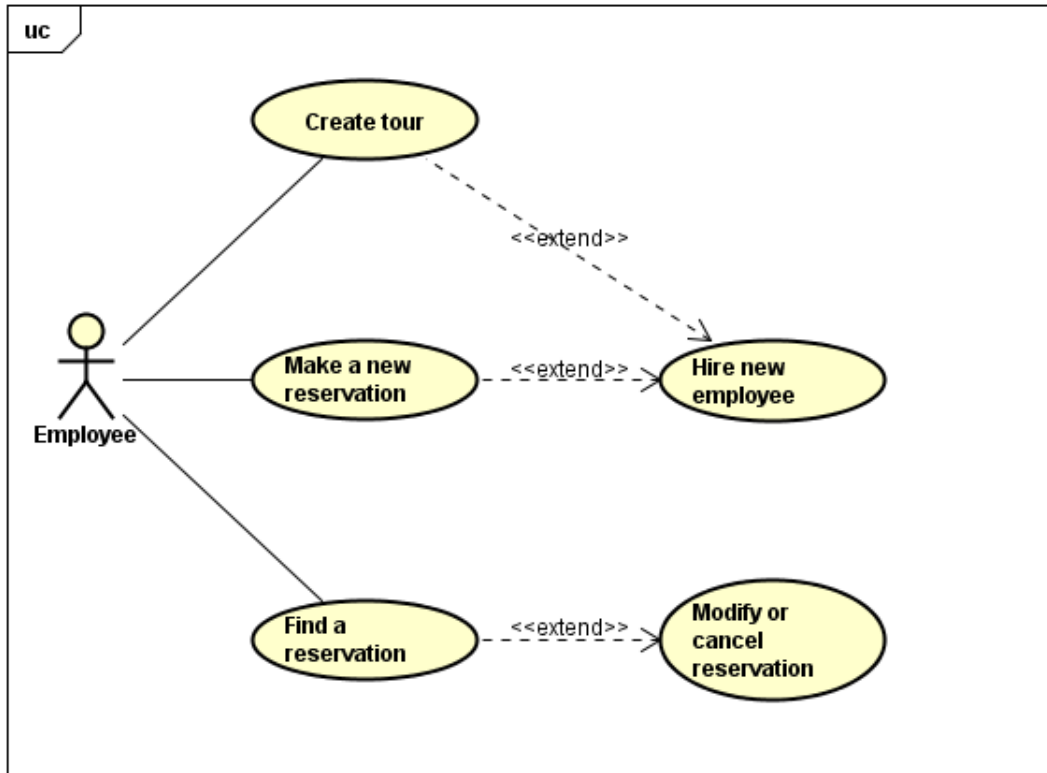# Requirements

1. The employee should be able to search through the list of destinations for the two kinds of tours: predefined trips and travels, and redesigned trips by renting a bus with a chauffeur.
2. The employee should be able to see all available seats.
3. The employee should be able to pick available seat and reserve it for customer including destination, date and time.
4. The employee should be able to see details about reservation.
5. For private customers, the employee should be able to register the name, address, the passenger's birthday, and when it is permitted the email address for the newsletter
6. For companies, the employee should be able to register name, address, phone number from the person who is making the reservation and the company's name.
7. The employee should be able to find data about customer.
8. The employee should be able to search through the list of customers to find the frequent customer.
9. The employee should be able to reward and give discounts to the frequent customers.
10. The employee should be able to add any additional notes to reservation.
11. The employee should be able to make a new reservation, which was not predefined, rent bus and chauffeur according destination, date and number of passengers.
12. Register employees by: name, address, employee ID, calendar trips, email, phone, preferences for trip.
13. The employee should be able to enter the type of contract: full-time or vicar, for new employee.
14. The employee should be able to search through the list of busses type for the service "bus and-chauffeur".
15. The employee should be able to find an available chauffeur after the suitable bus was found.
16. The employee should be able to search through the list of chauffeurs: full time or vicars.
17. The employee should be able to hire a bus-and-chauffeur for a day, or couple of hours by searching through the destination list.
18. For a bus and a chauffeur service, the employee should be able to reserve additional services such as breakfast, lunch in the bus, reserve a restaurant dinner, guide party, suitable for the chosen destination.
19. The employee should be able to register the type of a customers by their profile: company or private person, including at least name, address and phone number.
20. The employee should be able to specify preferences for full-time employees.
21. The employee should be able to cancel contract vicar any time.
22. The chauffeurs must be able to change and edit the trips according to their preferences.
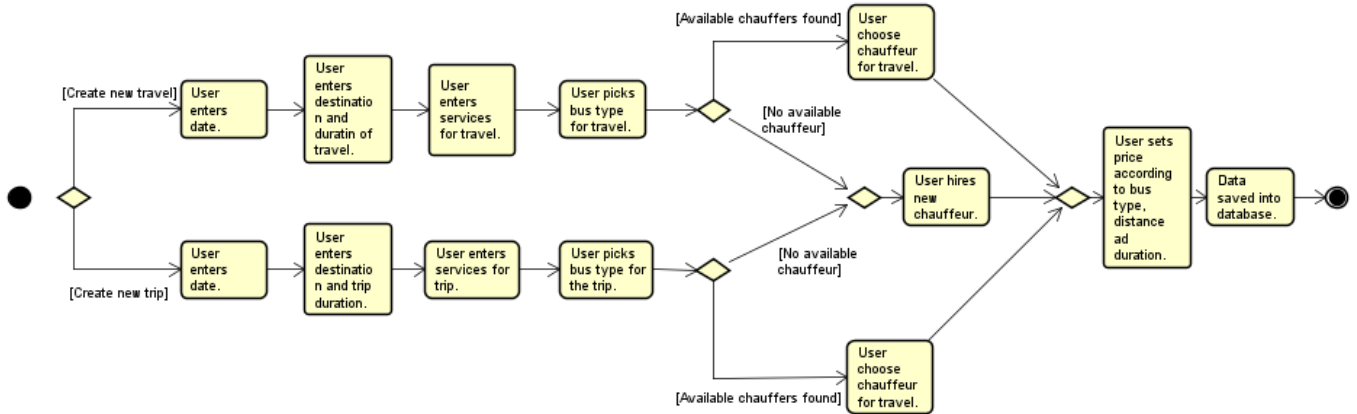23. The chauffeurs must be able to register time and date of the trips.

24. For the "bus and chauffeur" services the chauffeurs must be able to register time of departure, arrival destinations, and arrival back to the terminal.
25. The employee should be able to find a reservation in the system.
26. The employee should be able to delete reservation.
27. The employee should be able to modify reservations.
28. The employee should be able to save reservation if there are some changes.
29. The employee should be able to set the prices for each reservation according to the travel type, extra services.
30. The system stores all the data in database.
31. The system must be usability tested by end users.
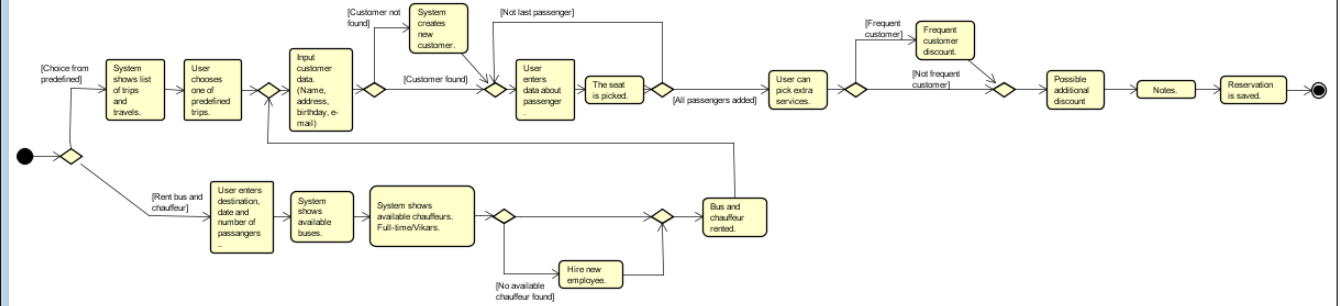32. The system has to be implemented in Java.

uc

Create tour

Make a new reservation

Hire new employee

Find a reservation

Modify or cancel reservation

Employee

<<extend>>

<<extend>>

<<extend>>

Create tour / UseCase Description

ITEM	VALUE
UseCase	Create tour
Summary	System will show list of all predefined trips and travels
Actor	Employee
Precondition	none
Postcondition	New tour has been created.
Base Sequence	1. System will ask if user wants to create new trip or travel. 2. If user wants to create new trip, Usecase continue with branch sequence. 3. User fills information about the travel. (Date, Destination, Duration, Bus type and possibly Accomodation). 4. User will choose one of available chauffeurs. 5. If no chauffeur is available user will hire new chauffeur. 6. User sets the price for the travel according to bus type, distance and duration. 7. New travel is saved into database.
Branch Sequence	If user picks to create new trip: 1. User will fill all information about new trip. (Date, Destination, Duration and Bust type). 2. User picks pick one of available chauffeurs and usecase continues from base sequence 6. 3. If no available chauffeur is found, base sequence 5.
Exception Sequence	Wrong input data: base sequence 3, branch sequence 1. Use case ends.
Sub UseCase	Hire new employee
Note	Creating new tour can be canceled without saving at any time.

[Create new travel] → User enters date.

User enters destination and duratin of travel.

User enters services for travel.

User picks bus type for travel.

[Available chauffers found] → User choose chauffeur for travel.

[No available chauffeur]

User hires new chauffeur.

[Create new trip] → User enters date.

User enters destination and trip duration.

User enters services for trip.

User picks bus type for the trip.

[No available chauffeur]

[Available chauffers found] → User choose chauffeur for travel.

User sets price according to bus type, distance ad duration.

Data saved into database.

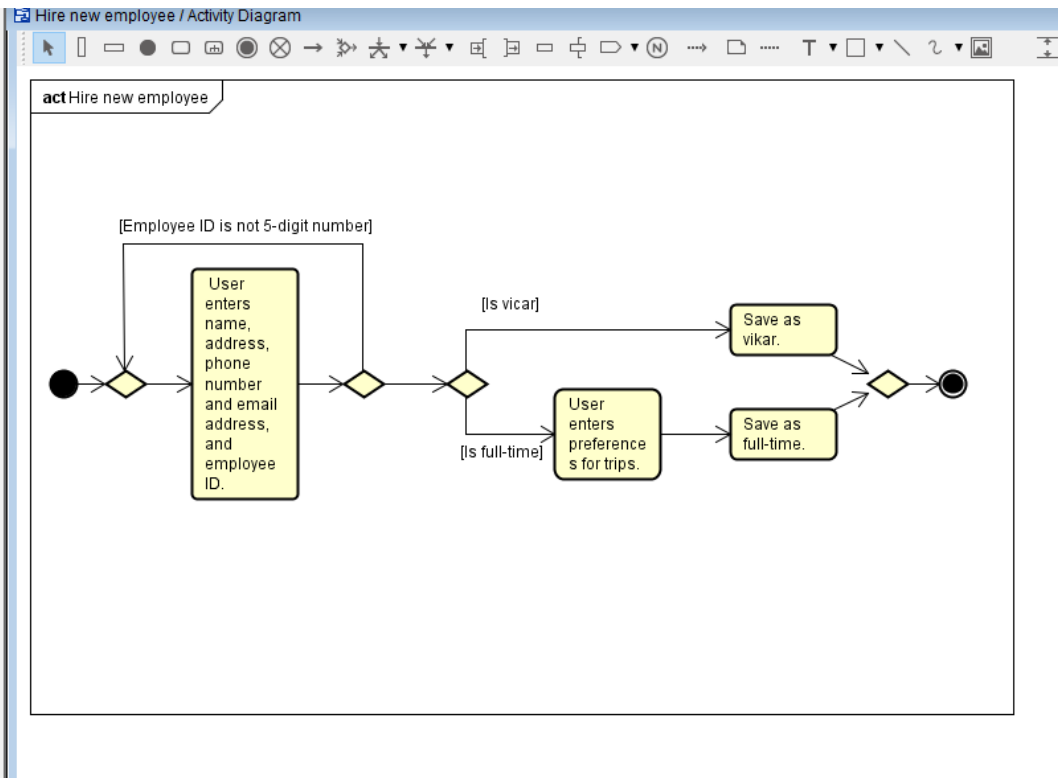| ITEM	VALUE
UseCase	Make a new reservation
Summary	User enters all data needed and makes reservation
Actor	Employee
Precondition	none
Postcondition	Reservation has been made and all data have been saved in the file.
Base Sequence	1. User can pick if the reservation will be from predefined trips or rent bus and chauffeur. If User wants to rent bus and chauffeur, branch sequence. 2. System will show list of all trips and travels. 3. User will choose one of possibilities according to available seats, destination and date. 4. System will show window to find a customer. 5. User will enter data about customer. (Name, address, birthday, if permited, e-mail address , and number of passangers) 6. If customer was not found user can create new one according to entered data. 7. User add data about passengers one by one. (Name and address) 8. One of available seat is picked. 9. System will show all extra services for chosen reservation. (Food, Enterance tickets, of in some cases accomodation) 10. User will either pick some or continue with none. 11. System will check if the customer is a frequent customer. 12. If yes, discount for frequent customers will be offered. 13. User will be asked about other diiscount. !!! 14. User can now enter any additional notes to reservation. 15. Reservation can be now saved. 16. System will save reservatin into database.
Branch Sequence	Base sequence 1: 1. User will enter destination, date and number of passengers. 2. System will evaluate and show all possible busses to rent according to date and number of passangers. 3. User picks one of the shown possibilities. 4. System will check for all available (full-time/vicar) chauffeurs according to their prefference s. 5. User picks available chauffeur. 6. If none were found user will be asked to hire new employee. 7. User will rent bus and chauffeur. 8. System will now continue from 4 base sequence.
Exception Sequence	No available seats in predefined trip: 1 base sequence User can rent bus and chauffeur. No available bus has been found: 2 branch sequence. Message will be shown on the screen, reservation not possible and use case ends. Wrong data input: Base sequence 4-5. Invalid data type, use case ends.
Sub UseCase	Hire new employee Create tour
Note	Reservation can be canceled any time.

act Make a reservation

[Choice from predefined]

System shows list of trips and travels.

User chooses one of predefined trips.

Input customer data. (Name, address, birthday, e-mail)

[Customer not found] → System creates new customer.

[Customer found]

[Not last passenger]

User enters data about passenger.

The seat is picked.

[All passengers added]

User can pick extra services.

[Frequent customer] → Frequent customer discount.

[Not frequent customer]

Possible additional discount

Notes.

Reservation is saved.

[Rent bus and chauffeur]

User enters destination, date and number of passangers

System shows available buses.

System shows available chauffeurs. Full-time/Vikars.

[No available chauffeur found]

Hire new employee.

Bus and chauffeur rented.

Hire new employee / UseCase Description

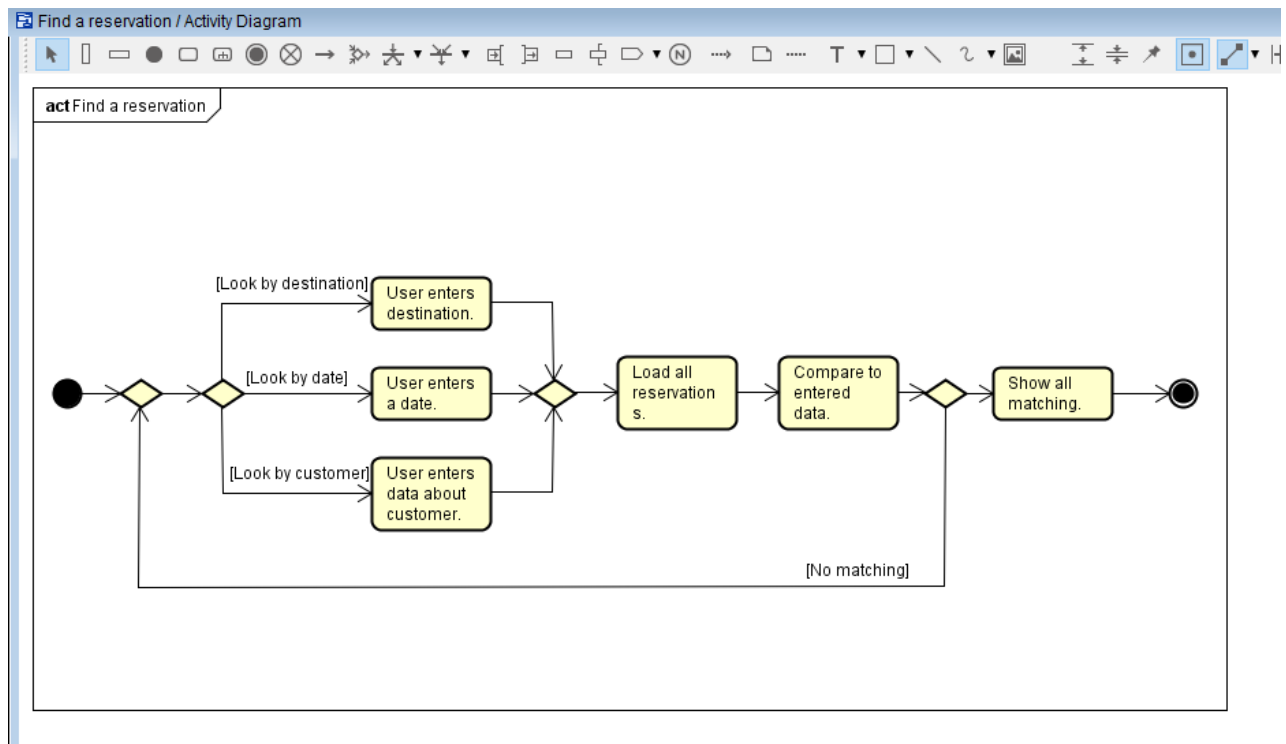| ITEM	VALUE
UseCase	Hire new employee
Summary	Information about new employee has been stored in the system.
Actor	
Precondition	Employee ID must be 5-digit number.
Postcondition	New chauffeur has been employed.
Base Sequence	1. User enters name, address, phone number and email address, and employee ID. Condition: Employee ID must be 5-digit number. If ID is incorrect, go to step 1. 2. User will enter employees type of contract. Full-time or vikar. If it is full time employee, user will specify preferennces for trips. 3. System saves all data and add employee to coresponding list of employees.
Branch Sequence	
Exception Sequence	Wrong data input: Base sequence 1. Invalid data type, use case ends.
Sub UseCase	
Note	Vikar contract can be canceled at any time.

Hire new employee / Activity Diagram

act Hire new employee

[Employee ID is not 5-digit number]

User enters name, address, phone number and email address, and employee ID.

[Is vicar]

Save as vikar.

[Is full-time]

User enters preferences for trips.

Save as full-time.

Find a reservation / UseCase Description

ITEM	VALUE
UseCase	Find a reservation
Summary	System will find reservation according to data entered by user.
Actor	Employee
Precondition	
Postcondition	Reservation has been found and can be opened and modified.
Base Sequence	1. User is asked whether to look by destination, date or customer. 2. User will enter data according to what was picked in first step. 3. System will load all reservations. 4. System will compare data to all reservations. 5. System will show list of all matching reservations on the screen. 6. User can now open one of reservations and modify them or cancel them. If any changes have been made, user will be asked to save changes.
Branch Sequence	
Exception Sequence	No matching reservation has been found: 4-5 base sequence List is shown empty. Use case continues from base sequence 1.
Sub UseCase	Modify or cancel reservation
Note	Reservation can be edited after it was gound.

act Find a reservation

ITEM	VALUE
UseCase	Modify or cancel reservation
Summary	Reservation is deleted.
Actor	
Precondition	Reservation must have been opened through find reservation option.
Postcondition	Reservation has been modified or canceled. File has been updated.
Base Sequence	1. Reservation is loaded from the file. 2. All details about reservation are displayed on the screen. 3. User can now modify the reservation. If user decide to cancel reservation, reservation is canceled. 4. User will be asked to save the changes. 5. All changes have been saved into the system.
Branch Sequence	Base sequence 4: If user does not want to save the changes. 1. User can choose to exit without change or to modify again. If modify again has been chosen, continue from base sequence 3.
Exception Sequence	Wrong data input: Base sequence 3. Invalid data type, use case ends.
Sub UseCase	
Note	Modifying can be canceled at any time. It is possible not to save the changes.

act Modify or Cancel reservation

[Modify]

Reservation is modified.

[Save changes]

File updated.

Reservation loaded from the file.

Details displayed on the screen.

[Cancel]

Reservation is canceled.

[Don't save]

[Exit]

[Modify again]