

TorVerCar

Software requirement specification

Giulia Desideri, Marco Lo Mele, Giuseppe Marseglia

1. Introduction

1.1 Aim of the document

The aim of the document is to present our project “TorVerCar”. It will present the purpose and features of the system and what the system shall do.

1.2 Overview of the defined system

This system allows Tor Vergata University students that have a car to offer lifts to other students and give the others the opportunity to book these lifts. The aim of the system is to make the University easier to reach by students that can't use a private car and let lonely drivers to have more company.

1.3 Operational settings

“TorVerCar” should run on any Operating System and Browser that supports the JAVA Environment.

1.4 Related systems

Similar services are provided by BlaBlaCar and JOJOB: the advantage of our system is that the users are all students attending Tor Vergata University. This means that every morning lot of users will go to the same place, making the lift searching easier. Since it is only for students the system is more safe and overseen. One disadvantage is that to work properly it has to be used regularly by its users.

2. User stories

2.1 Desideri

- As a student, I want to view a list of available lifts, so that I can book one of them.

- As a driver, I want to declare my availability, so that I can offer a lift and not travel alone.
- As a driver, I want to add (and edit) text notes to my availability declaration, so that I can provide additional information about the lift.

2.2 Lo Mele

- As a student, I want a reputation system, so that I can avoid drivers with **bad reputation**.
- As a student, I want to communicate with **lift related students**, so that we can coordinate with each other (**eg. Meeting point, traffic and possible delay**).
- As a driver, I want to define a blacklist, so that I can avoid unpleasant students.

2.3 Marseglia

- As a student, I want to search for lifts that drop-off me before a certain time, so that I can arrive on time.
- As a student, I want to view which lifts I have booked, so that I can know when I depart and arrive.
- As a driver, I want to set the number of seats of my car, so that I can avoid having too many passengers.

3. Functional Requirements

3.1 Desideri

- The registration system shall retrieve users' personal information (eg. First name, last name, personal picture) from university database.
- The registration system shall allow the users to define their **car info**.
- The system shall allow the users to update their **profile**.

3.2 Lo Mele

- The login system shall request email or matriculation number, password and user role (moderator or student).

- The registration system shall request students their matriculation number, email, password, phone number and **routine information**.
- The registration system shall verify the matriculation number via university database.

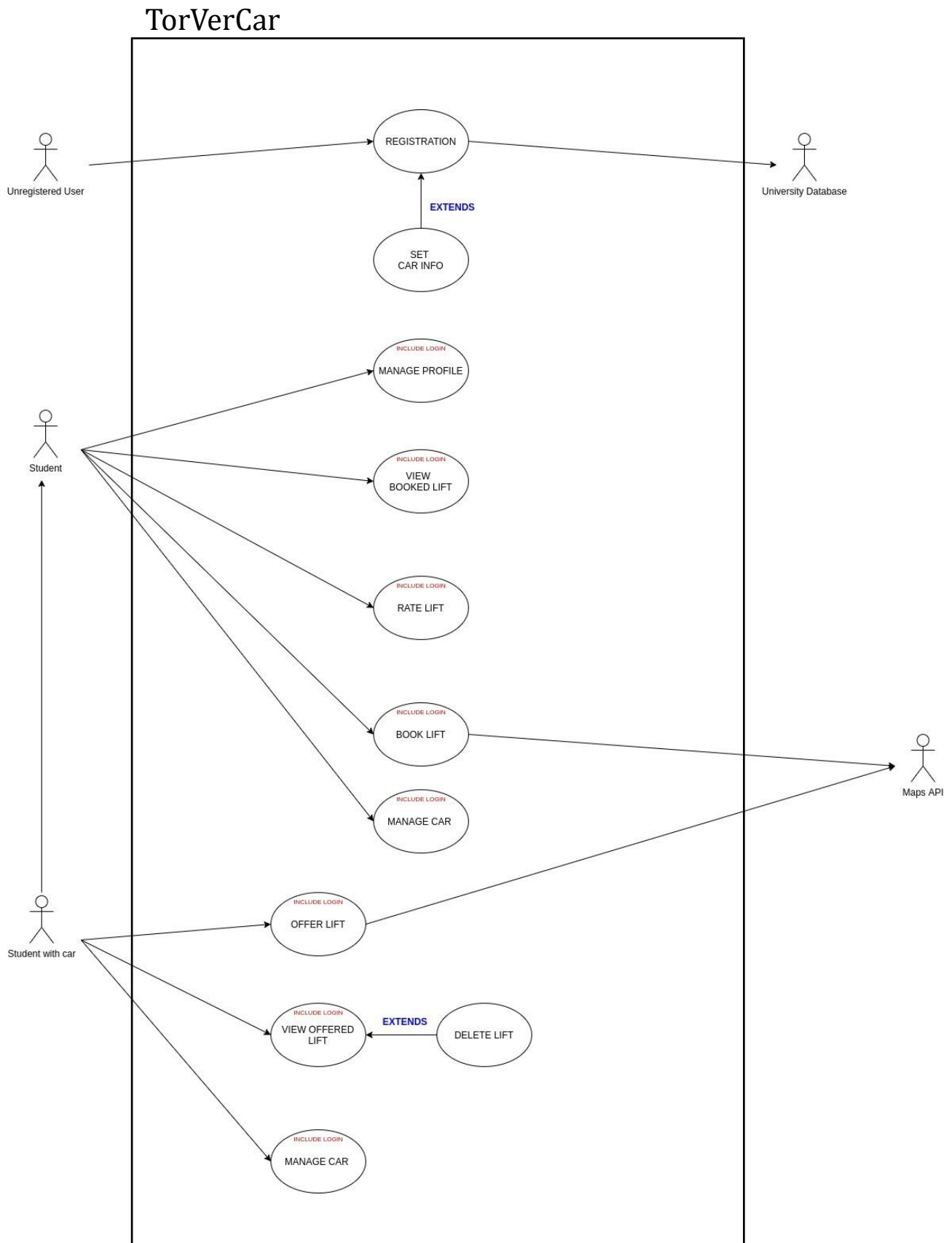
3.3 Marseglia

- The system shall allow the drivers to set the number of seats of their car.
- The system shall provide the students the list of their booked lifts.
- The system shall allow the students to search for lifts that drop-off them before a time specified by them.

4.Dictionary

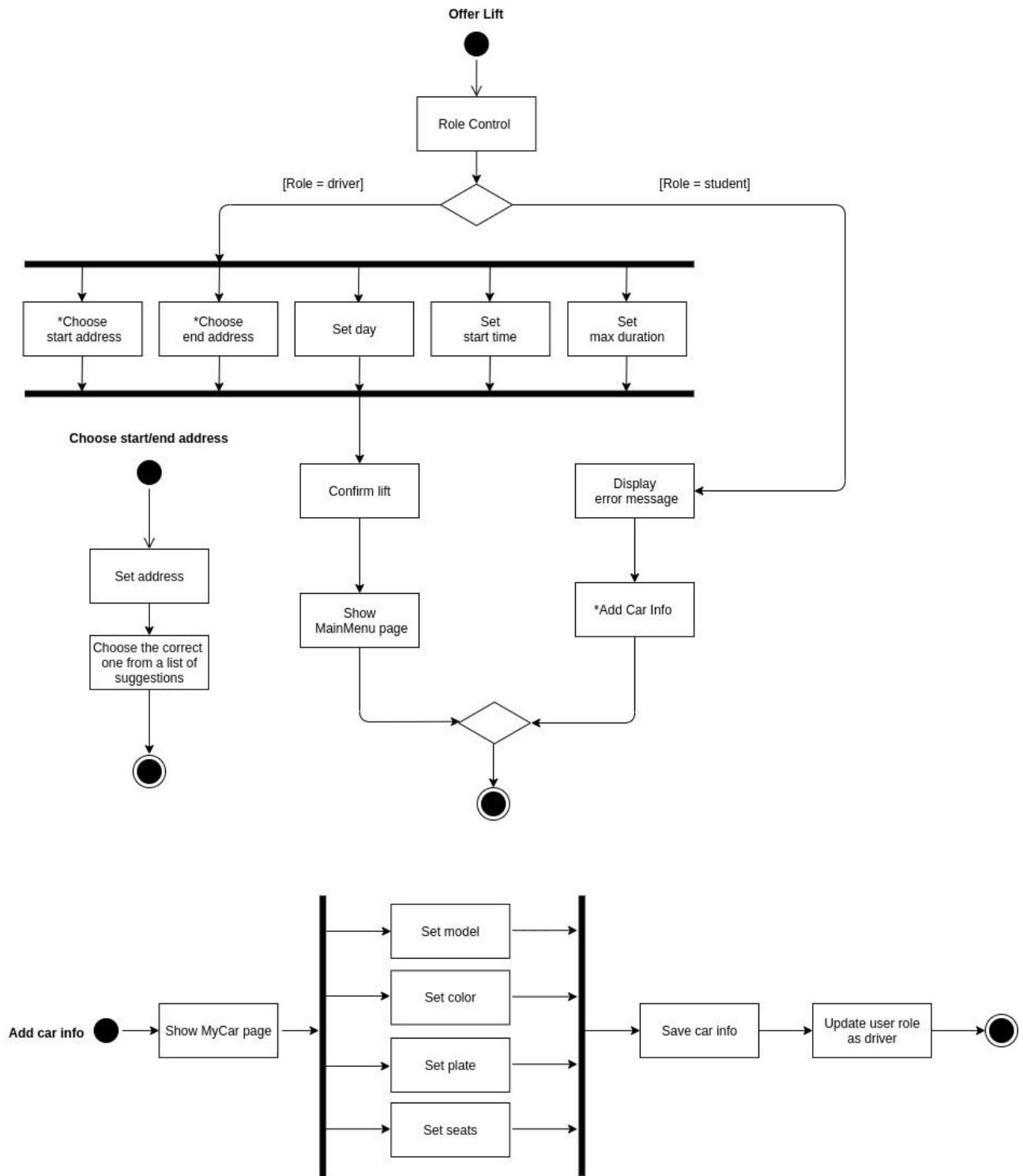
- Routine Information, includes:
 - Pick-up position
 - Class schedule
 - Drop-off position
- Car info, includes:
 - Seats availability
 - Car model
 - Car colour
 - Car plate
- Profile, includes:
 - Routine info
 - Car info
 - Blacklist
 - Personal info
 - Email, password and phone number
- Lift related students:
 - Passengers that have booked the same lift.
 - Driver of the lift.

5. Use Case Diagram

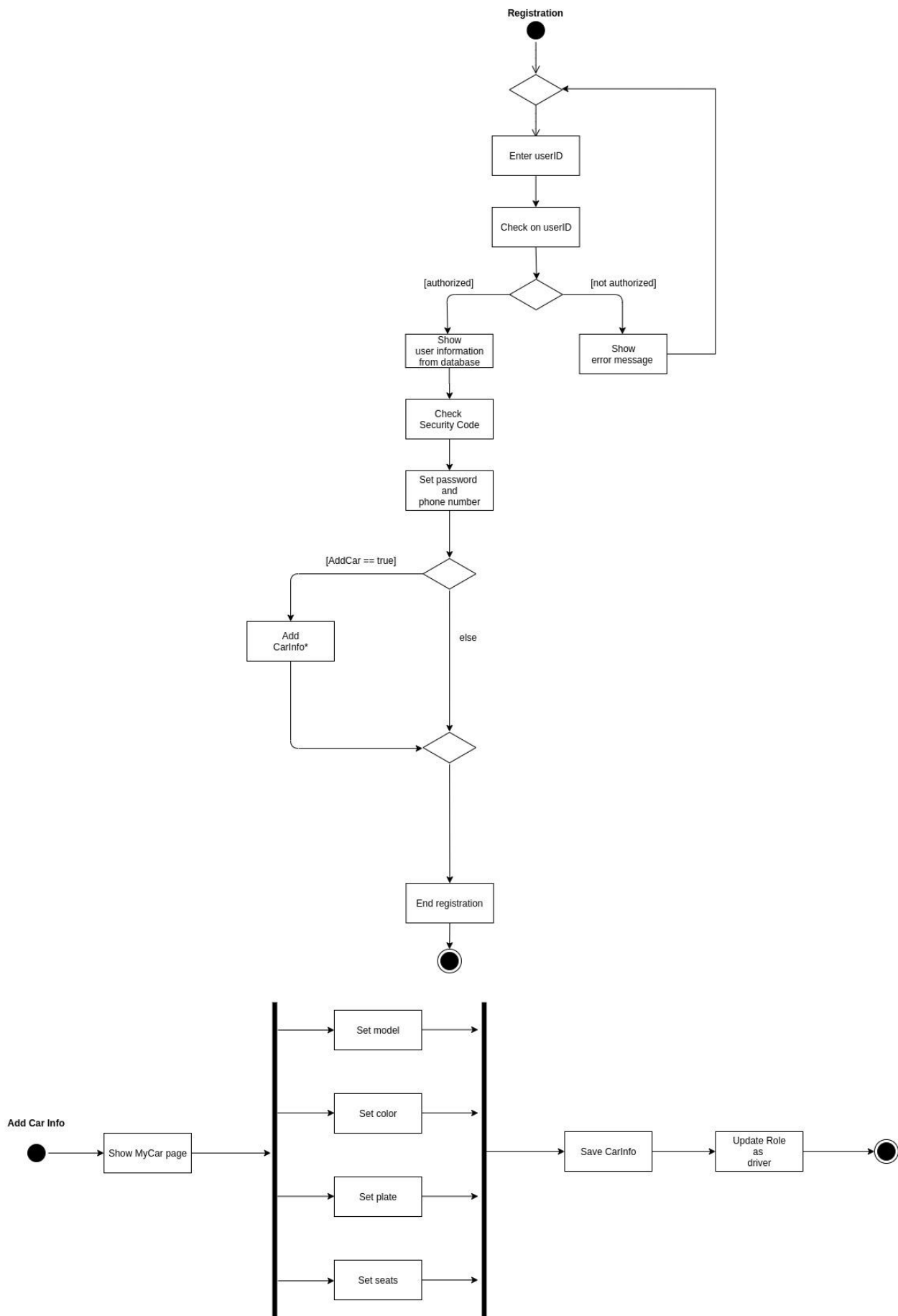


6. Activity Diagram

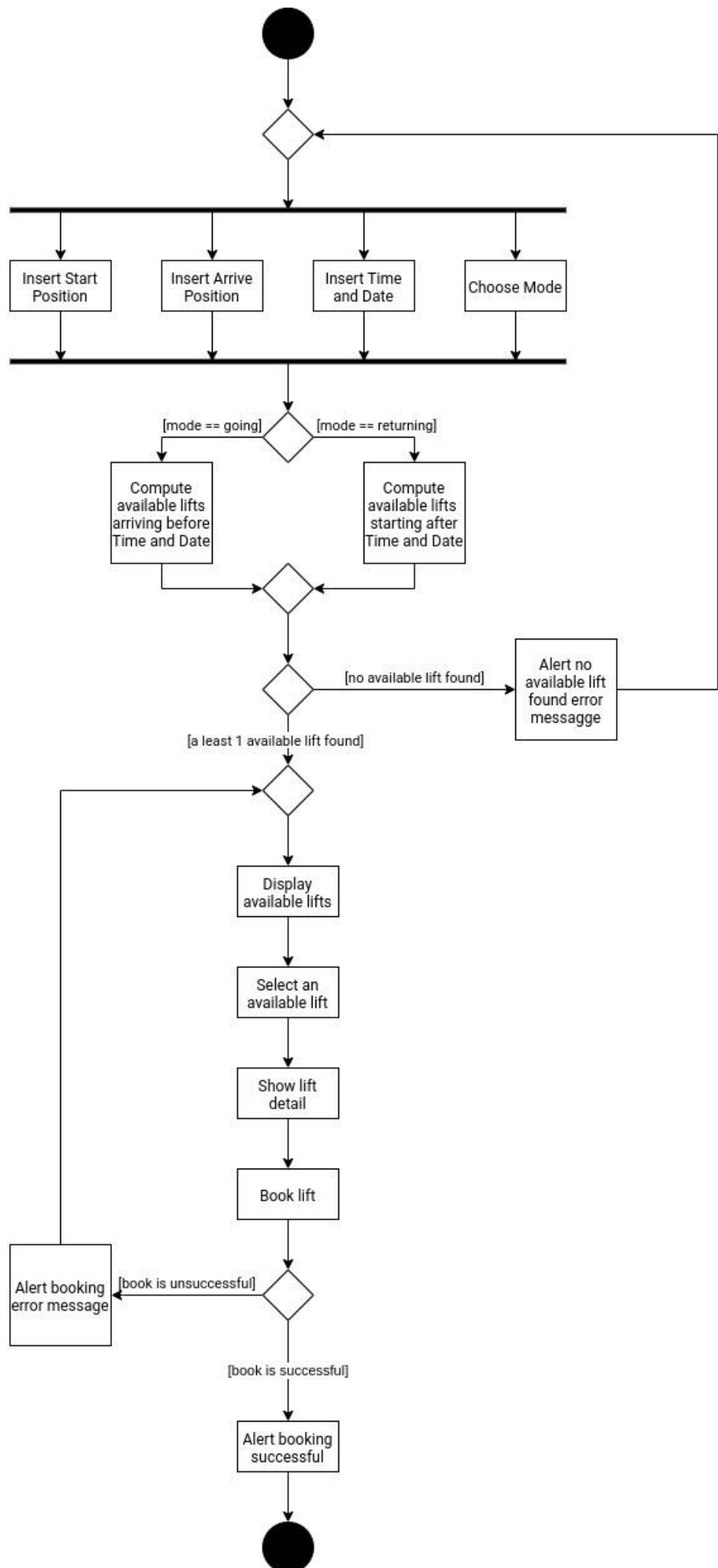
6.1 Desideri



6.2 Lo Mele

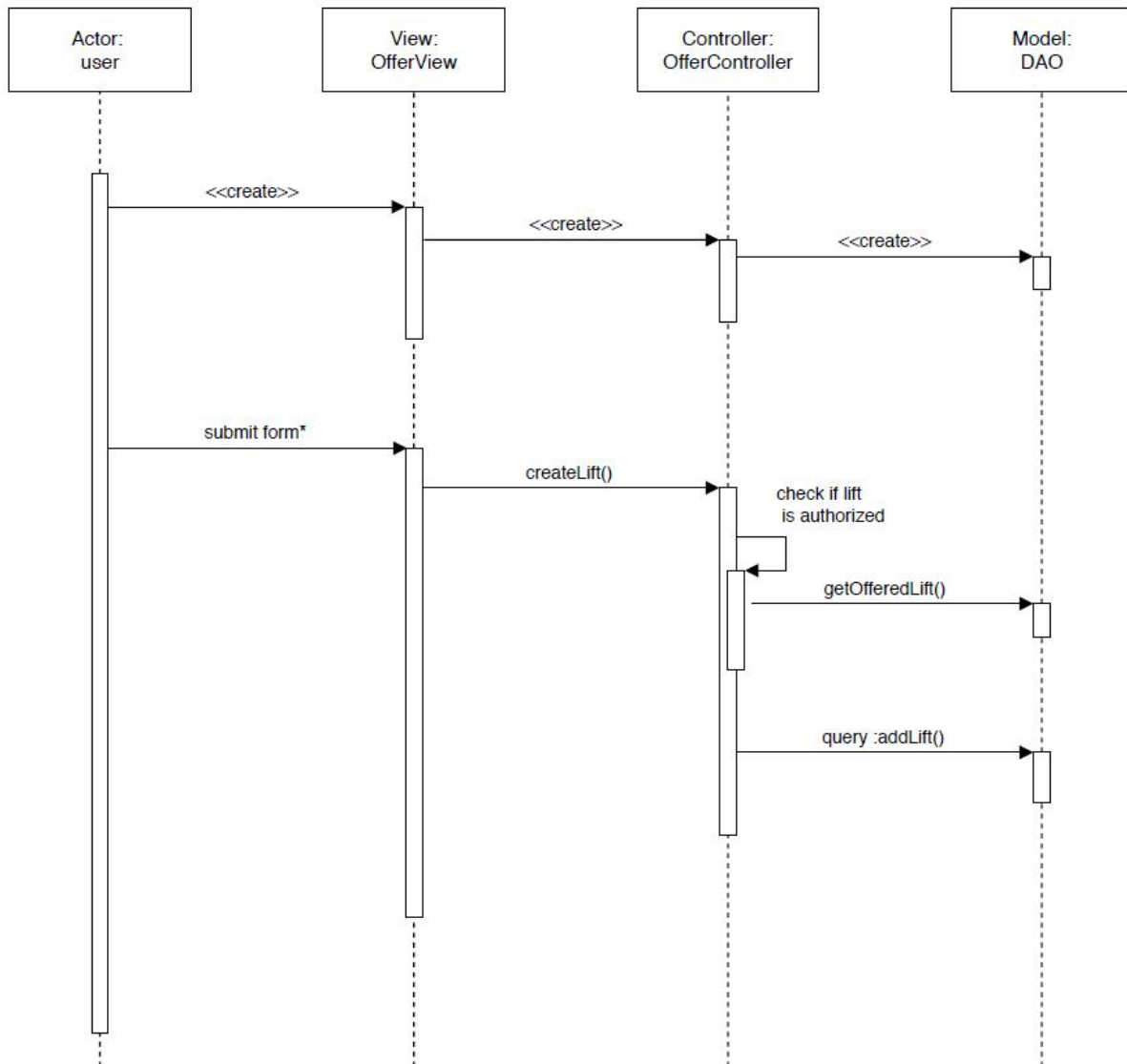


6.3 Marseglia



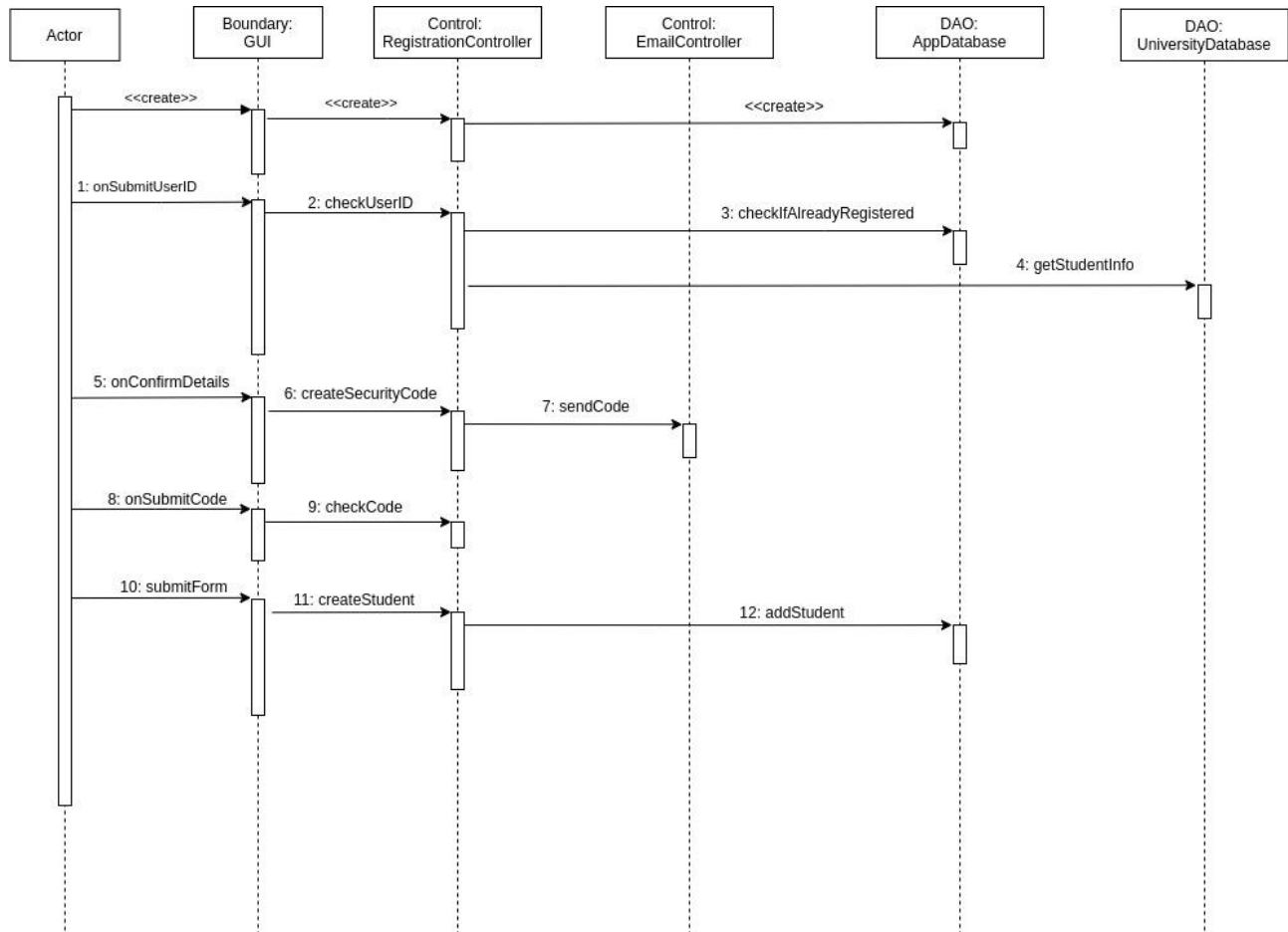
7. Sequence Diagram

7.1 Desideri

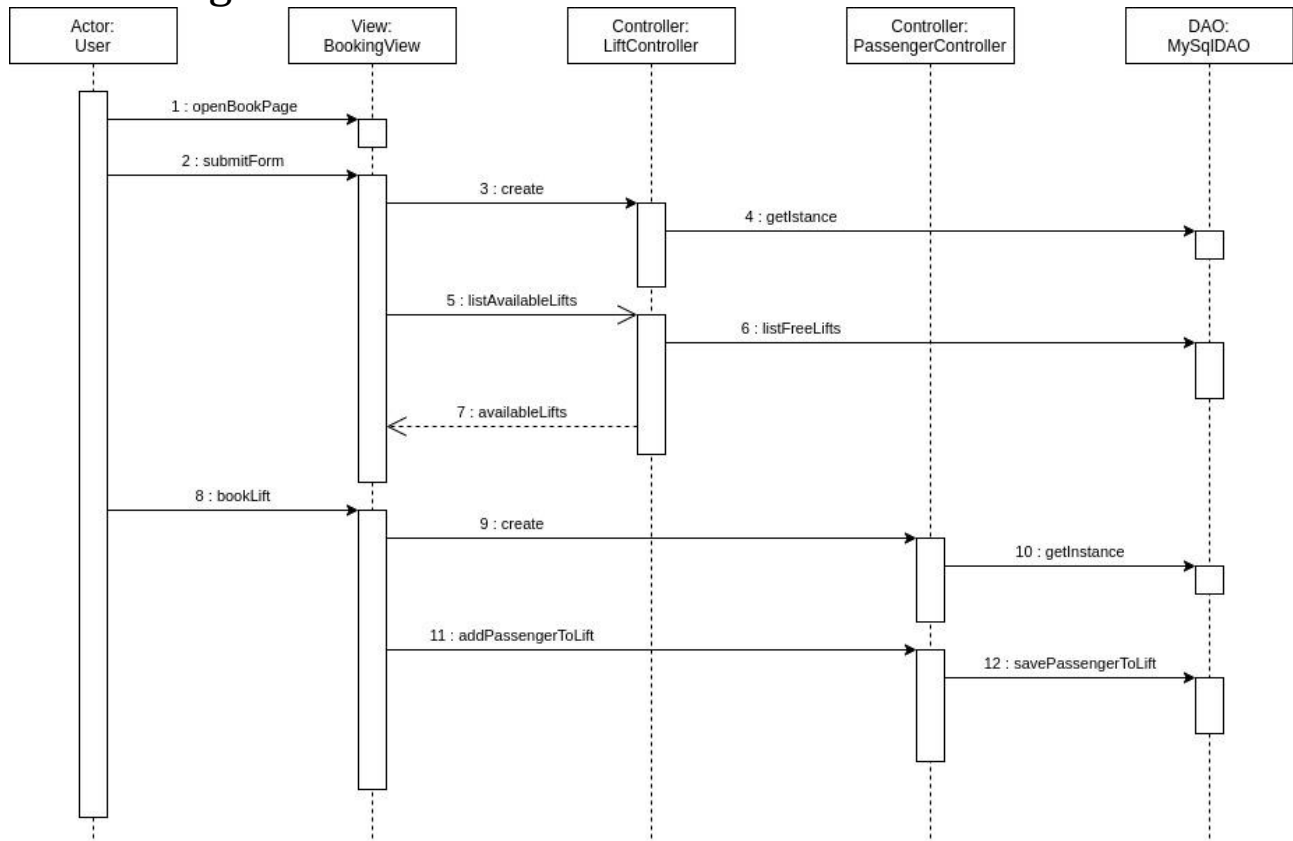


FORM: startAddress, endAddress, startTime, maxDuration, day.

7.2 Lo Mele

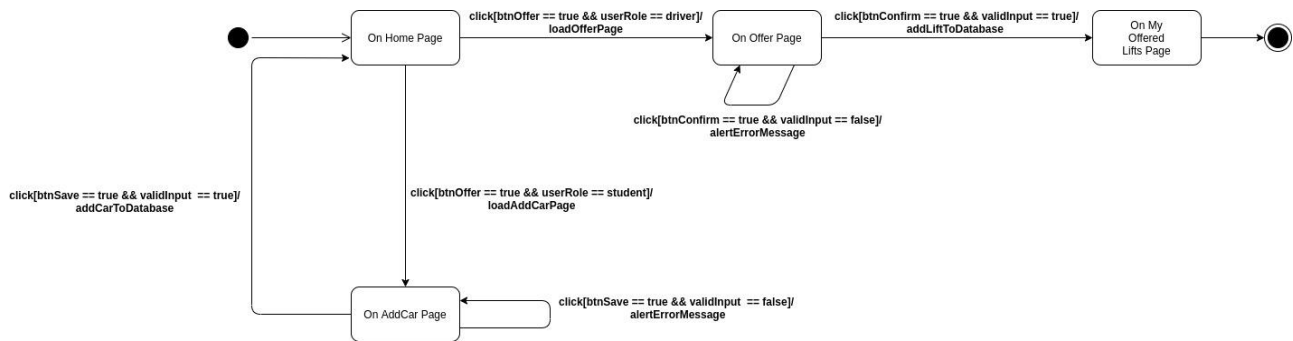


7.3 Marseglia

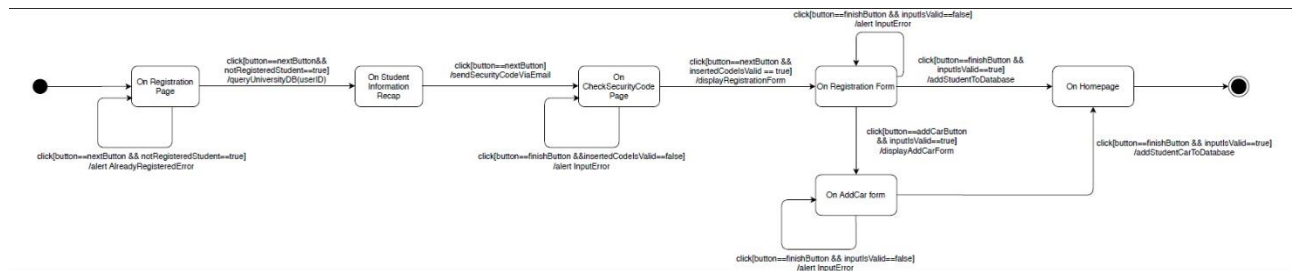


8. State Diagram

8.1 Desideri

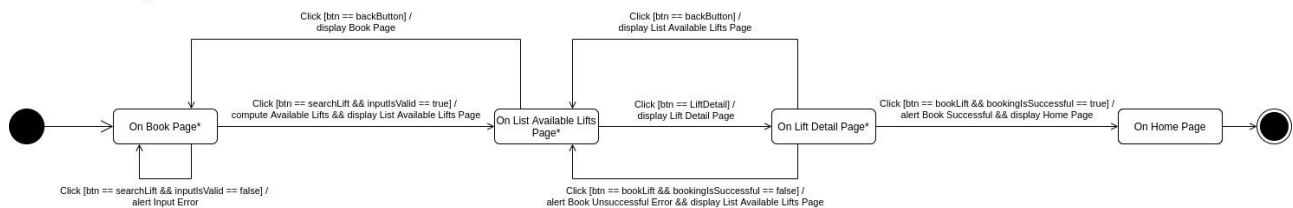


8.2 Lo Mele



8.3 Marseglia

State with *: Click [btn == homePage] / display Home Page



9. SonarCloud

https://sonarcloud.io/dashboard?id=Lomels_TorVerCar