

# Milestone 1

## *Advanced Distributed Systems Project*

Team: **Ctrl\_Alt\_Elite**

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**GitHub:** [https://github.com/tudorrrpop/ctrl\\_alt\\_elite](https://github.com/tudorrrpop/ctrl_alt_elite) (public)

**Trello:** <https://trello.com/b/N1t9sIdN/ctrlaltelite> (public)

### ***General Description & Features***

This distributed application is conceived to offer a complete car parking management solution across multiple stores of the same brand in a city. The application is designed to serve both driving users and store administrators.

The first category of users are going to use a mobile solution where they will register and login into an application and utilize a digital generated card to enter the parking space. The mobile component will have an AI module integrated. This AI model will be capable of offering responses to the users's questions, related to both the store parking lots and their availability and it will be capable of making predictions based on the history data. The interactions will take part through a chat interface.

A web component will also be available for the store administrators. They will be able to see the live state of the parking lots and several statistics regarding the traffic matters.

Each component will be hosted on a specific server in order to provide modularity.

### ***Technologies to be used***

→ **Servers:** Azure Services

→ **Backend:** Spring Boot (Java)

→ **Frontend:** Angular + NativeScript (TypeScript)

→ **Database:** MySQL

→ **AI Technologies:** LM Studio / Amazon Lex

→ **JSON Web Tokens**