# DRL Software Engineer Home Challenge

*v1.2*

Congratulations on reaching the homework challenge phase ! We are rooting for your success ! This assignment is tailored to take about 4 hours, but we are giving you 72 hours to complete the assignment and remove the stress element from your work, so please plan your time accordingly.

The assignment consists of two parts:

1. theoretical questions - please answer those in a readme file (plain text or markdown), you might add images if you prefer to provide visual description
2. practical coding challenge - please submit it as a zip file or as a ling to github/gitlab repository

## Part 1 - Theoretical

1. Here you will get a description of a system, please construct a data model (how would the database be organized) to accomodate the system in the best possible way. In your answer - please provide your considerations and assumptions. No code needs to be written for this question.

We are building a democratized taxi drivers platform, let's call it Unter. Drivers work as casual employees - coming and going at will. A driver can begin working at a certain time and get off work some time later. The driver can give rides to customers that use the platform and receive payment depending on the time of day, milage driven, length of the ride and the number of passengers. Drivers may also get a tip from the passengers.

Passenger may leave the driver 1-5 star rating after the ride. We don't care about individual ratings, and only want to know the accumulated average rating of each driver.

at the end of each day we want to be able to tell which drivers worked today, how many rides have they services, what is the total revenue per driver, what is the total amount of tips per driver, which driver has the highest and which the lowest rating on the platform.

2. How would you change the model from question (1) if we wanted the drivers to also leave 1-5 star reviews for the passengers ?

## Part 2 - Practical

please write an application in node.js and react that is capable of presenting a user with a questionnaire about their state of mind and capturing the data on the backend. The data should be captured in one of the following - SQLite file based database, CSV file, or a plain text file

The questionnaire consists of the following 6 items:

1. "Enter your full name"
2. "Enter your date of birth (mm/dd/yyyy)"
3. "on a scale from 1-5, how happy do you feel ?"
4. "on a scale form 1-5, how energetic do you feel ?"
5. "on a scale from 1-5, how hopefull do you feel about the future ?"

6. "how many hours have you slept last night ?"

The application records the responses along with today's date on the backend side.
After the user submits the questionnaire, the application presents the user with their results relative to their prior answers, and relative to answers of all people of the same age stored in the system.

The comparison results are:
Happiness today compared to their average happiness
Average happiness compared to average happiness of all people of the same age on the platform

Energy level today compared to their average energy level
Average energy level compared to average energy level of all people of the same age on the platform

Hopefulness today compared to their average hopefulness
Average hopefulness compared to average hopefulness of all people of the same age on the platform

Hours of sleep today compared to their average sleeping hours
Average sleeping hours compared to average sleeping hours of all people of the same age on the platform

Bonus:
Add another summary screen that shows per age group (0-10, 11-15, 16-21, 22-30, 31-40, 41-50, 55-70, 71-infinity) the average value for each of the four parameters (happiness, energy, hopefulness, sleeping hours)

## Rules

Please feel free to search the internet for syntax and best practices.
Please do not copy blocks of code from the internet - this would be considered cheating
Please do not post any parts of this assignment on the internet - this would be considered cheating
In your next interview stages you will be asked questions about this assignment, make sure you understand your own work well