

# Improving the learning experience for Driving Theory with a learning application

Anthony Geron, Supervisor: Jian Shi

## 1 Problem

Many people when they get their provisional license would want to get their driving license as soon as possible. They would want to be able to drive a car instead of public transport for more convenience. However, information to revise the theory is a hassle to put together. There's so much to begin with and may be intimidating at first. Here are a few examples where to find Driving Theory material:

- Online: Too many websites to search on.
- Books: May be out of date in later years.
- Gov.uk: ONLY one mock exam is available.
- Sign lists: The complete set of signs may not be up to date.

Even worse, manually writing up the notes for revision is too time-consuming and people would rather want to learn it as efficiently and engaging as they can. Especially if they have a deadline of an upcoming exam.

## 2 Goals

The final aim for this project is to be able to improve upon the learning experience for novice CAR drivers. To achieve this, the following objectives need to be met beforehand:

1. Identify factors why the current learning experience is poor.
2. Create an application as a tool for driving theory revision.
3. Get a survey of novice drivers after using the application.

Once the factors are identified and written into requirements for the development of the application, they can be tested for a number of non-drivers willing to learn. Therefore the learning experience is now improved.

## 3 Scope

This app is specifically targeted to those who aim for a category B license. It is common for novice drivers to first learn how to drive a regular car before any other vehicle. Maybe in the future for kids and more experienced drivers but they are not considered to be the main cohort targets.

Functionalities may contain but not limited to the following:

- A complete up to date library of up-to-date questions.
- Training sessions for daily active recall
- A complete list of the various road signs.
- Animations for the hazard perception test.
- A machine learning algorithm that recommends certain topics based on performance.
- Written in Java/JavaFX

And I will not do the following:

- Advanced learning for experienced drivers.
- Learning tailored to those without a provisional license.