Parksense_

The parking app for Modena

By D. Bilardello, F. Melis, B. Grimolizzi

1. Research

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1.1 Context and motivations

Efficient parking search

New payment paradigm

1-click exprerience

Simplify the parking experience

1.2 Critical Issues and Opportunities

Critical issues

- Parking anxiety
- Uncertain parking duration
- Complexity of payment

Opportunities

- Real-time parking information
- Autonomous parking duration management
- Pay as you go

1.3 Assessments and Assumptions

Do you understand what the app is for?

What are the app's strengths?

Is the map easy to navigate?

Were you able to find what you were looking for easily?

What are the critical issues?

The three welcome pages are useful for getting started when using the app for the first time.

The teardrop-shaped map pins, both filled and empty, a really smart solution, especially for colour-blind accessibility.

The app's strengths are its simple parking search and automatic parking management.

The legend is very useful for navigating the map and quickly finding free areas.

I preferred to see the occupancy of each parking space individually.

It's so convenient to view the restricted traffic zone and monuments in a city I've never visited!

In my opinion, the column should also accept coins.

2. Benchmarking

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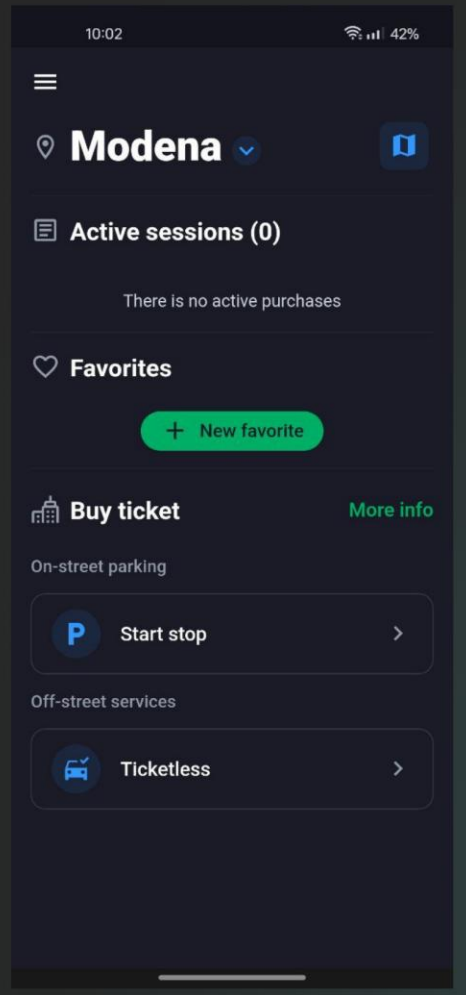
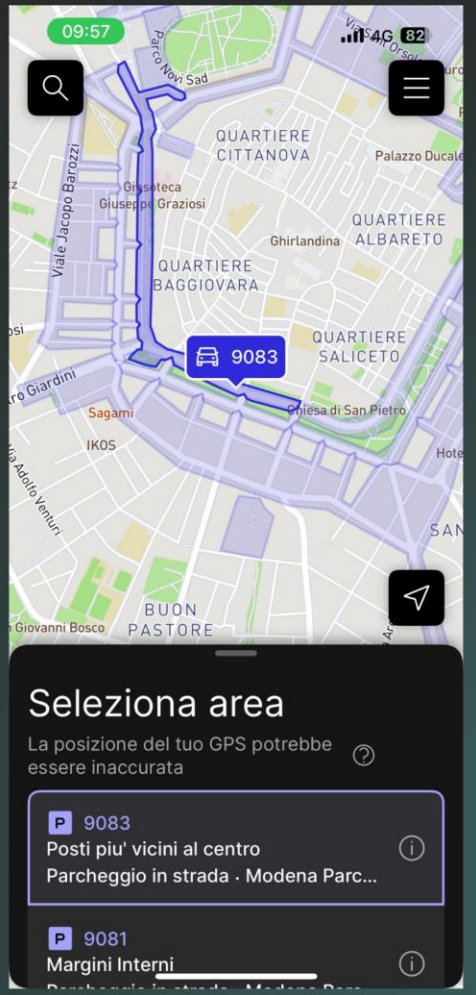
2.1 Benchmarking - Competitor

	Map with parking areas	Select parking duration	Flexibility of parking duration	AI prediction	Column integrated	Customisa-ble map	Integrated navigation in app	Level of use of zones	Support for other cities	Ticketless undergro-und parking
ParkSense	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗
EasyPark	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓
MoneyGo	✓	✓	✗	✗	✗	✗	✓	✗	✓	✗
BMove	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓

2.2 Benchmarking - Inspiration





3. Personas

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3.1 Personas

Antonio, the parking engineer

Antonio is an engineering student who struggles to find parking at his university every day.

Background:
- An ordinary citizen of Modena.
- Fairly tech-savvy.

Objective:
- To park quickly and stress-free.

Key action:
- Check parking availability.
- Drive to the car park.
- Park and start the session.
- Leave the car park.

Sebastiano, the tech taxi driver

Sebastiano is a tech-savvy taxi driver who doesn't want to waste time and wants to maximise his rides.

Background:
- A worker who uses ParkSense to optimise his work.

Objective:
- Find a free taxi slot.

Key action:
- Search for a free taxi slot.
- Head to the slot and occupy it while waiting for the next ride.

Emily, the smart traveller

Emily is a tourist who loves culture and gastronomy; she has rented a car and wants to explore Modena!

Background:
- A tech-savvy tourist who wants to find out about parking and attractions in Modena.

Objective:
- Discover points of interest and nearby parking spaces

Key action:
- Open the map and view attractions
- Discover nearby parking spaces and park without entering the restricted traffic zone

4. Idea

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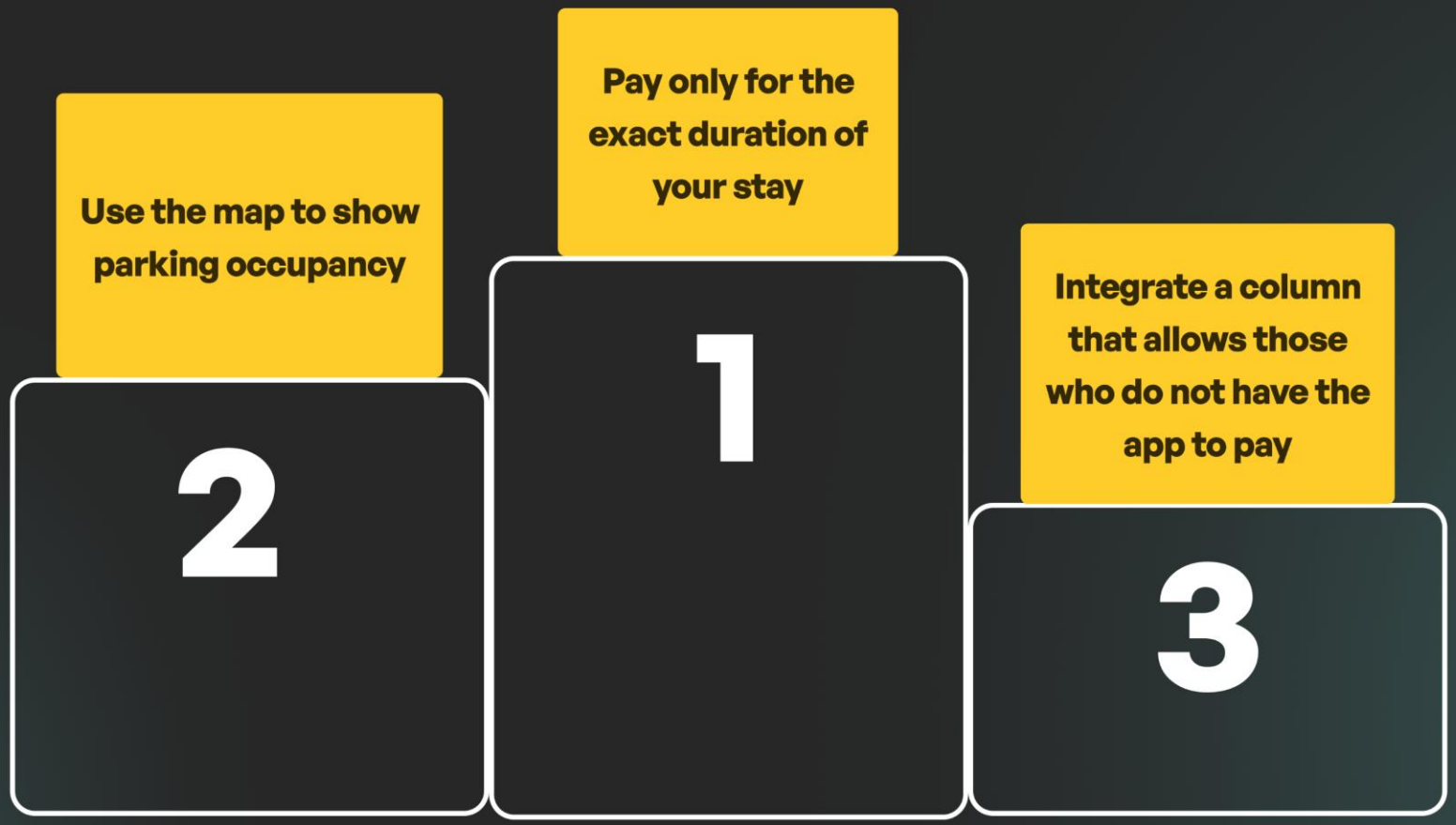
4.1 Big Idea


Use the map to show parking occupancy
Pay only for the exact duration of your stay
Integrate a column that allows those who do not have the app to pay
2
1
3

4.2 Other Ideas

Possibility to customise the app according to user needs

Predicting parking availability with AI

Implement the navigation system within the app map

Allow users to have multiple license plates and payment methods associated with their account.

Search for a specific address on the map

5. Design system

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5.1 Modern Style

Style characteristics

Elements

- Shapes: Rounded, square, or mixed edges.
- Shadows: Few, short, and subtle to give depth.
- Colors: Subtle gradients or flat/ monochromatic color palettes.
- Typography: Clean and legible fonts with a clear hierarchy.
- Icons: Simple, minimalist, and intuitive.

Spacing and Visual Hierarchy

- White space: Extensive use for clarity and focus.
- Alignment: Precise for order and harmony.
- Visual hierarchy: Clear distinction between primary and secondary elements.

Interaction and Feedback

- Visual feedback: Immediate response to every touch/click.
- Navigation: Clear, intuitive, and predictable structures.
- Simplification: Elimination of superfluous elements to reduce cognitive load and focus on content.
- Accessibility

5.2 Palette - Typography - Icons

Main

Robin egg blue
#63CCCA

Accent

Dark red
#733945

Background

Onyx
#35393C

Shades

Typography

General Sans

Icons

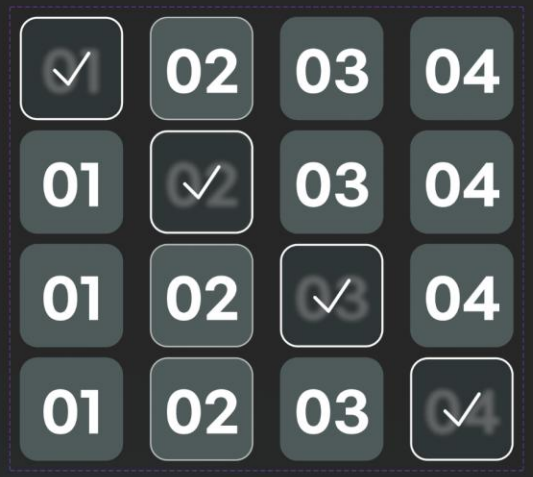
- Map
- Sessions page
- Zone not very full
- Zone almost full
- Full zone

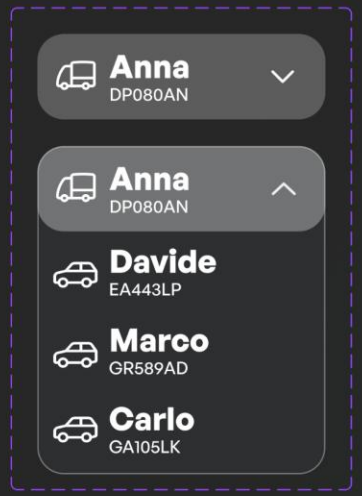
5.3 Logo

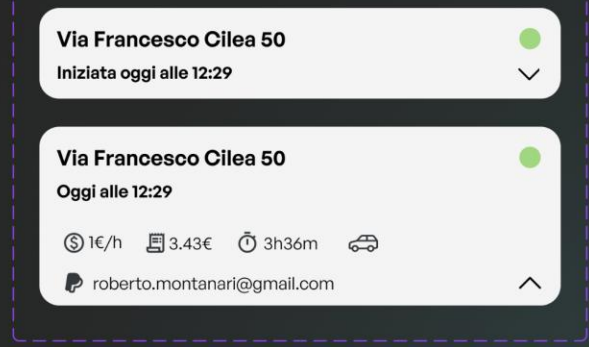
Selected idea

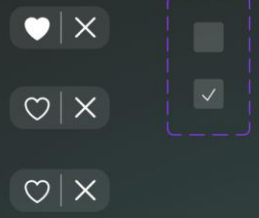
Discarded ideas

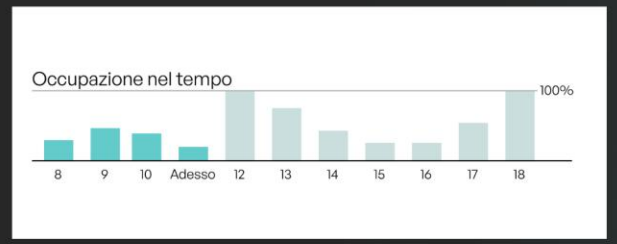
5.4 Components and variants











6. User Journey map

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6.1 User Journey

USER INFO
Emily, the American tourist

SCENARIO
He rented a car and wants to visit Modena's points of interest during his vacation.

EXPECTATIONS
You expect to find free parking spaces near points of interest, with routes and an easy way to pay.

STAGES	STAGE 1	STAGE 2	STAGE 3
GOALS	Find parking near points of interest	Start the parking session	Leave the parking lot and pay
ACTIONS	1. Explore points of interest 2. Drive to free parking using our integrated navigation system	1. Park 2. Start the parking session by clicking “Start” on the app.	1. Get in the car 2. Leave the parking lot
THOUGHTS	1. What do I want to visit now? 2. Let's check if there's a free parking space.	1. How do I pay? 2. How does it work?	1. How much did I pay? 2. Wow, I paid exactly for the duration of the parking.
PAIN POINTS	1. He doesn't know where there is a free parking 2. He doesn't know how to get to the points	1. He doesn't know how long he'll stay in that parking lot.	1. No one, because the user has just left the parking lot.
EMOTIONS			
TOUCHPOINTS	The user interacts with the app, the map, and the navigation system.	The user interacts with the sessions page and the parking spot on the map where they parked.	The user interacts with the notification that comes from the app.

7. Prototype

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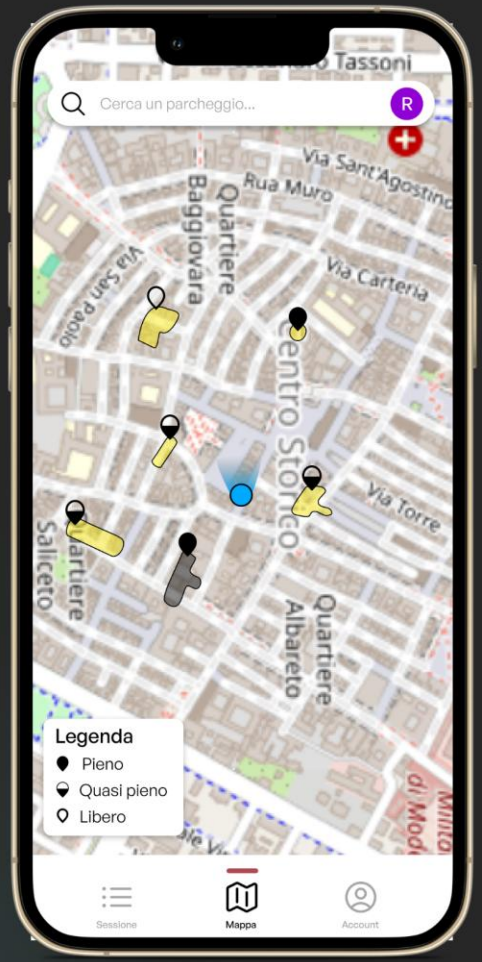
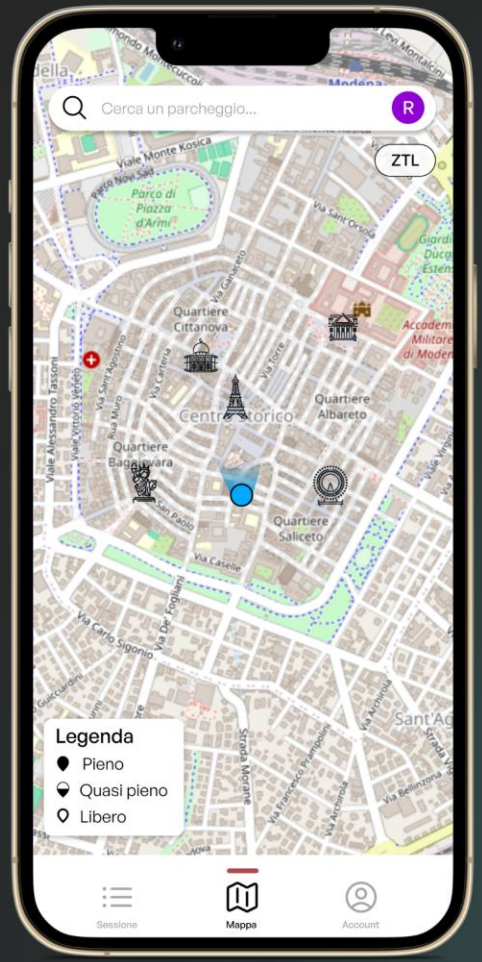
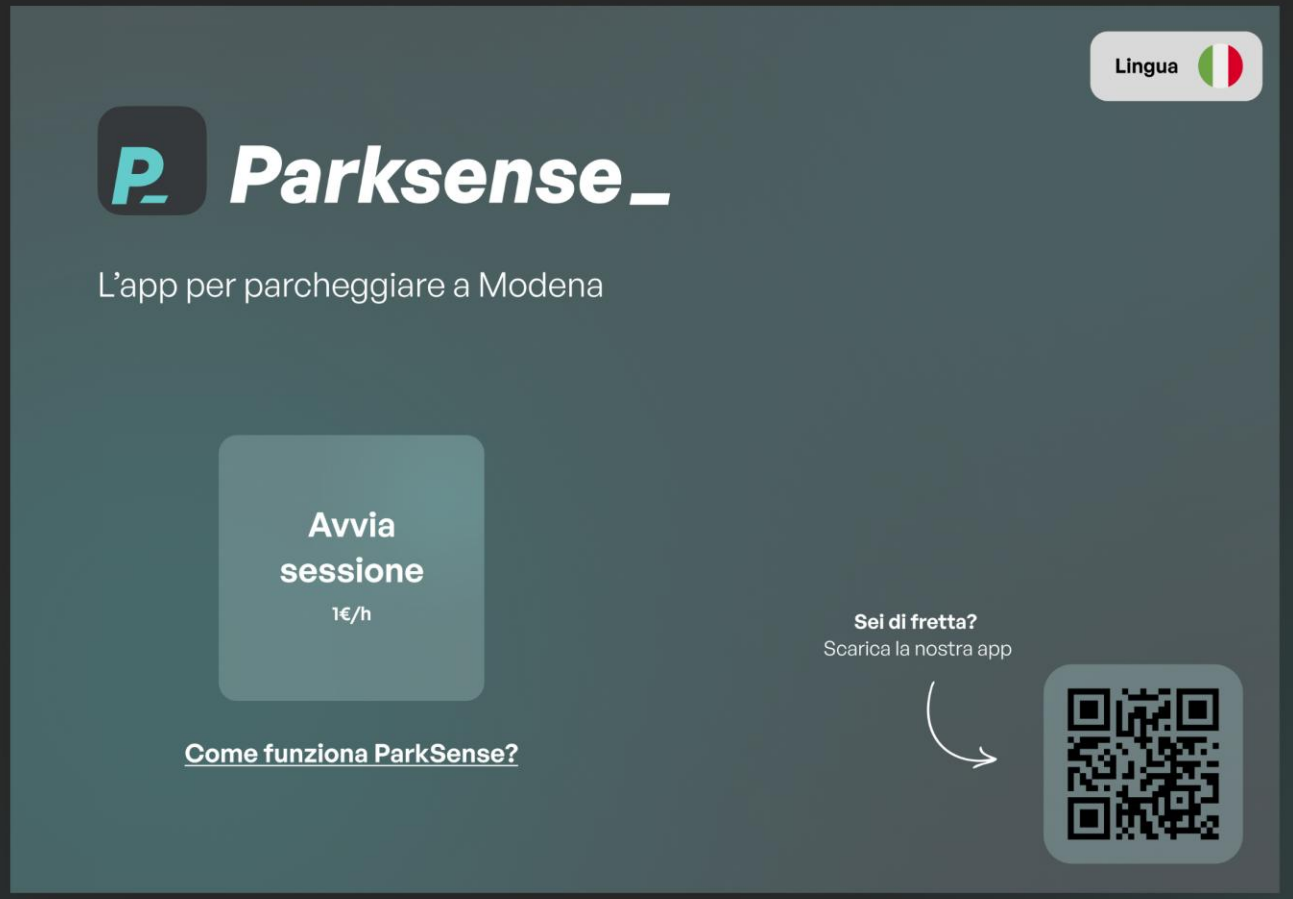
7.1 App Prototype

7.2 Taxi/Turisti Prototype App





7.3 Column Prototype



8. AI Revolution

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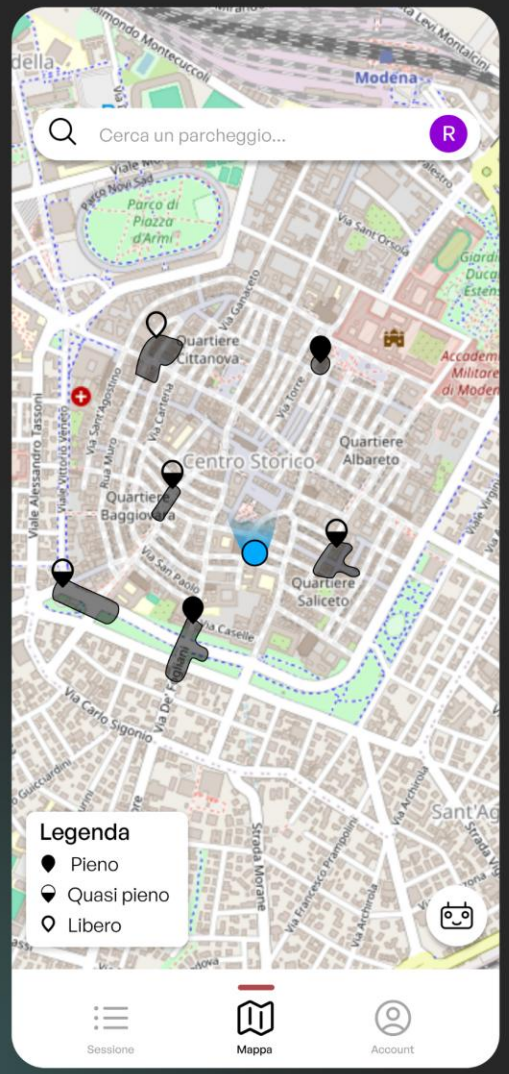
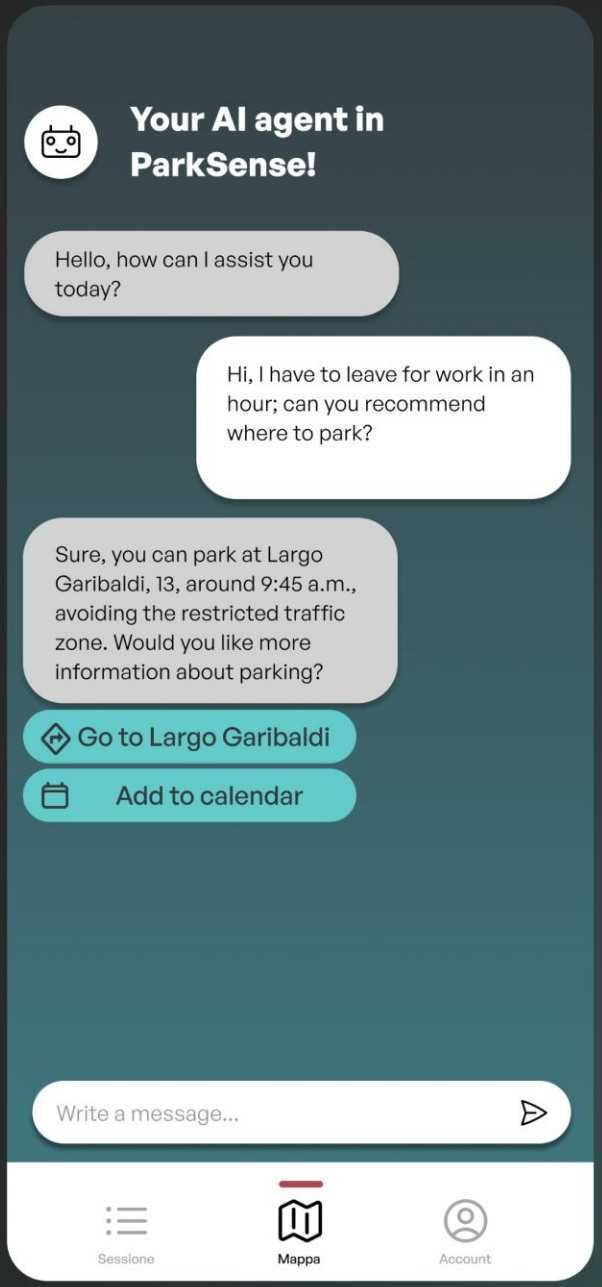
8.1 Generative AI in interfaces



AI Agent



Thank you for your attention.

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