**Bus Station**

Here is almost a complete simulation for a real-life bus station. First, we have the bus

station itself with a complete set of vehicles like a bus, minibus, limousine, ...etc. Second, there

are the employees who are divided into drivers and managers. Third, the passengers

(customers) who are trying to buy a ticket for a specific trip. A customer can reserve oneway

trip or round trip. Fourth, we have two main types of trips; internal (between cities) and

external (between countries), they differ in price, distance, ...etc. Also, a trip can be nonstop,

one-stop or many stops.

We have worked in everything together whether the logic itself or the GUI .

# Scenario

1. A welcoming window is opened the user will choose whether he is a customer or an employee
2. If he is a customer he will be turned to a new frame to let him enter his name and password and we will read the data of the customers in the file
3. The data he entered will be compared by the data in the files. If he entered it right he will be turned to his profile while if he entered any of the fields wrong a pop message will appear that he has entered a wrong field and will let him able to reenter his data.
4. His profile has the following options review his trips, add a trip and remove an existing one

**Review**

He will be able to see the trips in his profile with its details.

Add

He will first search for a trip by source or destination or both if he wants it a one way trip , but if he wants it a round trip he must enter both source and destination.

While if he doesn’t enter any data he will be able to choose the trip from all the trips in the file . and we will compare entered data with all trips in the file.

## Remove

He will able to select a trip he has already reserved b fore and remove it .at this point it will be removed from his profile and number of seats of this trip will be adjusted.

1. If he from the first has chosen employee he will go to another frame to choose whether he is a driver or a manager
2. If he chooses driver he will be turned to a frame to let him enter his name and password and the drivers information will be read from the file.
3. If he entered username and password right he will go to his profile that has his information like his name , date of birth , salary and the assigned trip to him

While if he entered it wrong a pop message will be appear to him to tell him that he has entered wrong data and will let him able to reenter them.

1. If he choose manager , he will be turned to a frame to let him enter his name and password .
2. If entered them right he will go to his profile that has remove a trip ,add a trip and assign a trip to a driver

Remove a trip

The list of trips will be shown to him and he will choose which one to remove

Add a trip

He will be able to create a new trip with all its details

Assign a trip to a driver

If he choose assign he will be turned to a frame that has a list of trips and a list of divers he will choose w trip and assign it to a specific driver and update the driver profile to see that he has a new trip.