

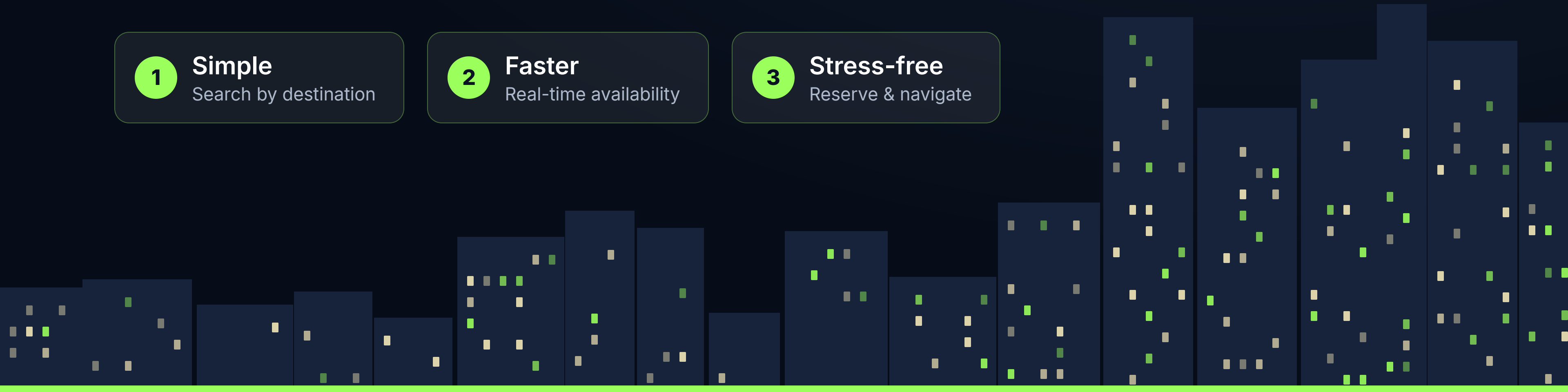
A smarter way to **find parking**.

Finding a parking spot made simple, faster, and stress-free.

1 Simple
Search by destination

2 Faster
Real-time availability

3 Stress-free
Reserve & navigate



OVERVIEW

Why I built Spot

THE SPARK

Finding parking in a busy city is stressful, time-consuming, and unpredictable. Drivers often waste **10–20 minutes** circling blocks, switching between apps, and hoping a spot is still open when they arrive.

This project began with my own frustration. Research showed almost everyone shares it.

THE PRODUCT

Spot is a mobile parking app that shows **real-time availability, pricing, and navigation**, with accessibility built in.

This case study walks through the full design process, from research to prototypes, user testing, and next steps.

1

Research

Interviews, survey & market data

2

Ideate

Affinity mapping & sketches

3

Prototype & test

Two rounds of usability testing

4

Next steps

Roadmap to a real launch

THE PROBLEM

Drivers lose time, fuel, and patience looking for parking.

DESIGN QUESTION

“How might we help drivers locate parking **faster and with **confidence**?”**



Wasted time

Circling blocks makes drivers late.



Unclear availability

No way to know if a spot is open before you arrive.



Inconsistent payments

Every lot and app works differently.

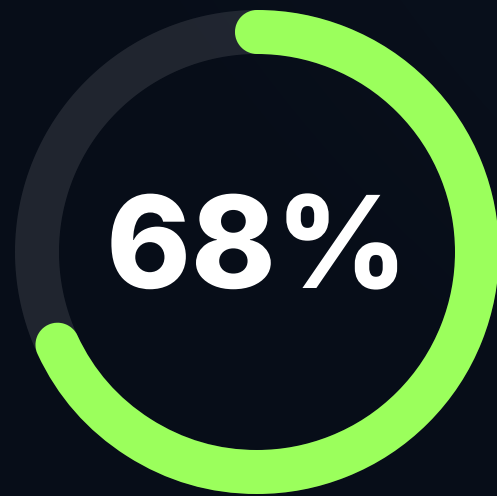


Unnecessary fuel use

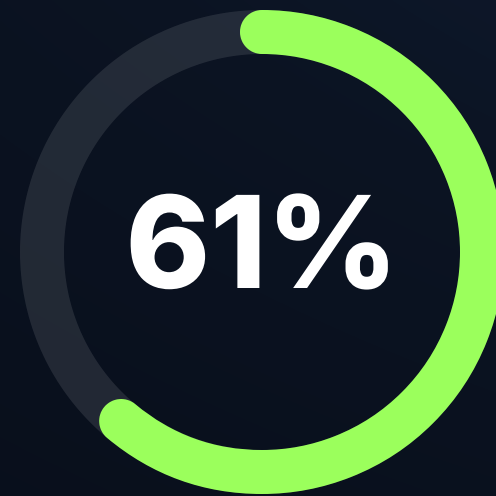
Outdated tools keep drivers on the road longer.

PAIN POINTS

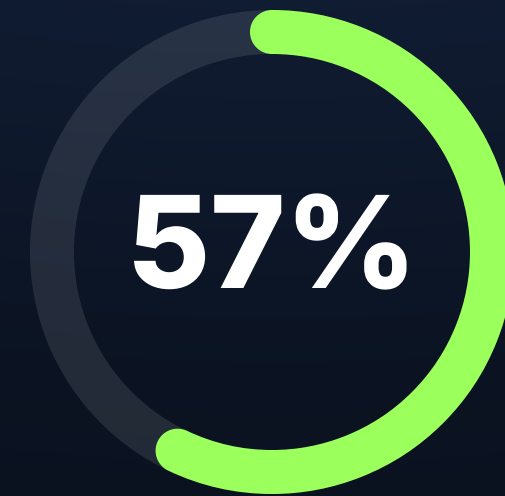
Three problems drivers face most



Unclear parking availability



Inefficient & confusing
payment systems



Lack of seamless navigation &
integration

TAKEAWAY

Spot's core features map directly to these three gaps: live availability, upfront pricing, and built-in navigation.

RESEARCH METHODS

How I learned what drivers need



Step 1

One-on-one interviews

Talked with drivers including Eric, Wendy, and Ronesha about daily parking frustrations.

RESULT

Revealed emotional triggers: time loss, confusion, and distrust of current apps.



Step 2

Screening survey

Found participants who drive to busy areas, search for parking often, and have tried mobile parking tools.

RESULT

Made sure testers reflected real parking behavior.



Step 3

Usability testing

Watched participants use the interactive prototype and collected feedback on flow and clarity.

RESULT

Users valued simplicity, real-time updates, and navigation integration.

MARKET RESEARCH

Parking is a city-wide problem, and a real business opportunity.

30%

of city congestion is linked to parking shortages, which also cause stress and wasted time.

MARKET POTENTIAL

- 100M+ urban commuters in the U.S.
- Growing demand for smarter mobility solutions
- Partnership potential with parking lots, municipalities, and event venues

BENEFITS

- Saves drivers time and stress
- Encourages sustainable driving habits
- Creates new revenue streams for parking operators

MEET THE PARTICIPANTS

Who I talked to (1 of 2)



Eric

Daily Commuter

Drives downtown to work every day and struggles to find affordable parking near his office.

PAIN POINT

Wastes 10–15 minutes circling for open spots.

NEED

Real-time updates on open spaces close to his destination.

GOAL

Get to work on time without the stress of searching or guessing.



Ronesha

Busy Entrepreneur

Manages multiple meetings across different parts of the city every day.

PAIN POINT

Finds current parking apps unreliable and time-consuming.

NEED

An accurate, fast-loading system that integrates with navigation.

GOAL

Arrive on time and stay focused on business, not parking logistics.



Wendy

Weekend Visitor

Visits family and city attractions but often avoids downtown because of parking.

PAIN POINT

Unclear availability makes trips stressful and unpredictable.

NEED

An easy-to-use app that shows safe, available parking before leaving home.

GOAL

Spend more time enjoying her visit and less time parking.

MEET THE PARTICIPANTS

Who I talked to (2 of 2)



Angel
Retired Veteran

Visits medical offices, grocery stores, and community locations several times a week.

PAIN POINT

Limited mobility makes walking long distances from parking stressful and tiring.

NEED

Clear information about proximity, safety, and easy-to-access spaces.

GOAL

Park close to her destination so she can run errands comfortably and independently.



Tamiesha
Office Manager

Drives regularly for work and errands, often in busy commercial areas.

PAIN POINT

Finding parking near her destination is slow and frustrating, especially at peak hours.

NEED

A reliable way to quickly locate parking without circling or guessing.

GOAL

Reduce wasted time and stress so she can stay on schedule.



Porcha
Retired Caregiver

Often drives family members and runs errands in unfamiliar or crowded places.

PAIN POINT

Parking far from entrances feels unsafe and inconvenient, especially when helping others.

NEED

Parking options that feel secure, well-lit, and close to destinations.

GOAL

Park quickly and safely while supporting her family's needs.

THE OPPORTUNITY

Why this problem is worth solving

WHAT I HEARD

Eric, Wendy, and Ronesha all described **driving in circles**, feeling anxious about finding a spot, and **losing trust** in current parking apps.

The problem hurts productivity, increases fuel use, and adds stress to everyday life.



For drivers

Save time, feel more confident, and plan trips better.



For cities

Use parking more efficiently and reduce congestion.



For businesses

Strengthen customer engagement and open new revenue.

TAKEAWAY

A reliable, **real-time** parking solution can serve drivers, cities, and businesses at once.

IDEATION & EARLY CONCEPTS

From interview notes to first sketches

Interview insights → Grouped themes → Hand sketches

I grouped interview insights with sticky notes to find patterns, then sketched screens and user flows before committing to a prototype. This phase was about exploring ideas and testing direction, not final solutions.

5 KEY THEMES

Convenience

One app for all parking needs

Accuracy

Real-time availability & clear directions

Security

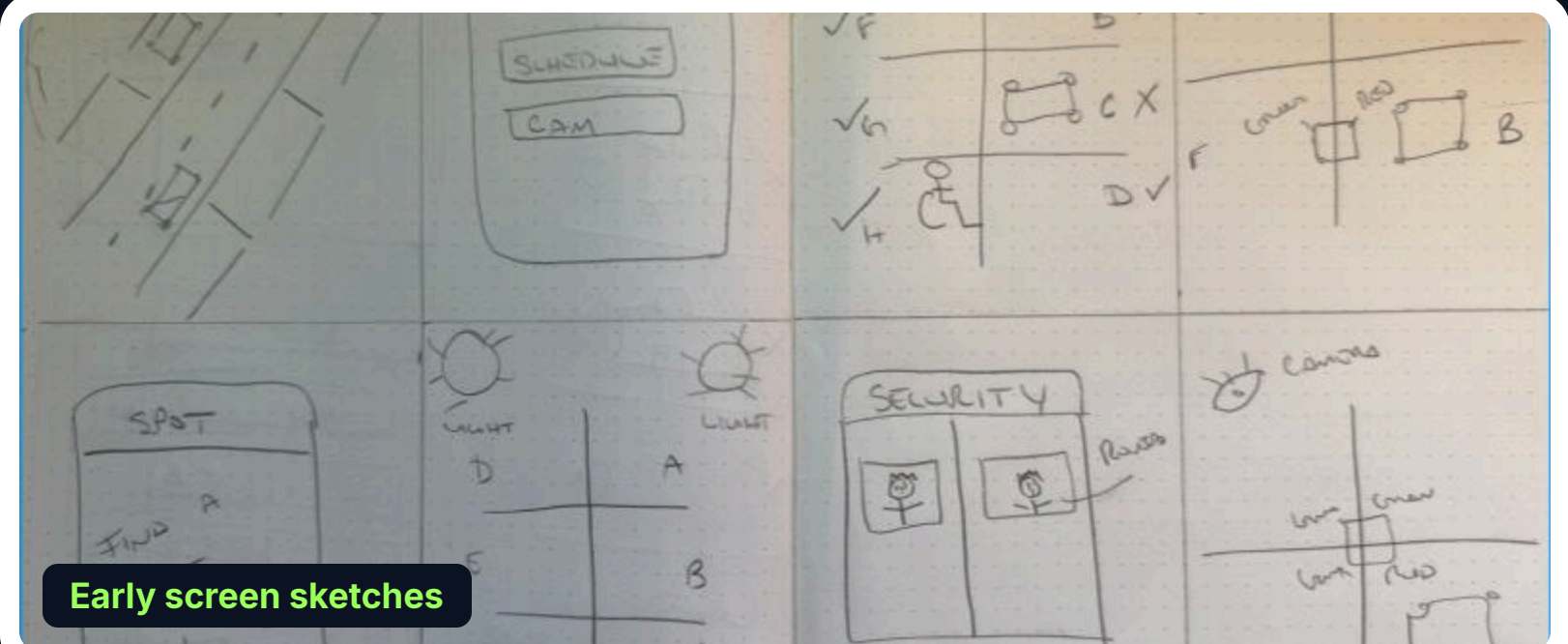
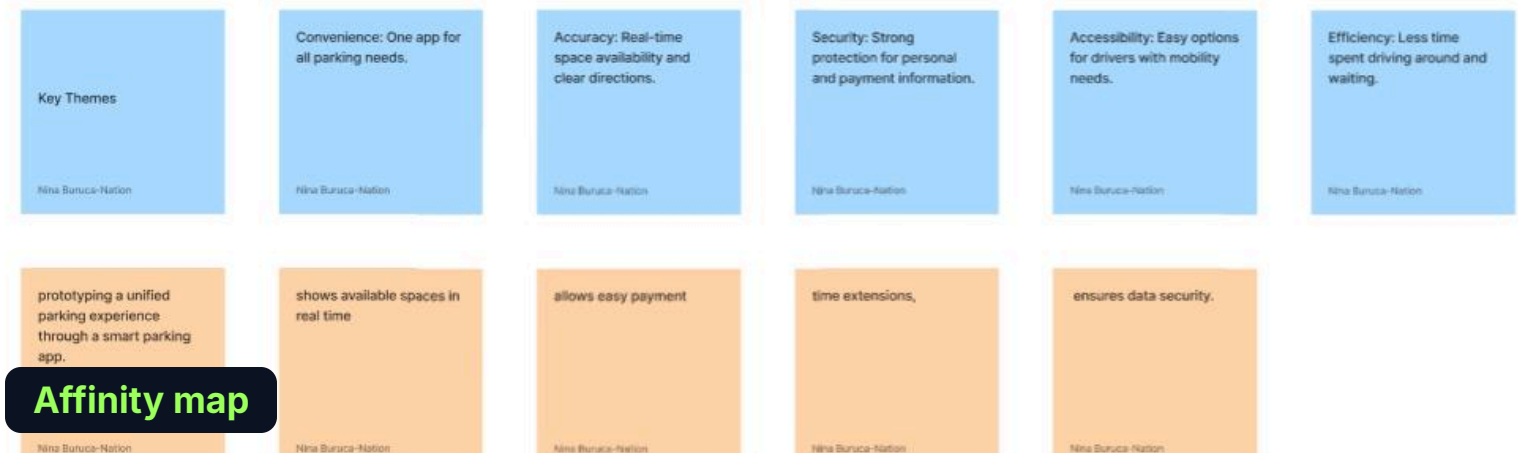
Protected personal & payment info

Accessibility

Easy options for drivers with limited mobility

Efficiency

Less time driving around and waiting

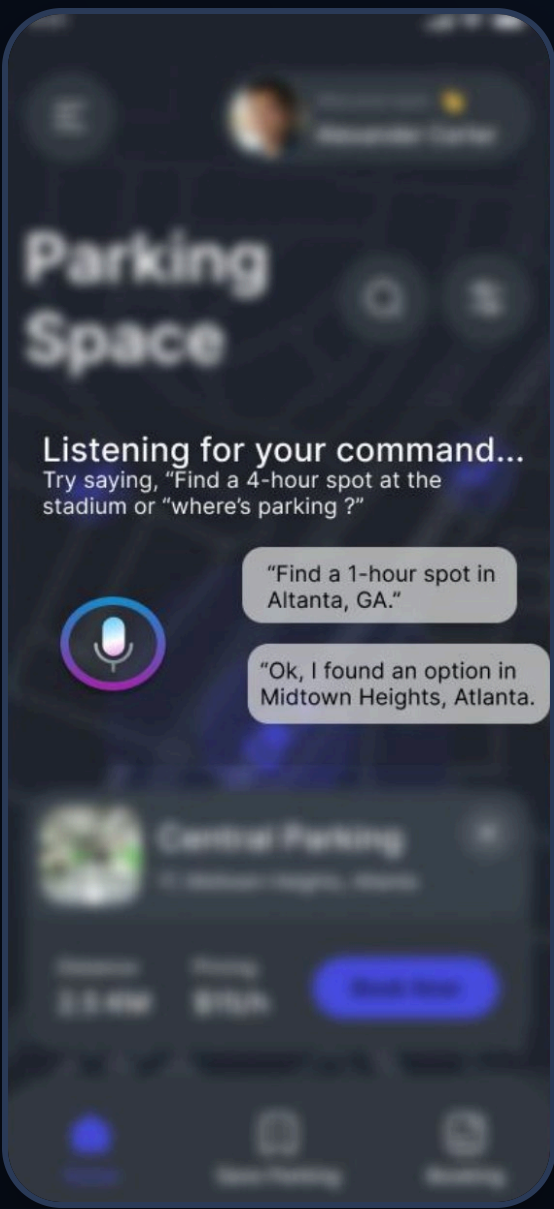


PROTOTYPE 1

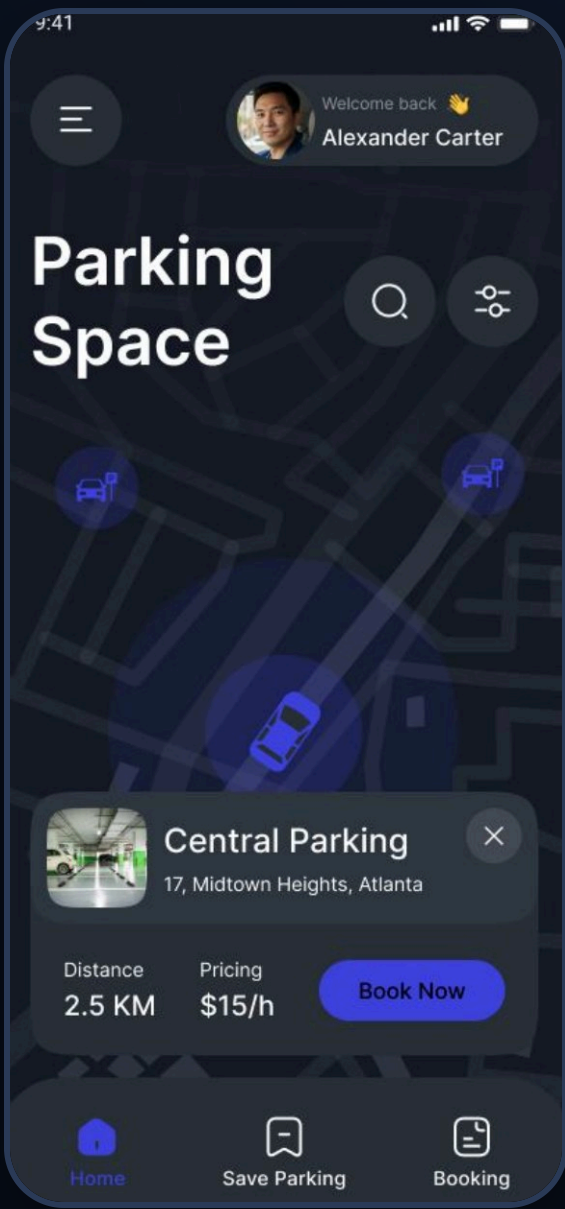
Focus: simplicity

[View interactive prototype ↗](#)

Search bar, map, availability markers, and reservation confirmation.



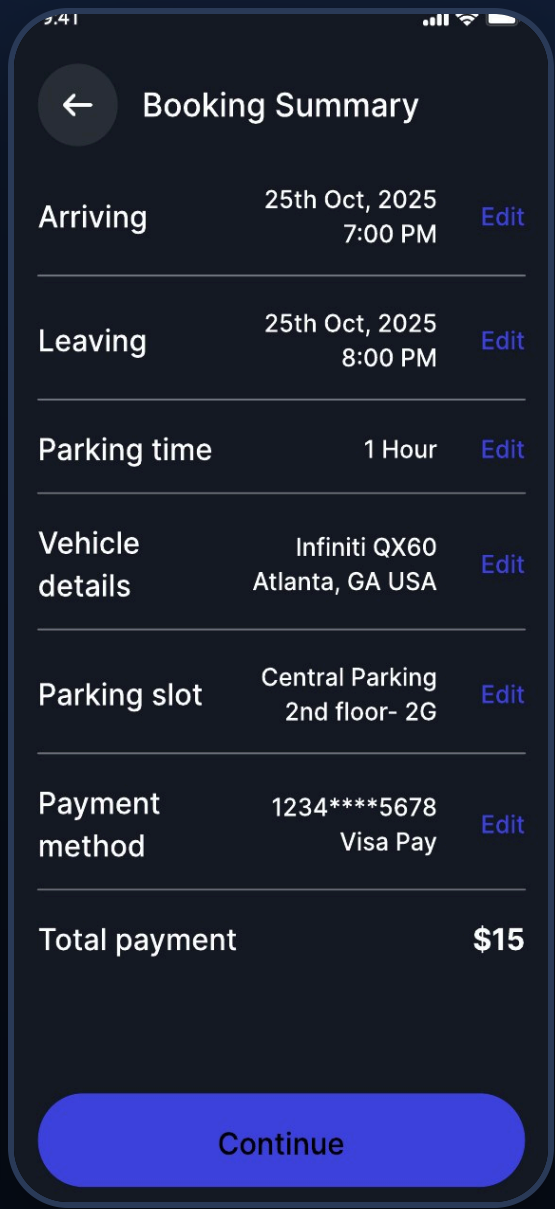
1 Voice command



2 Home map



3 Choose space



4 Booking summary

TESTING · ROUND 1

What users told us

Everyone

Liked the simple design and how easy it was to start searching.

Wendy

Seeing availability before leaving home made her feel more relaxed about busy areas.

Eric

Liked the clean layout and fast results, but wanted **pricing to appear sooner**.

Ronesha

Needs the app to **sync with her navigation** so she can drive straight to her spot.

✓ VALIDATION

People would use the app, especially if it works with navigation apps they already trust, like **Google Maps** and **Apple Maps**.

CHANGES FOR ROUND 2

- Show pricing earlier
- Integrate with navigation

PROTOTYPE 2

Built from round 1 feedback

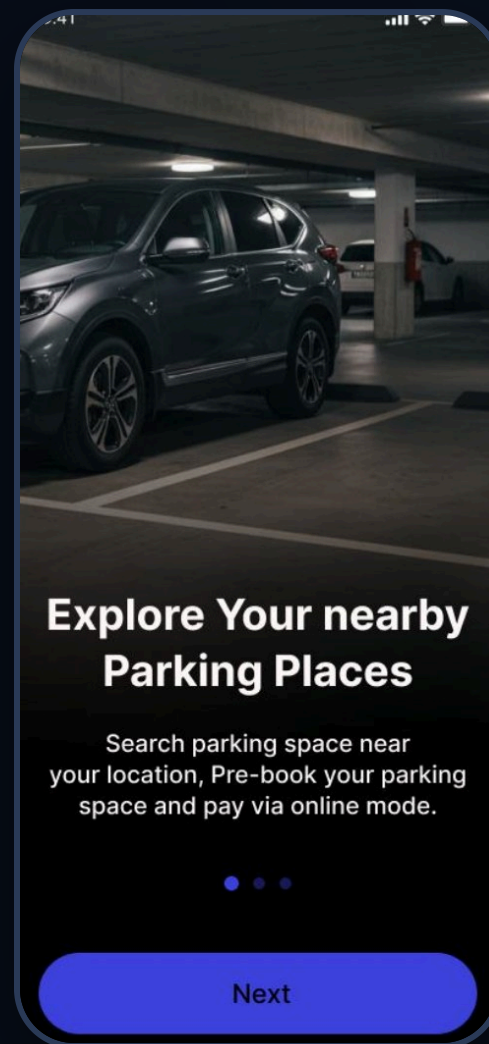
[View interactive prototype ↗](#)

1 Pricing shown earlier

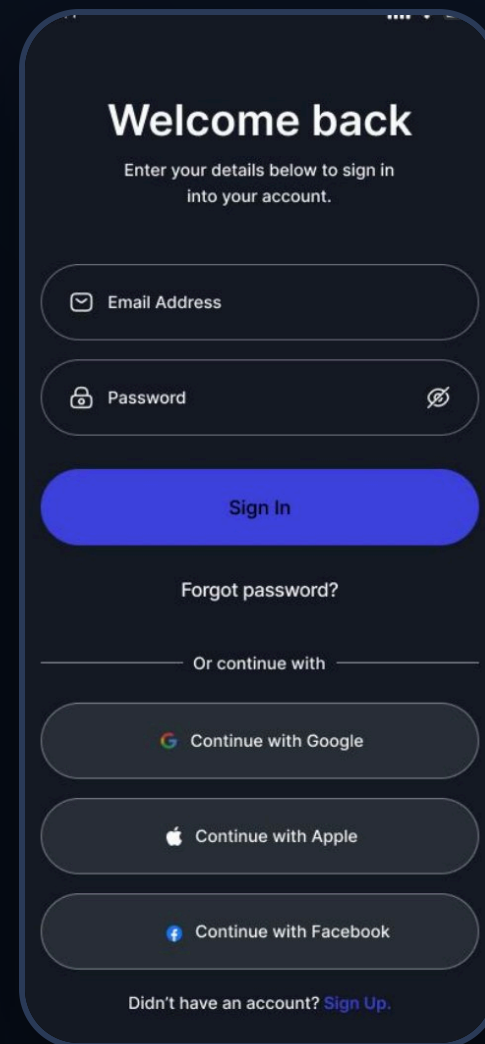
2 Works with Google & Apple Maps

3 Faster sign-in

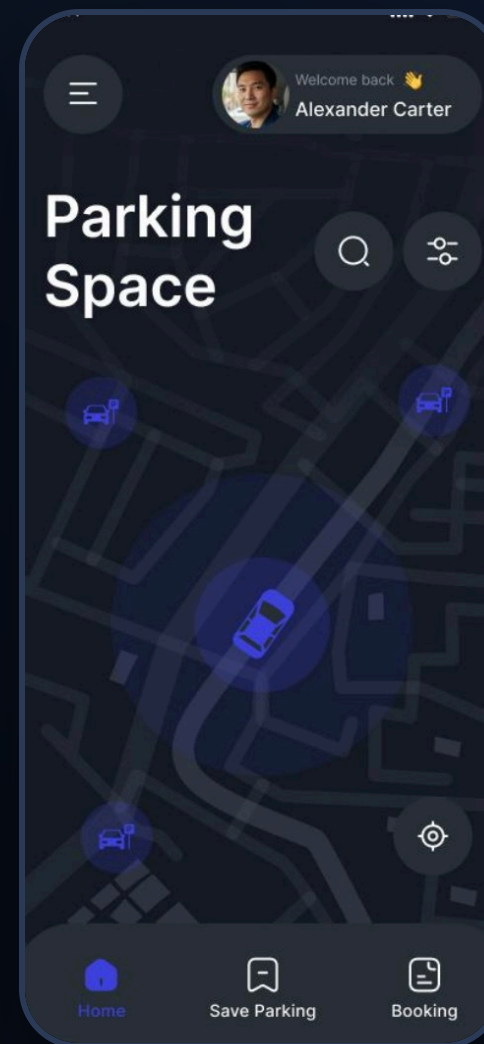
4 Share or gift a spot by text, email, or AirDrop



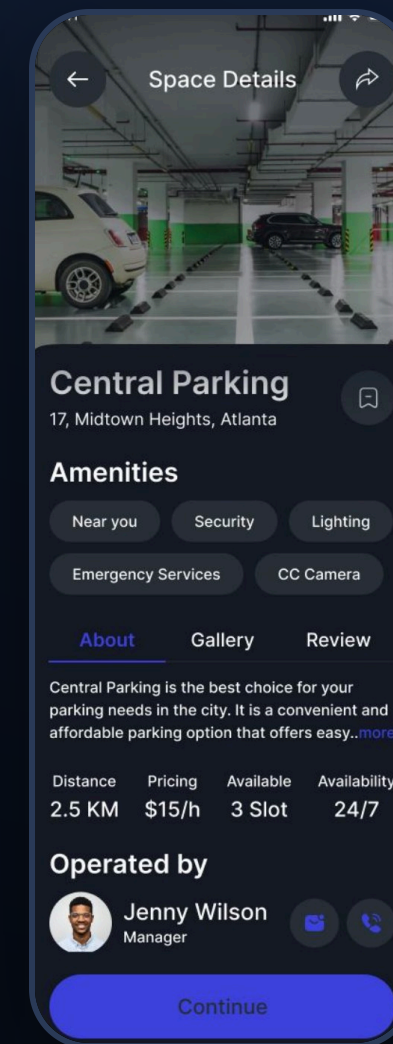
1 Onboarding



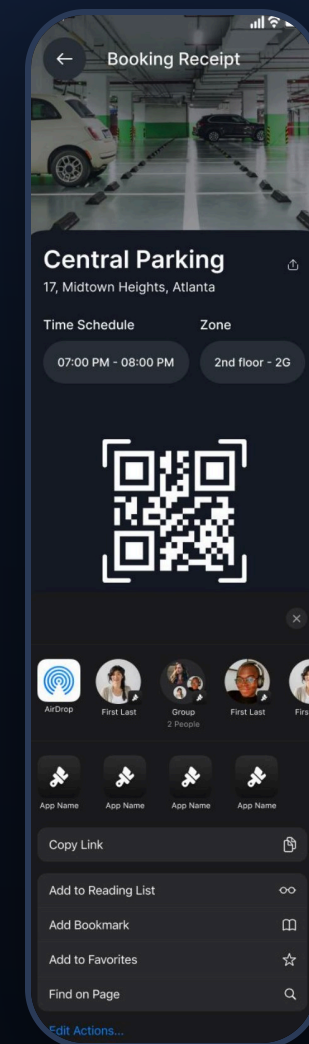
2 Sign-in



3 Navigation



4 Space details



5 Booking receipt

TESTING · ROUND 2

What users told us, and what I changed

INSIGHT	WHAT WE HEARD	DESIGN RESPONSE
Unreliable parking tools	Alexander and Christopher often switch apps because current tools feel inconsistent.	→ Availability and pricing surfaced earlier; simpler search flow.
Safety influences decisions	Ronesha and Wendy said lighting and location strongly affect where they park.	→ Safety cues and clearer location details on space selection screens.
Real-time availability reduces stress	Eric said knowing availability in real time cuts wasted time and anxiety.	→ Real-time indicators reinforced throughout the experience.
Sharing fits real life	Wendy and Ronesha valued easy ways to share parking details with others.	→ Added share & gift via text, email, or AirDrop.
Clean interfaces build confidence	All participants said simple, uncluttered screens make them feel in control.	→ Kept the interface minimal and focused.

✓ VALIDATION

Clarity, real-time accuracy, safety indicators, and sharing directly address users' biggest frustrations and make parking easier and more reliable.

FINAL EXPERIENCE

The Spot app

- ✓ Real-time availability
- ✓ Upfront pricing
- ✓ Map & list view
- ✓ Navigation integration
- ✓ Reservation confirmation

[Try the prototype ↗](#)

Design scope note

This prototype shows the intended experience. Real-time parking data would require future integration with parking operators or city systems.



WHAT'S NEXT

Roadmap

SHORT-TERM

- Improve GPS accuracy
- Add filters: price, distance, lighting
- Expand testing to 15 users

LONG-TERM

- Research with parking lot owners and city parking departments
- Design operator tools for availability, pricing, and data sharing
- Partner with city lots for real-time feeds
- Launch a pilot in Tampa / Orlando

REFLECTION

What I learned

TEST EARLY

Early user feedback shaped every major decision, from pricing placement to navigation.

DESIGN FOR FEELINGS

Parking frustration is emotional. Users need clarity, confidence, and simplicity.

SMALL CHANGES, BIG IMPACT

Something as small as showing the price upfront can transform the whole experience.

GROWTH

This project strengthened my user testing methods and design decision-making.



“I just want to know there's a **spot before
I leave the house.”**

Wendy Zuñiga, research participant

THANK YOU

