# Database Management System
## Bus Management System

Group 2
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## Project Description:

Mainly 3 types of users,
- Admin
- Conductor
- Passenger (general customer)

Admin can access all data, which mainly includes adding a new bus to database, updating driver name from existing bus, editing ticket from database and deleting ticket from database.

Conductor can access all data of his/her particular bus, which mainly includes editing driver information of his/her bus, editing and deleting tickets from his bus.

Passenger can book a ticket from this website and later edit his/her ticket information including source, destination and date.
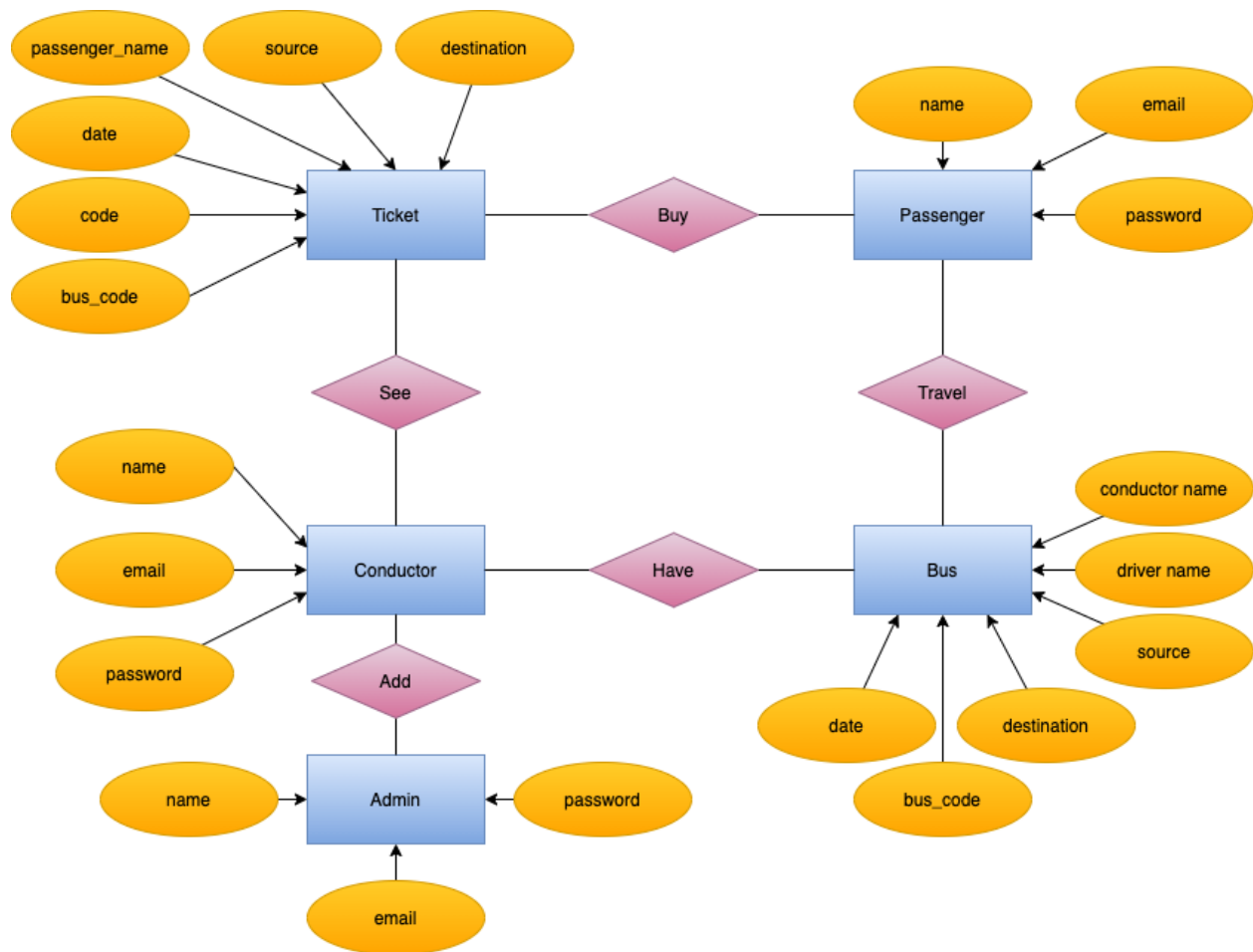
## Technologies used:

Frontend
- html (used as ejs)
- css (includes bootstrap)
- javascript (includes jquery)

Backend
- node js
  - express
  - express-session
  - Bcrypt
- mysql (for database)

# E-R Diagram:



# Normalization techniques:

We didn't use any normalization technique in any particular sense.

We just checked fiest any such data exists or not, in case of existing we just popped an error message while in case not finding data, we further proceeded to the next step.

In this way, we made it easy to understand for everyone rather he/she having deep knowledge about DBMS.

# Instructions to run the project(for linux and mac os):

Requirements:
- System(laptop/desktop) should have pre installed node js. In case of not having it, you can download node js from [here](#).
- Mysql should be pre installed. In case of not, you can download it from [here](#).
- Localhost port '4000' should not be in use. In case of not, you can kill the process using below commands.
  - lsof -i tcp:4000
  - kill -9 PID
- Mysql server should be on.
- Should have a stable browser(Chrome recommended).

Steps:
1. In the project file, there is a folder named 'extra', which contains a file named 'database.sql'. You have to run this file in your mysql workbench.
2. Then in the terminal, go to the project directory and run command 'node app.js'. In the terminal, 2 messages should pop up saying 'server started!!' and 'database connected!!'. In case, something unexpected happens, please contact me on(8696093988), as errors can't be predicted.
3. Now open '[http://localhost:4000/](http://localhost:4000/)' in your browser and website should be in front of you.

# Things you should know before using website:

- Admin email: '[admin@gmail.com](mailto:admin@gmail.com)'
  - Password: 'admin'
- Only the admin can add a new bus, which means to add a conductor in the database which can't be deleted later.
- All conductors will get their login information only from admin and later they can change their account password.

- All passwords are encrypted, so in case someone got access to our database they can't steal our data.
- We are providing a large database for easy evaluation.

## Accounts already exist:
- Admin
  - Email: 'admin@gmail.com', Password: 'admin'
- Conductor
  - Email: 'b1@gmail.com', Password: 'b1'
  - Email: 'b2@gmail.com', Password: 'b2'
  - Email: 'b3@gmail.com', Password: 'b3'
  - Email: 'b4@gmail.com', Password: 'b4'
  - Email: 'b5@gmail.com', Password: 'b5'
  - Email: 'b6@gmail.com', Password: 'b6'
  - Email: 'b7@gmail.com', Password: 'b7'
  - Email: 'b8@gmail.com', Password: 'b8'
  - Email: 'b9@gmail.com', Password: 'b9'
  - Email: 'b10@gmail.com', Password: 'b10'
- Passenger
  - Email: 'a1@gmail.com', Password: 'a1'
  - Email: 'a2@gmail.com', Password: 'a2'
  - Email: 'a3@gmail.com', Password: 'a3'
  - Email: 'a4@gmail.com', Password: 'a4'
  - Email: 'a5@gmail.com', Password: 'a5'
  - Email: 'a6@gmail.com', Password: 'a6'
  - Email: 'a7@gmail.com', Password: 'a7'
  - Email: 'a8@gmail.com', Password: 'a8'
  - Email: 'a9@gmail.com', Password: 'a9'
  - Email: 'a10@gmail.com', Password: 'a10'

**Links:**

- For all code, a github link is [here](.).
- For easy viewing of the project, we hosted it on heroku which can be seen from [here](.). You may find online websites slow, as heroku hosted websites are very slow.

**"In case of any error, please contact me on 8696093988 or email me on [iit2019188@iiita.ac.in](mailto:iit2019188@iiita.ac.in)"**

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