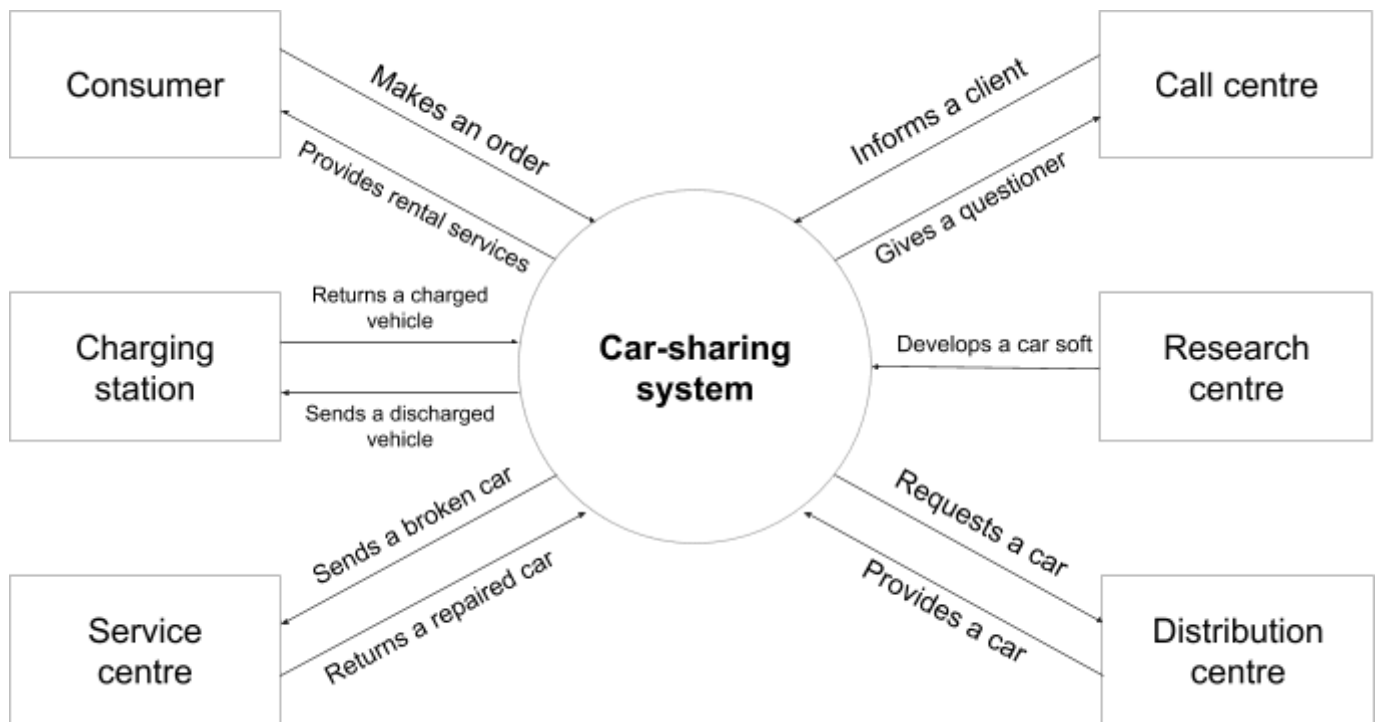# Data Modelling and Databases: Assignment 1

**Team**:

Irek Nazmiev, Kamilla Kryachkina,

**B17-05**

## Shall statements:

- The system shall provide the ability for customers to make an order, including the payment.

- The system shall find the closest available car and deliver it to the customer.

- The system shall notify a customer if the car is found and send its location and description.

- The system shall provide the ability for customers to leave feedback, which will be used in the research centre for car soft development.

- The system shall update the car soft as long as it is developed and provided by the research centre.

- The system shall provide the ability for customers to get answers on questions about the service and company from the call centre.

- The system shall provide the ability to find the closest charging station and charge the car.

- The system shall provide the ability to repair a car.

- The system shall provide the transfer of car parts from provider to the service centre.

# Context diagram:



Consumer — Makes an order → Car-sharing system
Car-sharing system — Provides rental services → Consumer

Call centre — Informs a client → Car-sharing system
Car-sharing system — Gives a questioner → Call centre

Charging station — Returns a charged vehicle → Car-sharing system
Car-sharing system — Sends a discharged vehicle → Charging station

Research centre — Develops a car soft → Car-sharing system

Service centre — Sends a broken car → Car-sharing system
Car-sharing system — Returns a repaired car → Service centre

Distribution centre — Requests a car → Car-sharing system
Distribution centre — Provides a car → Car-sharing system

# Use-case diagram



**Car-sharing system**

- Customer
- Call centre agent
- Researcher
- Repairer
- Provider
- Vehicle

Makes an order — <<include>> → Pays

Uses a vehicle

Answers the question

Asks a question

Sends feedback — <<extend>>

Develops car soft — <<include>> Analyses feedback

Updates car soft — <<extend>>

Repairs a car

Receives car parts

Provides car parts

Finds the closest station — <<include>> — Charges