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Checking available parking spaces in the city

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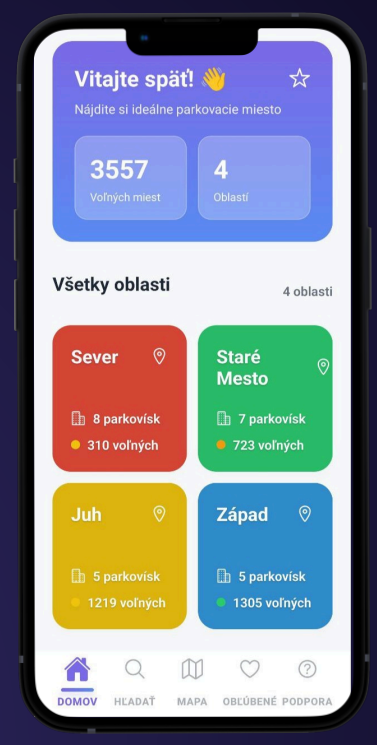
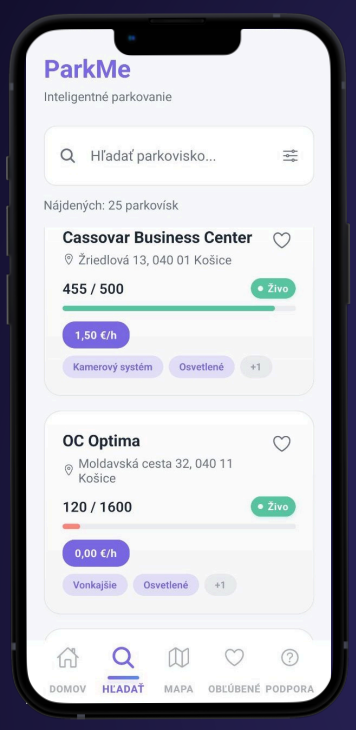
ParkMe



Description of the problem

Drivers in city centers often waste time looking for available parking spaces. Repeatedly driving around streets increases traffic congestion, emissions, and stress. At the same time, local governments need accurate data on parking capacity utilization to plan and optimize parking policies.

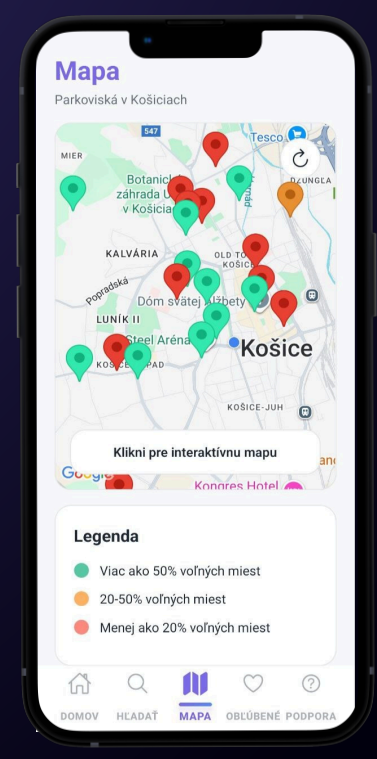


Features of the solution

- Map of available/occupied places + navigation
- Filtering: short-term, long-term, closed
- Real-time updates
- Parking lot/zone details: capacity, free spots, opening hours
- Zones statistics: utilization over time, peaks, trends

Evaluation and status of the solution

The implementation covers all key project requirements, displaying parking availability on a map, filtering by parking type, and navigating to the selected parking lot.



Solution architecture

We obtain occupancy data using YOLO.
The backend in FastAPI processes it, stores it in SQLite, and provides it to the mobile application in React Native via REST API. A web admin panel with statistics is also available.

TS · Python · React Native · FastAPI · Google Maps · SQLite · REST API · YOLO

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