Safe Drive

Learning Traffic Regulations

Concept Document   
(Homework No.1)

Project team: TBA

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Submitted in partial fulfillment of the requirements of the CSCI 4836: Game Development Fundamentals course project

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# Introduction

This is part of the Game Design Document for a hypothetical project “Safe Drive” submitted for partial fulfillment of the requirements of the Game Development Fundamentals course in the School of Information Technologies and Engineering at ADA University, Baku, Azerbaijan.

“Safe Drive” is an educational 2D action game which is mainly about the basic traffic rules in Azerbaijan. It is a single-player game where the main concept is driving the car by obeying the main traffic rules of Azerbaijan Republic which differs in each level of the game. The player gains points if the car is driven safely and lose if it is not. It is planned to be kind of obstacles to avoid and items to gather during the level of the game besides obeying the rules. Controls for the game is intended to be simple and traditional as the ones of same type/genre. Player will be more involved in the atmosphere with the graphical and sound effects that are compatible with the main concept of game. The game “Safe Drive” is intended to create a safe and entertaining driving practice for the players during the time they spend on the game.

# Game Analysis

## Game Description

• Genre: Action, Strategy

• Game Elements: Driving (fast, medium, and slow), Collecting points from traffic signs,

• Game Content: Educational

• Theme: Training, Practise

• Style: Real

• Game Sequence: Linear- Storylines and Simulation

• Player: Single-player

## Game Reference

“Safe Drive” is made up of simulation of traffic and the success of the player depends on his/her knowledge of traffic rules and signs. Game taxonomy will be based on rules so further the player success on road test, he or she gets points at the end to pass to next level which is fully non-fictional simulation that is already written rules of traffic signs by Police Department. It is planned that player will be informed about the mistakes made during the level at the end so that he/she can learn from his/her mistakes.. This game mostly references to the DMV test examiner application which is provided by Police Department, but it is more efficient way of remembering the signs and rules by playing this simulation.

## Definitions

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| Term | Definition |
| Traffic Rules    Action – Platform      Texture type | It mostly contains signs and prohibited actions in action    Player can remember the meaning of signs and dedicated rules for every driver which can be easily learnt by this action and practice based game    In order to provide visual detail for the road, traffic rules and signs in 2D graphic game. |

# Game Atmosphere

The main atmosphere of the game is the basic traffic road. However the items, signs and the obstacles is changing on different levels. The player will meet different situations where the car should be driven according to the different traffic rules which will change depending on the level. By obeying the rules, player gains points and violating rules results in losing them. There is a point limit for each level to pass and the final goal/prize is designed getting driving license if the player has enough points to pass the final level. There will be informational labels and hints during the game in order to help player to get knowledge about the rules and how to pass the level. And also, compatible and entertaining audio effects are planned to be designed for getting player to be more involved in the game atmosphere.

# Game Play

The gameplay of our game is based on the traffic rules. The game will provide players with traffic rules before the game, players will be required to obey these rules to go through the levels and complete them successfully. The game will be used by people who want to learn traffic rules by playing game. The progress of the level and earned points will be displayed on the top of the screen. Players must reach the end of the level with required amount of points to be able to play next level. If players do not get required points at the end of level, they need to restart the level and play again. Each traffic rule will be scored separately. The points will increase each time player successfully passes through obstacles, traffic lights, pedestrian crossing, etc. If player does not obey these rules, points will be decreased accordingly. At the end of each level players will see their score for current level. The time will be predefined for each level. The player who completes level within this time will get bonus points. Players will interact with game through keyboard, so they will see the game controls on the screen at first play. Players will be able to control car to go through obstacles. As the players complete levels, levels will become harder each time. The obstacles and rules are harder to overcome at the higher levels, so players need to improve their skills to complete levels. At the end players will get symbolic driving license for completing all levels successfully.

# Key Features

* Number of Levels

Up to 10 levels with different levels of hardness.

* Number of Enemies / Characters

Pedestrians.

* Time of Game Play

From 10 to 15 minutes per level, if played perfectly.

* Replay ability

Players are able to replay levels if they want. Additionally, every level restarts if player has taken the wrong decision during the gameplay.

* Audio Specifications

Game is going to be accompanied by sound effects and background music from Open Source resources on permissive MIT License (2).

* Graphic Specifications

Game is going to be written on Unity3D Engine, but it’s decided to use 2D Graphics for implementation. Object Assets will be used from Open Source libraries on permissive MIT License (2).

* Device Compatibility

Initially game will be available for PCs with Windows 7 or higher version operation systems. It is planned to implement the project on hybrid basis, which will allow it to be reproduced on most of the available platforms such as mobile devices and smart TVs.

* Number of Players

1 Player - the main actor.

* Online Activities (high scores, etc.)

Game is going to be offline - therefore, scores and additional information will be stored locally.

* Number/Type Modes

Single game mode, with the incrementially increasing hardness level and different gameplay categories.

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# Selling Features

* Consumer Group:

Target audience is concentrated on people willing to learn basics of safe driving and traffic rules. Game can easily be played by both genders - no gender preference is given for players, neither there is any age-restriction.

However, as the rules in the game are based on traffic regulations of Azerbaijan Republic, local people are the major part of target audience.

* Unique Features:
  + Based on real traffic rules
  + Helps to increase the ability of critical thinking on the way
  + First traffic road simulation game in Azerbaijan
* Marketing Ideas / Merchandising:
  + Social Media Marketing
  + Billboard Advertisement with the support of State Traffic Police Department of the Republic of Azerbaijan (1)
  + Brochures and flyers in governmental organizations

# References

1. State Traffic Police Department of the Republic of Azerbaijan

<http://www.dyp.gov.az/?/en/mainpage/>

2. The MIT License

<https://opensource.org/licenses/MIT>

3. Steve Rabin (Editor), Introduction to Game Development, Comprehensive, International Edition, 2nd Edition / Charles River Media © 2010 (1016 Pages) ISBN: 978-0840031037