< Great Instructor Races>

“You will RACE but will you ACE???” © (N)\*everLasting

Concept Document

(Homework No.1)

Project team: (N)\*everlasting

Instructor: Dr. Araz Yusubov

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

|  |  |
| --- | --- |
| Version date | Version information |
| 30.09.2018 | Homework 1 (Documentation) |
| 18.10.2018 | Initial draft(V1.0): For this version, we would like to start with the drawing the area of ADA and decide what the boosters should resemble. |
| 05.11.2018 | Second draft(V2.0): For V2.0, we would like to implement car and its movements and adjust the characters/cars to the ADA map. |
| 19.11.2018 | Sub-draft (V2.1): some obstacles and boosters should be added to the roads. (other cars) |
| 05.12.2018 | Proper Working Version(V3.0): a working game should be launched; |
| 15.12.2018 | Final Changes: fixing bugs if we have any. |
| Before Presentation Day | All the alterations should be done. A proper game should be presented in the presentation day. Preparations n PowerPoint slides. |

|  |  |
| --- | --- |
| Other documents in the package | |
| Gameatmosphere.pdf | Includes personages’ images (Mood board) |

|  |  |  |
| --- | --- | --- |
| Team member | Contribution to this homework (NOT the project) | Estimated % |
| Ilyas Karimov | overall changes, 2 | 25% |
| Aytan Alakbarova | 3,6 | 25% |
| Sevil Jafarova | 1,4 | 25% |
| Ismayil Bagirov | 5,1 | 25% |

Table of Contents

[1. Introduction 3](#_Toc526021724)

[2. Game Analysis 4](#_Toc526021725)

[Game Description 4](#_Toc526021726)

[Game Reference 4](#_Toc526021727)

[Definitions 5](#_Toc526021728)

[3. Game Atmosphere 5](#_Toc526021729)

[4. Game Play 5](#_Toc526021730)

[5. Key Features 6](#_Toc526021731)

[6. Selling Features 7](#_Toc526021732)

[7. References 7](#_Toc526021733)

# Introduction

GIR is a multiplayer racing game where actions take place in ADA University (Baku, Azerbaijan) roads. The players will choose one of the transportation means, specifically, one of the cars. The genre of the game is **Sports, racing.** The boosters depend on the chosen professors’ fields. The player should reach the finish stay alive without touching other acting cars and by using specific skills(boosters) the player gets advantages which will be explained below.

The **history** of racing games starts from the 1974 when **Atari** (Game Corporation) created the first single player racing video game **Gran Trak 10.** The first colorful and 2D imaged game was **Pole Position** (1982), and after years passed games such as **Need for Speed (1994)**, **Asphalt (2004)** came into gaming industry with more realistic graphics and a more comfortable game control (Hooson,2013).

The GIR game has similar goals with other racing games where one competes against other; however, cars and the place where the actions take part create a unique storyline of the game.

# Game Analysis

Our game will be unique in having the boosters by which the player can get many benefits and we related those boosters to our ADA instructors and each of them has their own unique features. It’s worth mentioning that another uniqueness of our game is the game map which is ADA area.

## Game Description

* **Genre:** The genre of the game is Sports, Racing. In such games, at least one (up to four) players partake in a competition with one another in a means of transportation. However, in our case, the multiplayer option is not available. The game map will be made based on a real-life ADA area, however, other constructions of Azerbaijan might be added to the map. The transportation means will be land vehicles (cars and buses).
* **Game Elements**: the players will compete with cars for surviving and getting the highest score in a short period. The vehicles will move at a static velocity. If any obstacles are faced, the player should dodge. The player’s aim is to protect himself/herself from other cars and achieve the highest score.
* **Game Content**: Funny (funny in a way to not offend anybody), fun (pleasant, not serious)
* **Theme:** Realistic map but unrealistic features of boosters.
* **Style**: Cartoon-like, colorful, stylized.
* **Game Sequence**: Linear – continuously and not many changes through the rounds.
* **Player:** only 1 player is allowed to play at a time.

## Game Reference

We can say that our game has both fictional and nonfictional stories. The former exists while the car uses the boosters and the latter is the environment and surroundings (ADA).

Our game is tactical since the player should contemplate thoroughly how to behave and, in the end, the player might get different emotions of winning and losing the game.

Reference: Our game is constructed based on the brainstorming of our team members and every one of them contributed their ideas to it. Since the game has 2 main rules of being non-violent and related to ADA and Azerbaijan, we thought we could make a racing game in the map of ADA adding some other buildings, if possible, and let the racers be our instructors.

## Definitions

|  |  |
| --- | --- |
| Term | Definition |
| Gravity Falls  (Gulmammad m.)  AES Encryption  (Emin m.)  AI boost  (Samir m.)  Surprise  (Araz m.) | When other cars slow down, and the time spend is halved.  Your existence doesn’t have an impact on other cars (you can go through them safely)  Player’s car speeds up  The Car turns into a big vehicle, to be precise, into the bus no 77. |

# Note: all of the features are broadly explained in section 6.

# Game Atmosphere

The location of the game will be the roads of ADA campus. We will take pictures of the campus for making the game more realistic and will work on those pictures in order to make it relevant for Unity.

As we mentioned above instructors will be main characters of the game and each will have different boosts. When car hits one of the characters, it will get its boost. Characters and their boosts are described in the Mood Board.

We will use voice of the instructors, in detail, we will ask them to say slogans that relates to their boosts and record them as audio for game. In order to visualize the game atmosphere, see the attached file in the zip: gameatmosphere.pdf

# Game Play

In GIR one car is chosen (indecisive whether there will be other car options) and races with other cars to have a high score in a small amount of time. There will be related boosters which are explained right below if they are chosen:

**Gulmammad Gulmammadov**

skill:

* Using gravity which attacks other cars to the ground to limit their movement of the cars.

**Emin Alasgarov**

skill:

* Encrypts the car, making it untouchable which frees him from obstacles on the road.

**Samir Rustamov**

skill:

* Uses car speed booster to overtake the opponents’ cars and adds x10 seconds to time.

**Araz Yusubov**

skill:

* Turns the car into a bus no 77 and adds x2 Score.

These all features will last maximumly 10 seconds.

The game begins and the player races with other cars, the other cars are managed by the computer. The player’s aim is to get a high score

* **Objectives**: get a high score within limited time.
* **Outcomes:** getting a high score and seeing your score in Top10 board.
* **Uncertainty**: collecting bonus boosters, random elements which have different features.
* **Rules and Structure**: skills of the personages (in the boosters) will be applied as stated above, overcoming obstacles along the road.

**Outline:**

**Game Options - choosing many boosters of the 4 personages on the road and the level of the game.**

**Game Elements - personages, cars, obstacles, bonus boosters, ADA University.**

**Game Levels – easy, medium, hard levels in the game.**

*Why is all this fun?*

Most of the multiplayer racing games have the problem of **player balancing** where skilled players get bored and weak players get frustrated (Cechanowicz et al.,2014). To solve this problem, we add challenges with random probabilities of appearance during the game. Moreover, the game has unique storyline where personages represent professors of the university and the dean (Dr. Araz Yusubov) waits them on the finish line motivating them for new challenges.

# Key Features

• Number of Levels: Levels will increase after passing some specific scores.

• Number of Enemies/ Characters - There will be four Characters in the boosters (might change in the future).

• Time of Game Play - Depending on how much you can play without crashing.

• Replay ability - You can start again after losing.

• Audio Specifications - When you take some boosts or face with obstacles, there will be played specific sounds. Also, in the background will play dynamic music.

• Graphic Specifications – 3D environment based on the Unity Engine.

• Device Compatibility - Windows, Mac OS, IOS, Android.

• Number of Players - 1 player.

• Online Activities - High score and limited time.

• Number/Type Modes - Easy, Medium, Hard. Depending on the level of difficulty, the number of obstacles will change.

• Developing Skills - Your thinking and reflexes will improve.

# Selling Features

* Our game allows players to race with other cars. Target audience for this game is young people who likes to race. It will be interesting mostly for ADA University`s instructors and students.
* Unique Features: obstacles, boosts, ADA`s instructors.
* Firstly, we would like to demonstrate our game via social media in order to get customers. Next step will depend on the interests of customer. If we get enough interest toward our game, we will start to create application of our game. Moreover, new features also will be added to the game and forum will be created in order to get customers` opinion.

**Note: The alteration of the content in the authentic implementation is expected.**

1. **References:**

J. C., C. G., & S. B. (2014, October19). Improving Player Balancing in Racing Games. Retrieved from <http://hciweb.usask.ca/uploads/347-p47-cechanowicz.pdf>

M. H. (2013, July 10). A brief history of racing video games. Retrieved from <https://www.moneysupermarket.com/car-insurance/articles/a-brief-history-of-racing-video-games/>