Domain Description

This is a database design for a company that provides car-sharing services. Here below you can find the shall statements describing the system. Other files of the project archive contain the context and the use-case diagrams.

Shall Statements

- 1. *The system shall provide the ability for a customer to **register for an account** with the full name, a unique username, an email, the location of residence and the phone number.
- 2. The system shall provide the ability for a customer to **rent a self-driving car** to get from starting point A to destination B.
- 3. The system shall provide the ability for a customer to **pay for all services** of using a self-driving car with **a bank account**.
- 4. *The system shall store information about the company's charging stations: GPS location, amount of available sockets, price per some charging amount, shape and size of plugs, charging speed of each plug.
- 5. *The system shall store information about each self-driving car: a unique registration number, a model, specifications info, the rent price, charging plug type.
- 6. The system shall provide the ability for a customer to get **the nearest charging station**'s location using a **GPS** service.
- 7. The system shall provide the ability for charging stations to **charge** self-driving cars of customers for some **payment**.
- 8. The system shall provide the ability for **customers to pay** for charging their self-driving cars and the payment shall go to a charging station.
- 9. *The system shall store information about the company's workshops: GPS location, car parts available according to the car type, availability of timing.
- 10. The system shall provide the ability for workshops to **repair** self-driving cars of the company.
- 11. The system shall provide the ability for workshops to have several providers of car parts each of them providing with some types of car parts for some payment.
- 12. The system shall **fund workshops** for car parts that they **report** to purchase.
- 13.*The system shall identify each provider with a unique company id, a name, an address and a phone number.
- 14. The system shall provide the ability for the **administration team** to manage the system.

^{*} The shall statement with * (star) contain information about attributes. However, they might NOT be used in the context and use-case diagrams because, according to the styles of diagrams, it is not mandatory for entities to contain attributes.