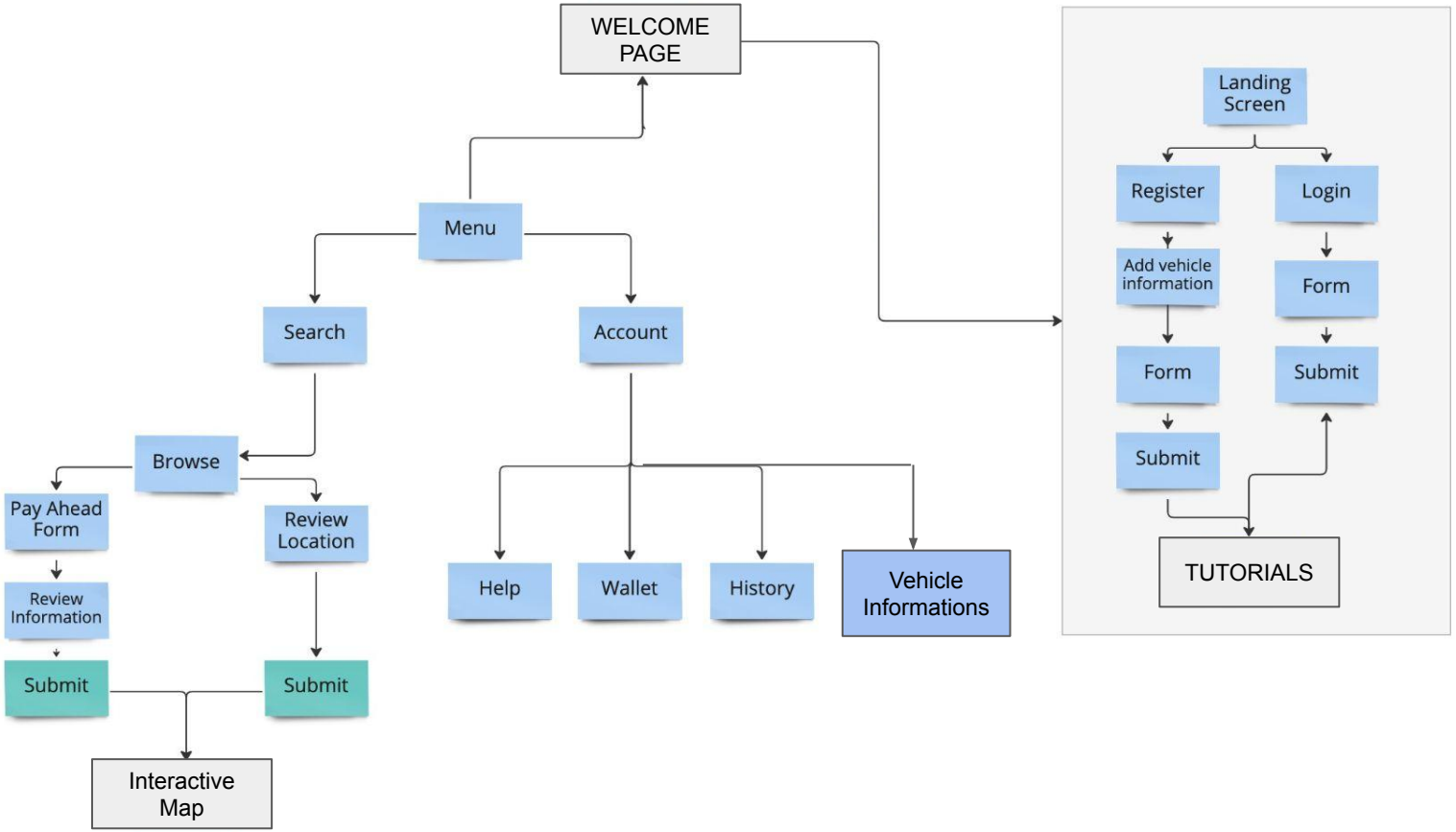
FRUSTRATIONS

- Being late to class
- The roads in the parking lot are narrow
- Never being able to fit his truck in spots

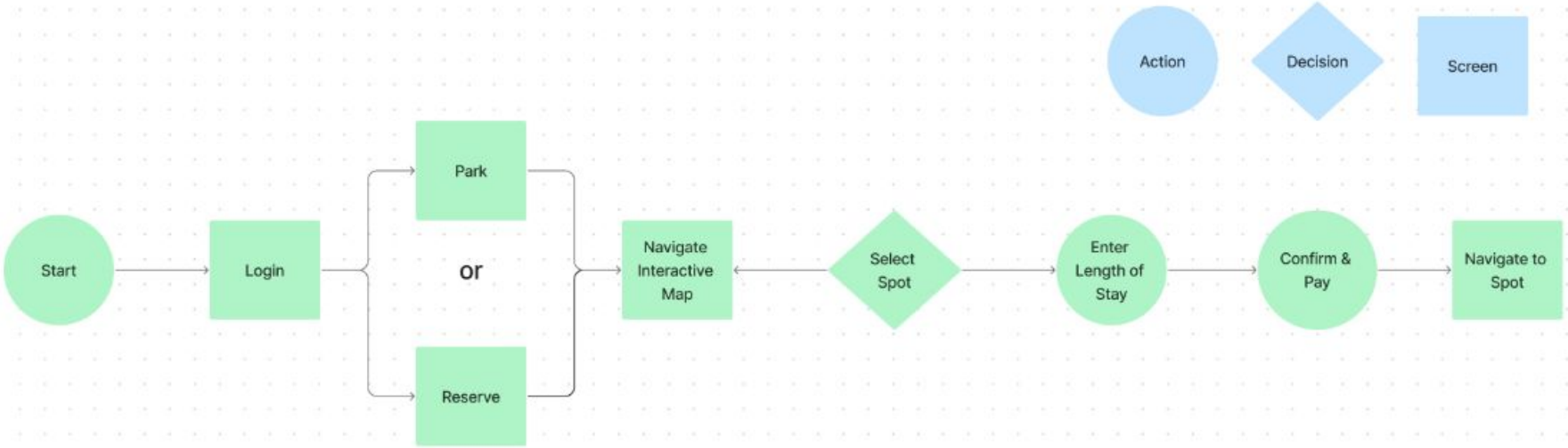
BRAINSTORMING


Profile
- Parking History
- Cars you own
- Payment Options
- Account Settings
- Help/Support
Profile section will allow you to enter personal information and a picture of yourself, maybe even the ability to add friends
Cars you own: See all of the cars that you have registered to the app with all of their details including license plate, color, and the option to add a photo
Payment Options
- the ability to add cards or apple pay to our app
Parking History:
- See all of the last spots you have parked in as well as the date and time
Help/Support
- Get help from customer support
- Submit a review about our app
Account Settings
- Email Address
- Notification and Reminders
- other settings
Interactive Map
- Open spots highlighted in green
- Full spots highlighted in red
- Reserve spots
- Tap to pay
If a spot is highlighted in green, the user can simply click on it and hit park
This will prompt you to select the vehicle you are using
After this you will select for how long you want to park and pay through our app!
If a user has the parking pass, there will be an option to select "Using parking pass"
This will allow them to park in the spot without having to choose a "length of stay" or pay through the app
Yes people can lie about having the parking pass, however they can still be ticketing from parking authority
User can reserve spots ahead of time
The interactive map will feature a Siri automated voice system, navigating the user to their spot.
This can eliminate any potential risk or danger when driving in parking lot.
Not all spots will be reseravable
Highly In-demand spots will be more expensive (e.g. spots closest to building during the morning rush)
Search
- Nearby Parking with suggestions
- Recently parked in spots
- My favorites/Starred Spots
Using the Interactive Map users can either navigate to the spot they are looking for or use the search bar
From there they can click the spot and reserve it before hand for a more expensive fare
There will be a 15 minute grace period to be in your reserved spot, if you are not there it will become open again
It is cheaper to park in a spot if you are physically present in that spot, this rewards first come first serve parking
This will keep the normal flow of the parking lot working correctly, all spots wont be reserved beforehand because itll be more expesnive
Parking Sensors
- sensors will be implemented into parking lots to allow our system to read if a spot is vacant or filled
The sensors will also be able to show whether a open parking spot may not fully be open due to poor parking in the spots next to it.
Satellite imagery
- Unipark could use satellites to see if a parking are full/closed
The only downside with satellites is that it would not work in parking garages

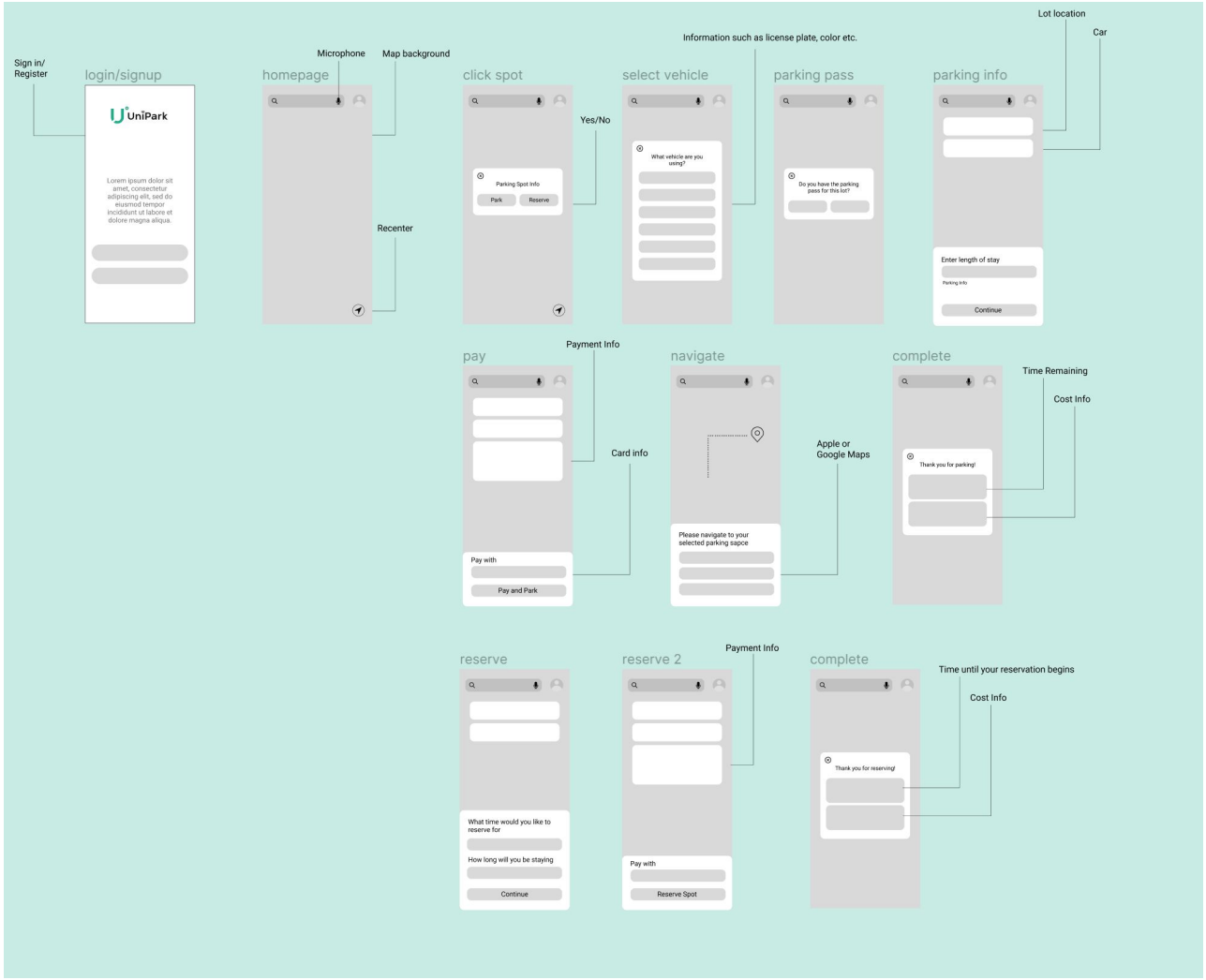
SITEMAP


WELCOME PAGE
Menu
Search
Account
Browse
Pay Ahead Form
Review Information
Submit
Review Location
Submit
Interactive Map
Help
Wallet
History
Vehicle Informations
Landing Screen
Register
Login
Add vehicle information
Form
Form
Submit
Submit
Submit
TUTORIALS

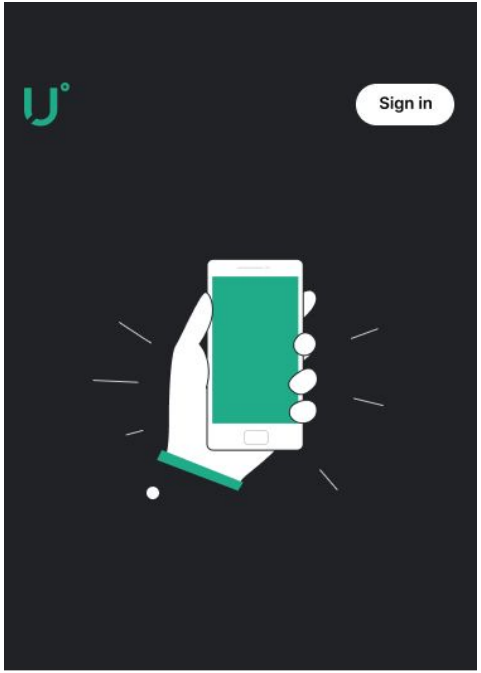
USER FLOW


Action
Decision
Screen
Start
Login
Park
or
Reserve
Navigate Interactive Map
Select Spot
Enter Length of Stay
Confirm & Pay
Navigate to Spot

LOW FIDELITY WIREFRAMES

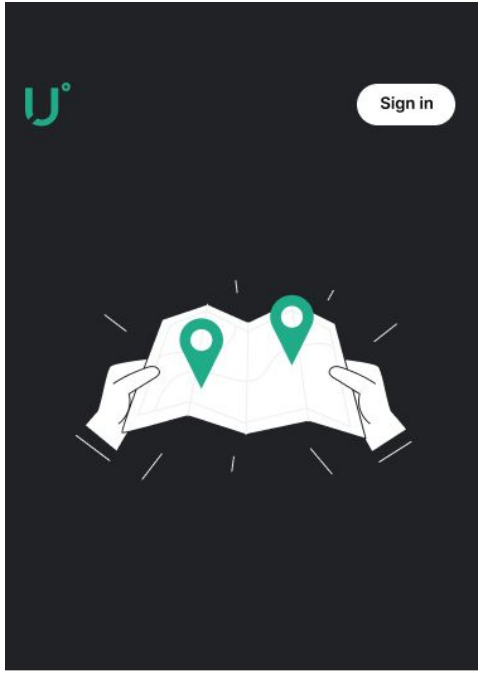

Sign in/
Register
login/signup
UniPark
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
homepage
Microphone
Map background
Recenter
click spot
Parking Spot Info
Park
Reserve
Yes/No
select vehicle
What vehicle are you using?
Information such as license plate, color etc.
parking pass
Do you have the parking pass for this lot?
parking info
Lot location
Car
Enter length of stay
Parking Info
Continue
pay
Payment Info
Card info
Pay with
Pay and Park
navigate
Apple or
Google Maps
Please navigate to your selected parking sapce
complete
Time Remaining
Cost Info
Thank you for parking!
reserve
What time would you like to reserve for
How long will you be staying
Continue
reserve 2
Payment Info
Pay with
Reserve Spot
complete
Time until your reservation begins
Cost Info
Thank you for reserving!

HI-FIDELITY WIREFRAMES



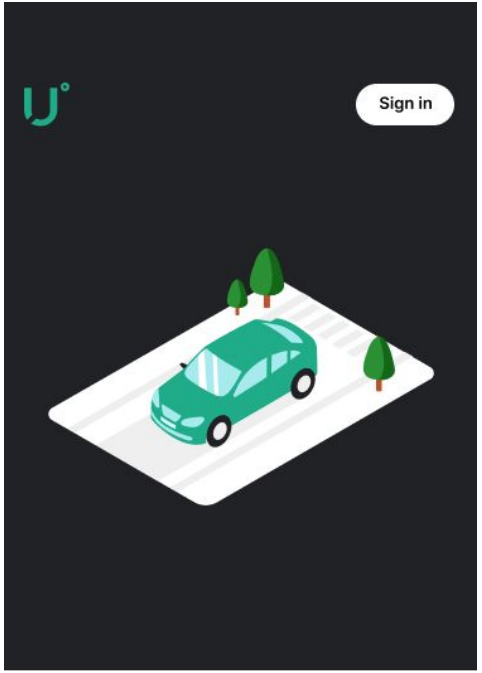
Save time by reserving parking before your trip

Continue



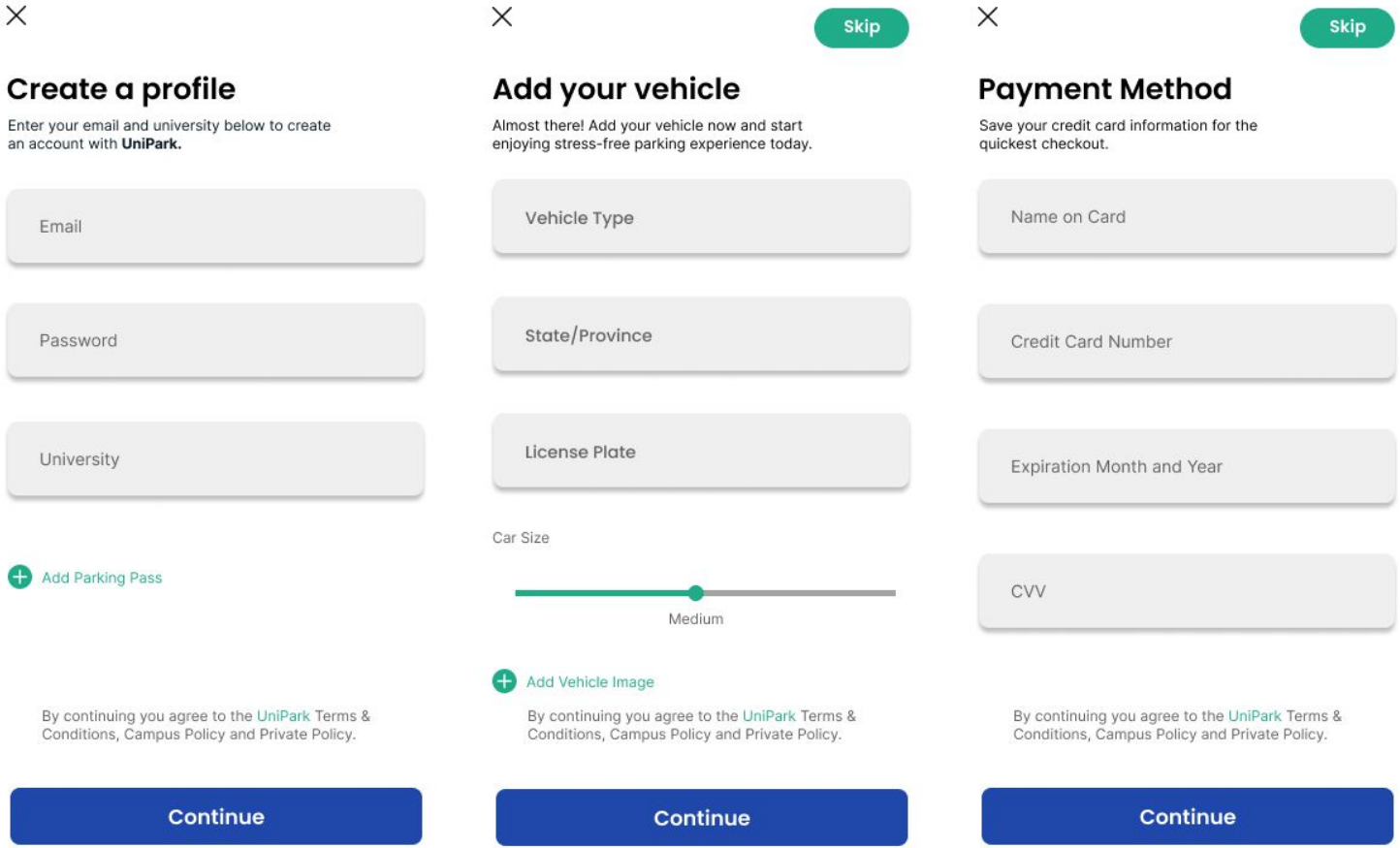
Find which parking spots work best for you

Continue



Navigate to your spot with in-app directions

Get started


Create a profile
Enter your email and university below to create an account with UniPark.
Email
Password
University
Add Parking Pass
By continuing you agree to the UniPark Terms & Conditions, Campus Policy and Private Policy.
Continue
Skip
Add your vehicle
Almost there! Add your vehicle now and start enjoying stress-free parking experience today.
Vehicle Type
State/Province
License Plate
Car Size
Medium
Add Vehicle Image
By continuing you agree to the UniPark Terms & Conditions, Campus Policy and Private Policy.
Continue
Skip
Payment Method
Save your credit card information for the quickest checkout.
Name on Card
Credit Card Number
Expiration Month and Year
CVV
By continuing you agree to the UniPark Terms & Conditions, Campus Policy and Private Policy.
Continue

Park Reserve

Find the best **parking!**

Search by Lot

Lennar Health Center
6610 SW 57th Ave, South Miami, FL

Herbert Wellness Center
6610 SW 57th Ave, South Miami, FL

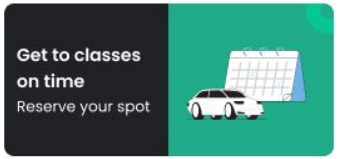
Favorites

P Pink lot

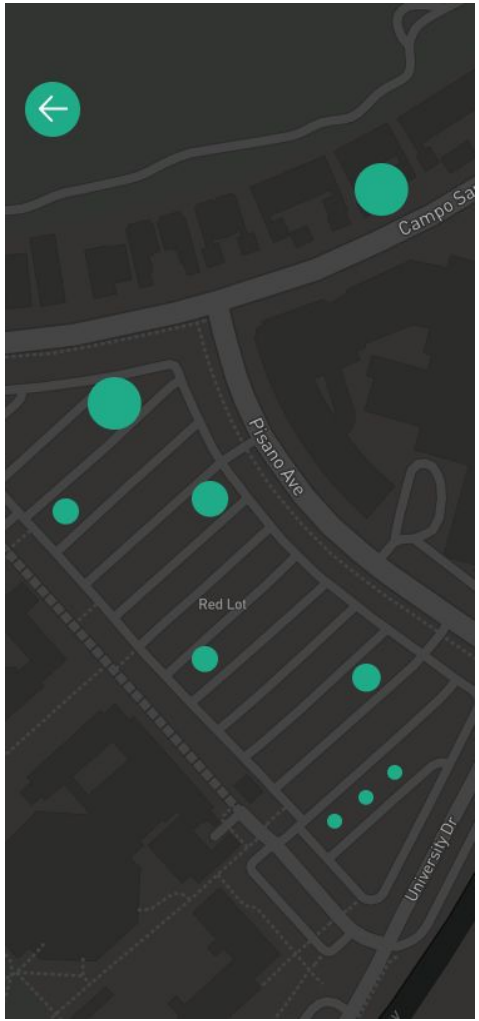
R Red lot

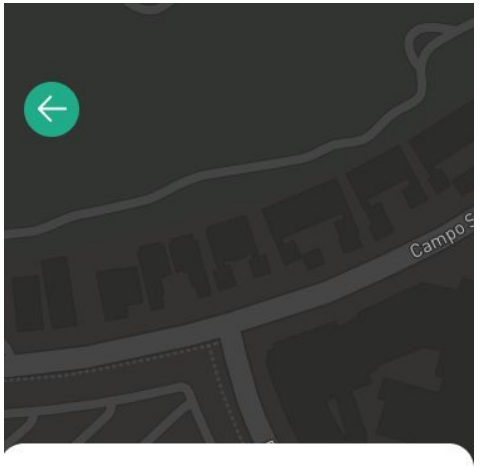
Y Yellow lot

Plan ahead with Unipark



View Map





Select a vehicle

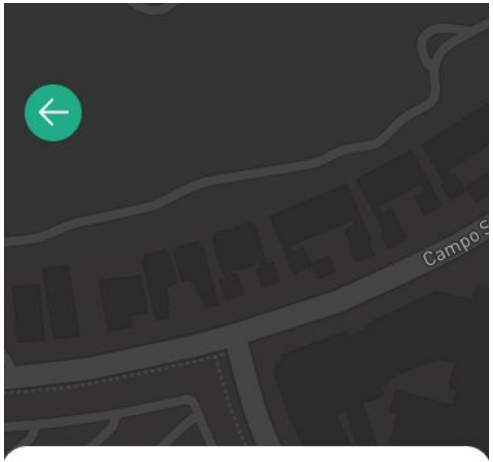
rdtfyGUHDCLVysdHVKJnID B NLS :DN PIS D
NDSON ISOIDSPJPOSz

FP22351 PA

LHPG62 FL

AX57987 CT

Add new vehicle



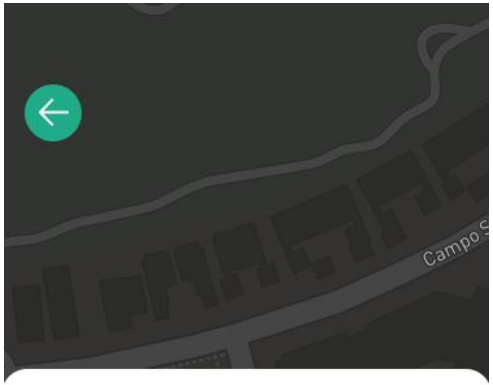
Enter length of stay

330446
Red Lot
University of Miami

LHPG62 FL

01 **hours** 55 **min**

Continue



Confirm Parking

330446
Red Lot
University of Miami

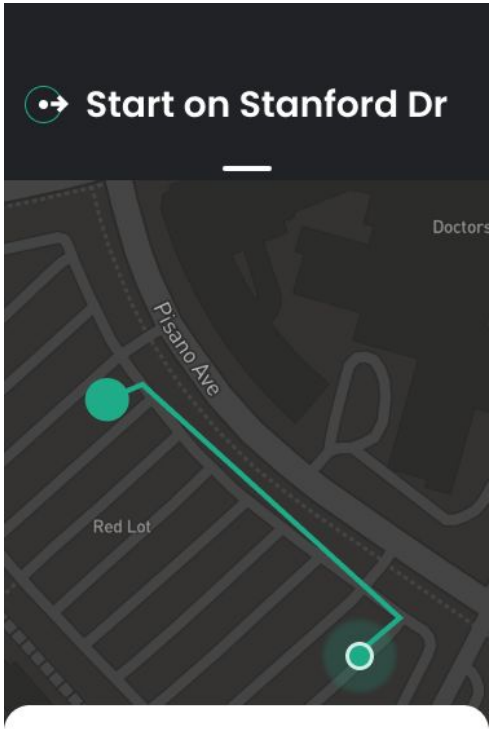
LHPG62 FL

Expires in **2 hours**

Total cost **$4.27**
Includes service charge (+$0.27)

•••• 2201

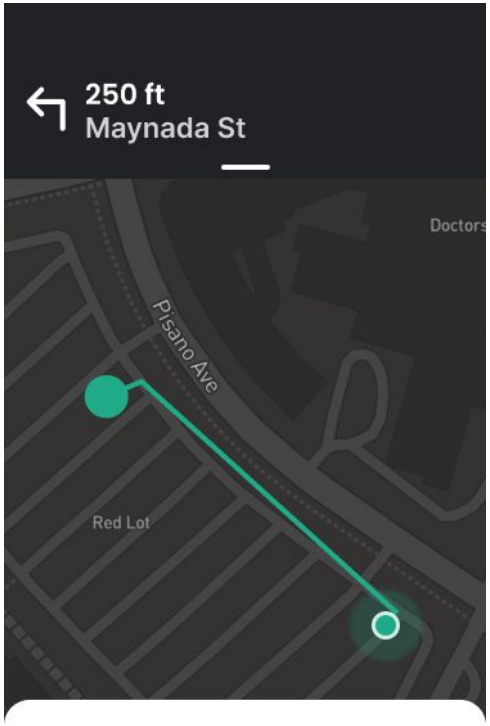
Confirm



Details

2:05 PM arrival

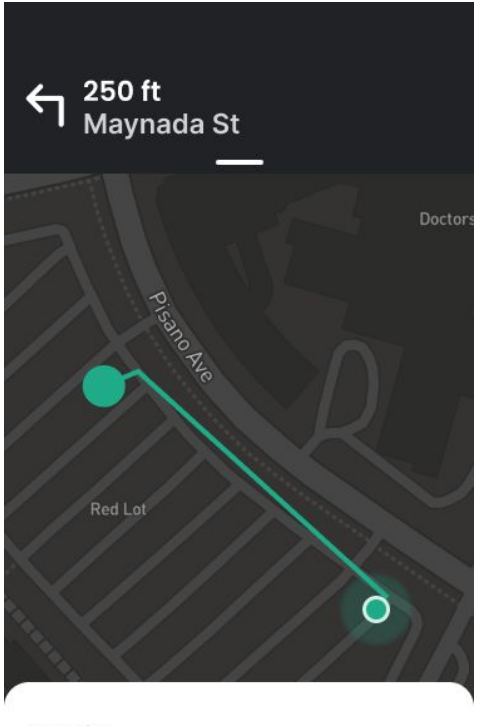
330446 Red Lot
University of Miami



Details

2:05 PM arrival

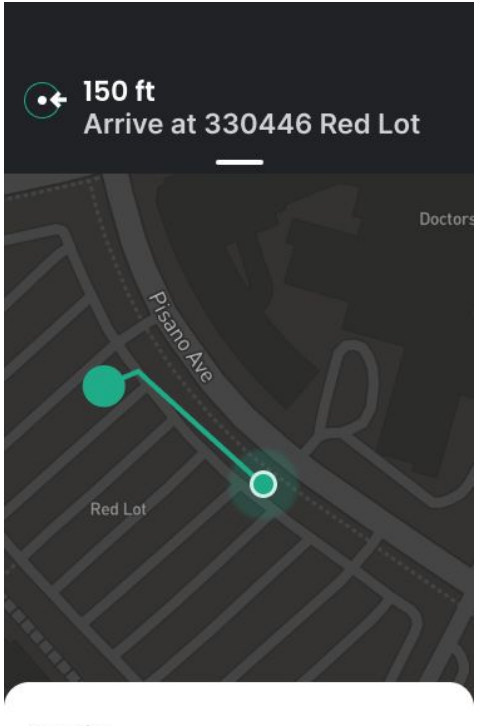
330446 Red Lot
University of Miami



Details

2:05 PM arrival

330446 Red Lot
University of Miami



Details

2:05 PM arrival

330446 Red Lot
University of Miami

UX EVALUATION

USER RESEARCH FINDINGS

Overall, the reviews of our prototype were **positive.**

All users were satisfied with the design and layout. The user flow felt familiar and straightforward.

One of our only **negative** reviews was that it took a lot of steps to get to the navigation screen. This was because they had to go through the entire onboarding process, **as this was their first time using the app**. For future use, it will not take as many steps because they will already have created an account on our app. Our strengths lie in our design and layout, and we can work to improve how quickly a user can complete their task.

Tasks and Interactions	Rating
Welcome Screens	1
Onboarding	2
Homepage	1
Parking Lot map with open spots	1
Select Car, Pay and Confirm parking spot	0
Navigate to parking	2
Aggregate Score out of 30	7

Our combined score translates = 76.7%

HEURISTIC EVALUATION FINDINGS

After analysing our heuristic review, it is fair to say that we created an efficient working prototype.

Four of our categories had a 0-1 rating, with only two categories having 2.

The two biggest things that we must work on for our final hi-fi prototype are the **onboarding process** and the navigate to **parking animation**. By shortening these two the user's time to complete task will be much shorter, creating a more positive user experience and a higher aggregate score.

PROTOTYPE

FUTURE PLANS

For our future plans, we have two primary objectives. In order for our parking system to work, we must **install sensors within the spots**. These sensors will tell the system if the spot is vacant or filled. In order to do this, we will most likely have to collaborate with universities. If this idea proves to be too costly or inefficient, we would consider **licensing our technology off to a larger parking app** such as PayByPhone. By allowing them to simply implement Unipark technology into their larger system, both parties can equally benefit.