

### **BILKENT UNIVERSITY**

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### TERM PROJECT PROPOSAL REPORT

# Private Taxi Database Management System

**GROUP 12** 

21301027 Nergiz Ünal Sec-1

21200992 Rıdvan Çelik Sec-2

21401058 Orhun Kar Sec-2

21200509 Zeynep Delal Mutlu Sec-1

## **Table Of Contents**

1. Introduction and Project Statement	2
2. Functional Requirements:	3
2.1 Customer	3
2.2 Driver	3
2.3 Administrators:	4
3. Non-functional Requirements:	4
4. Limitations	5
5. Conceptual Design	6

# 1. Introduction and Project Statement

Since with the introduction of the Uber in the USA they are continuously growing their influences in the market and currently dominating it. Uber simply is an application where you can register as a driver to the system and users can "call" drivers to pick them up and drive them wherever they want. This project is about creating a database of Uber like application with some additional customization. Our project database will be observed via a web application.

The application will have 3 types of users as follows; customer, driver, admin. The type of the users will be determined by a initial login screen. Application interface will change according to user types. To model this application's database, we will use E/R modeling. Data tables and relations between them will shown at the end of the report.

## 2. Functional Requirements:

- There will be 3 different types of users:
  - Customer
  - Driver
  - Administrator

#### 2.1 Customer

Customer will be able to:

- Set their preferences about a driver.
- Make a request with this preferences,
- After the requests customer will be able to see drivers who satisfies his/her preferences and view their rates and comments about them,
- Eliminate the drivers he/she did not like and make request accordingly
  make comments and rate their trips when they are done,

#### 2.2 Driver

- Driver will be able to:
  - See the requests from customers
  - Will be able to choose a customer from available requests by also seeing their rates and comments.
  - At the end of the trips drivers will be able to rate and comment this trip.

#### 2.3 Administrator

#### • Administrators:

- Have absolute control over the application and it's database,
- Will be able to see all customers and drivers, also their rates and comments,
- Will be able to delete registered accounts of users,

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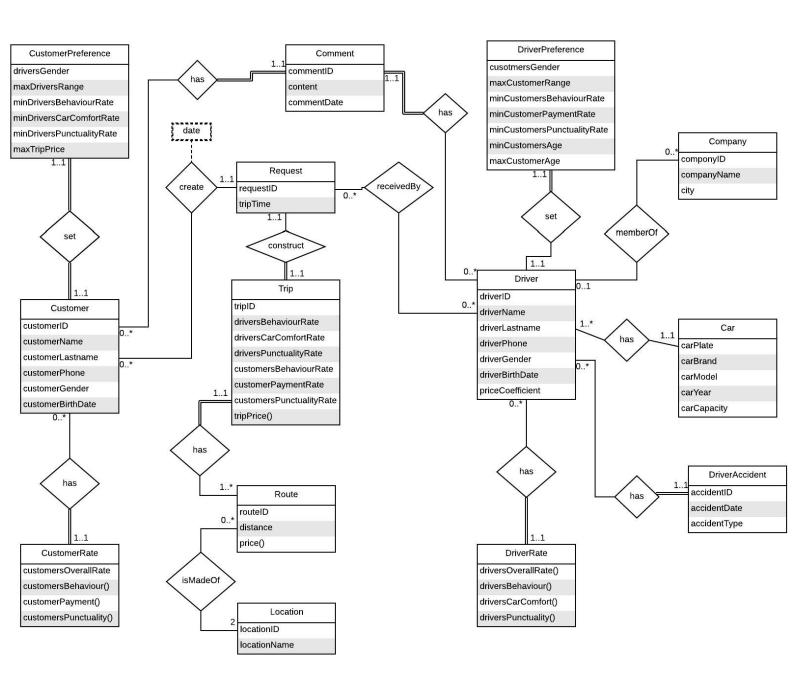
## 3. Non-functional Requirements:

- Response time: should be fast, moving between pages must be fluent.
  Getting information from database must be fast.
- Security: the application should be secure since it has real time locations of the customers.
- Usability: user interface must be clean and understandable. User should operate in application as intended.
- Accessibility: since our application is a web application, anyone with a browser can use it.

### 4. Limitations

- Drivers can not see which customer gave him/her which rate
- A customer can not send multiple requests. S/he must wait until their trip is done or must wait for certain amount of time
- Drivers can only drive one person at a time or a group of people if it is specified beforehand
- Drivers can not pick additional people or customer while they are serving a customer
- A driver can not be in more than company
- Our database will have certain amount of fixed locations and distances
  between them will be predefined in our database for simplicity
- Comments will have a certain character limit
- All comments will be displayed after the approval of the Admin

# 5. Conceptual Design



# 6. Conclusion

We propose a web based application which can be used to track the relations between customers and drivers. The system will be designed with a relational database in order to support all the users mentioned above.