PROJECT PARKING LOT

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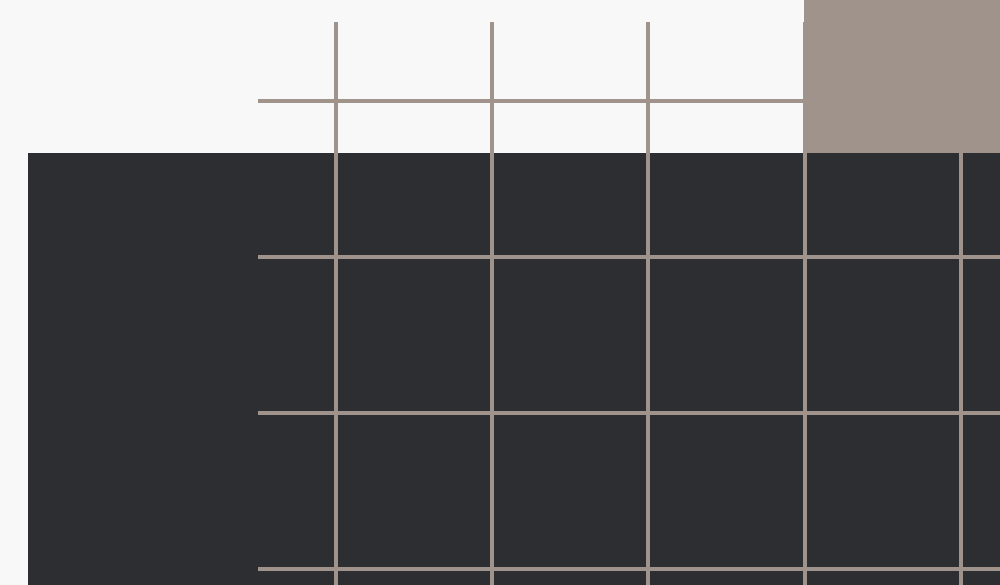- EMILY CALLE
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PROBLEM STATEMENT

Residential complexes and buildings often face difficulties managing the entry and exit of vehicles when parking spaces are rented. Currently, most parking management processes are handled manually, leading to:

- Lack of accurate records of vehicle movement.
- Confusion over space assignments.
- Delays when verifying rental status or availability.

This creates a need for an automated system to improve administrative control, ensure security, and optimize time and effort.

PROPOSED SOLUTION

This project proposes the development of a Parking Control System (PCS) that automates vehicle entry and exit registration, assigns parking spaces dynamically, and stores all related information in a centralized database. The system will help administrators manage users, monitor real-time parking availability, and reduce manual errors. By digitalizing the process, the PCS aims to enhance security, efficiency, and overall management within the residential complex.
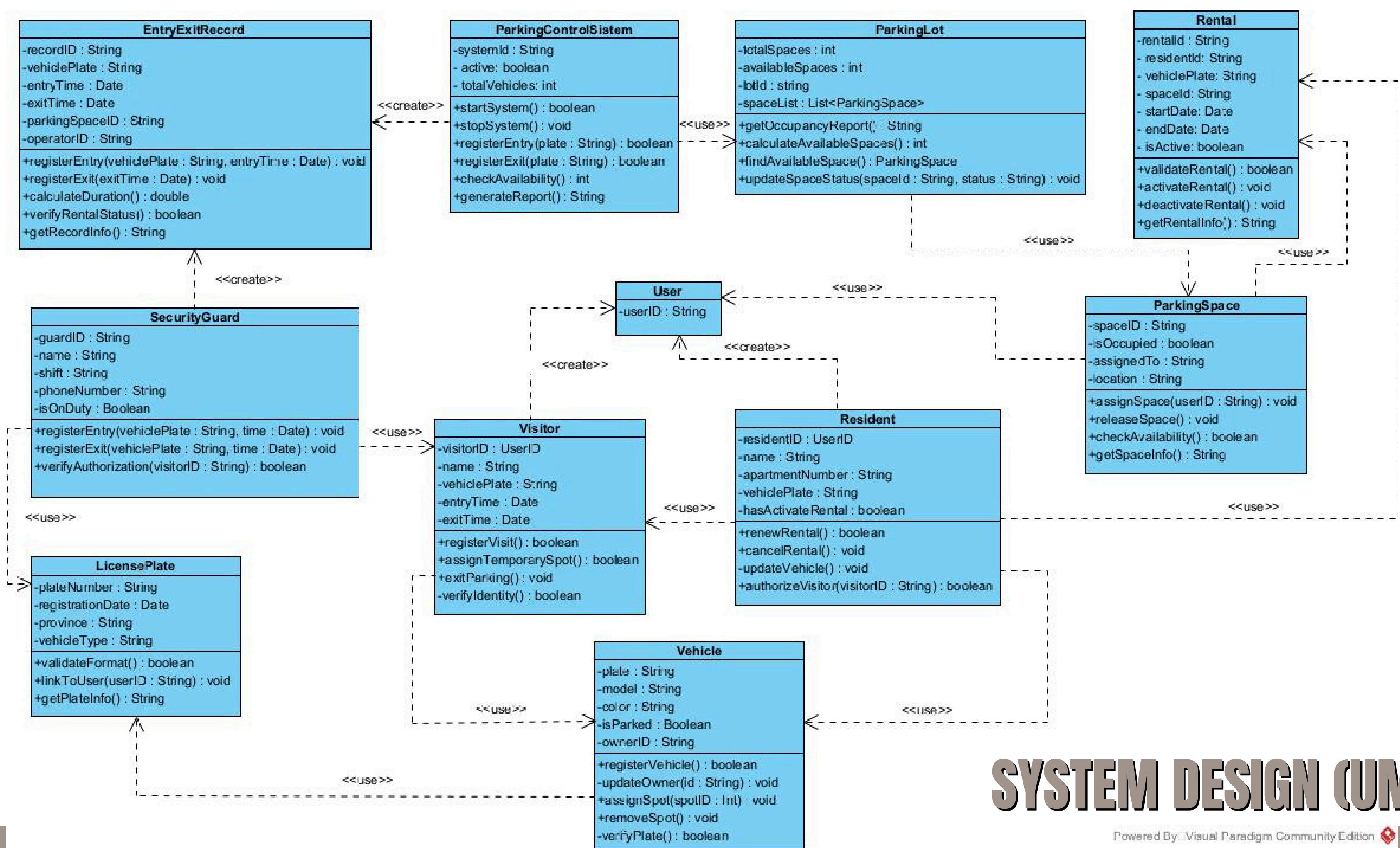
OBJETIVES

GENERAL OBJECTIVE

- To design a system that controls the entry and exit of vehicles, through the java programming language, optimizing the security, efficiency and management of parking lots in a housing complex.

SPECIFIC OBJECTIVES

- Create a database to register residents, vehicles, guards and parking spaces.

- Design interfaces and functional modules to facilitate control and report generation.

SYSTEM DESIGN (UML)

BENEFITS OF THE SYSTEM

1. For the Owner or Administrator of the Complex

a. Centralized and real time control

b. Increased security and traceability

c. Saves administrative time

d. Optimization of the use of space

e. Transparency and trust

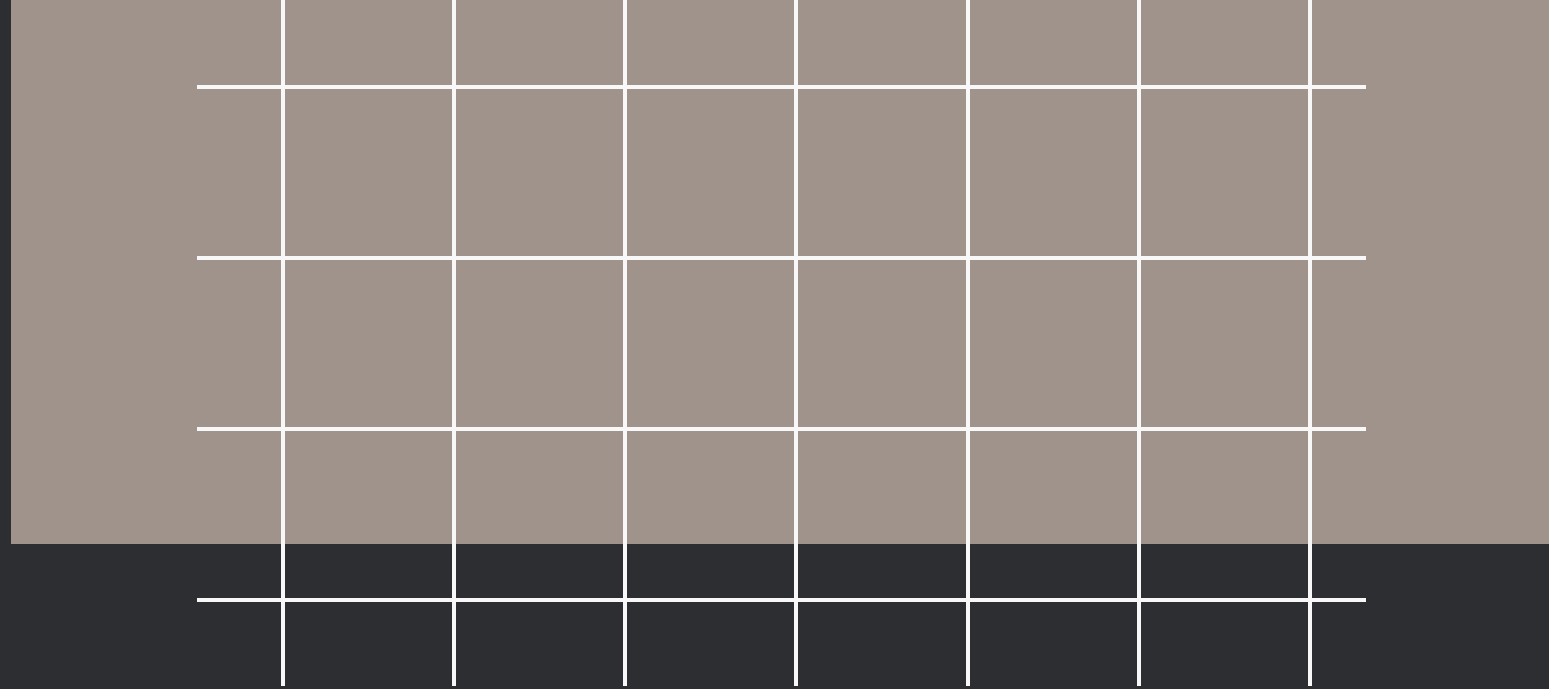**2. For the Guard or Security Personnel**

a. Fast and accurate logging

b. Identification of residents and visitors

c. Conflict reduction

d. More efficient shifts

e. Minimal training

3. For Residents or Users of Parking Lots

a. Increased security and access control

b. Convenience and speed

c. Transparency and trust

THANK YOU