# PAKING MANAGEMENT

## SYSTEM

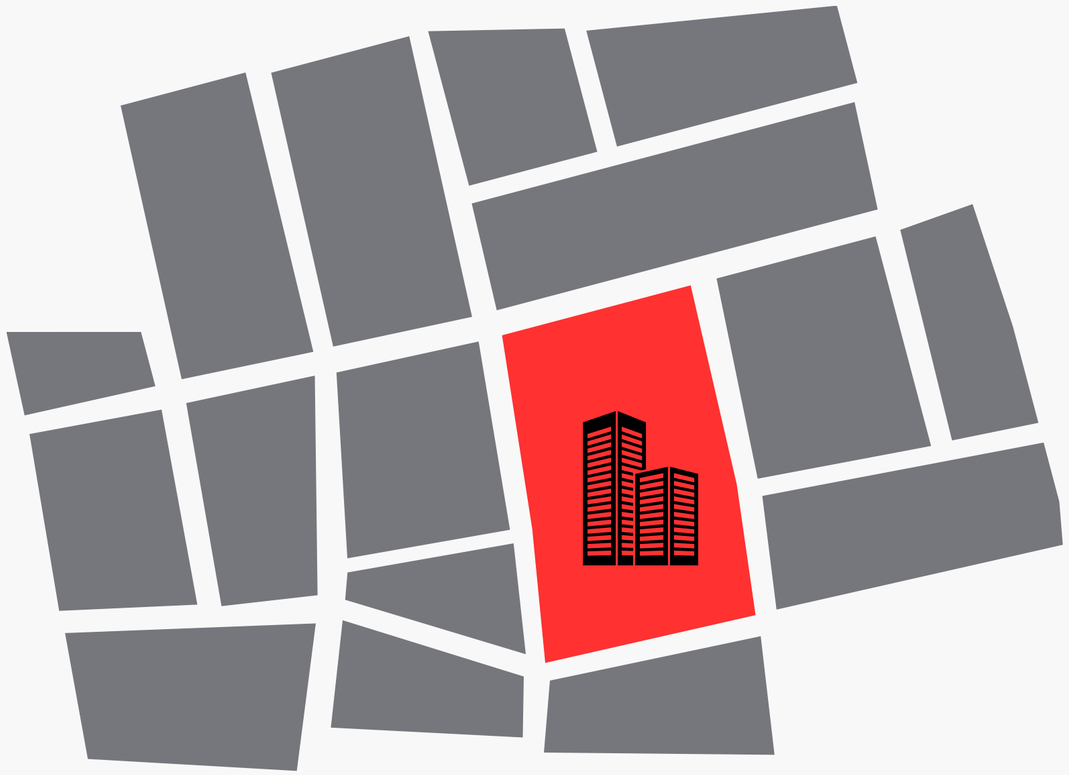
# INTRODUCTION: THE PROBLEM

URBAN CHALLENGE


TRADITIONAL METHODS

TRACEABILITY

# PROPOSED SOLUTION



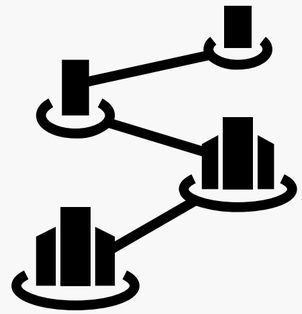
- Low-cost digital application
- Otimizes the entry and exit registration process
- Efficient management of available space.
- Traceability Record

# DEFINITION AND PLANNING

**Business Model Canvas:** Defined the target audience (parking lot administrators), the value proposition (automated registration and space control), and revenue streams (license, subscription, or installation).

**CRC Modeling:** Identified the main classes (Vehicle, User, Register, Slot, Area, Fee) and their responsibilities.

**User Stories:** Capture the administrator's needs, such as vehicle entry/exit, space availability, and authentication.



# APPLICATION DESIGN AND UI PROGRESS

- **UML Class Diagram**: Defined the classes User, Vehicle, ParkingTicket, ParkingLot, and ParkingSession, along with their relationships.
- **General Architecture**: Connection between Frontend (interface), Backend (business logic), and database.
- **Mockups**: Main system screens (home, user dashboard, and settings).

# CURRENT PROJECT STATUS

**Current Status:**

- Ongoing development of the interface.
- Implementation of vehicle entry and exit registration.
- Simulation of available space control.

**Immediate Next Steps:**

- Integrate functional validations.
- Conduct local testing.
- Adjust the interface based on usability test results.

# RESULTS

## Short-term Goals:

- Real-time visual control of the parking lot.
- Elimination of manual records.
- More agile workflow for the operator.

## Medium-term Goals:

- Implement basic user authentication.
- Adjust the system for different parking lot sizes.

# CONCLUSIONS

- A SIMPLE TECHNOLOGICAL SOLUTION CAN IMPROVE EVERYDAY PROCESSES.
- THE SYSTEM DEMONSTRATES EFFICIENCY WITHOUT REQUIRING ADVANCED RESOURCES.
- THE MODULAR DESIGN FACILITATES FUTURE EXPANSION (E.G., AUTHENTICATION OR REPORTS).

# THANK YOU

## WORK TEAM

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