



<Game project name>

<Game catch phrase>

Design Document
(Homework No.2)

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

Version date	Version information
<Date>	Initial draft
<Date>	<Version description>

Other documents in the package	
File name	Brief description of the document
<File name>	<Description of the document>
<File name>	<Description of the document>

Team member	Contribution to this homework (NOT the project)	Estimated %
<Student Name 1>	<Description of the work contributed>	<X>%
<Student Name 2>		
<Student Name 3>		
<Student Name 4>		



1. Table of Contents

<Automatically generate here using Microsoft® Word menu References→Table of Contents>

<This document describes how game objects behave, controlled and properties they have. This is often referred to as the “mechanics” of the game. This documentation is primarily concerned with the game itself. This part of the document is meant to be modular, meaning that you could have several different Design documents attached to the Concept Document.>

2. Introduction

This is part of the Game Design Document for a hypothetical project <Game Project Name> 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.

<This document must be submitted in original Microsoft© Word format.

DELETE each and every instructional paragraph between < and > everywhere in the document¹ and REPLACE ALL of them with your text. Keep the main numbered sections, but feel free to add sub-sections if needed. All consequent homework assignments will be based on this document, so give it enough thought.>

< While doing further planning and getting better understanding of the project you may need to make changes in the HOMEWORK 1 content, such as additions/modifications to the Game Play or to Definitions. In this case edits in the Homework 1 content should be visible by turning the TRACK CHANGES option on through Review→Track Changes menu. Remember that the version information on the title page should be updated.

Bonus: Get extra **5%** points for revising and SUBSTANTIALLY improving the Homework 1 content.

Any additional files e.g. diagram and charts will usually be inserted to this document as embedded images, but the source files e.g. Photoshop .psd files should also be submitted. In this case (of having multiple files) all of them should be submitted as part of a SINGLE .zip archive file.>

¹ This template is based on the Unity Curricular Framework ©May 2015 Unity3d.



< In this section, the definition of the game-play is established. Definitions should include how a player wins, loses, transitions between levels, and the main focus of the game-play. Issues that should be addressed here are:

- Menu
- Synopsis
- Game Play
- Player Control
- Game Over (Winning & Losing)

>

Game matrix

< The game matrix is a spreadsheet containing the generic names of the player and antagonistic elements and their game properties. This should allow an easy cross reference for any elements in the game that have numerical or other descriptive values associated with their name.>

Game Flow Chart

<The game flow chart provides a visual of how the different game elements and their properties interact. Game flow charts should represent Objects, Properties and Actions that are present in the game. Flow chart objects, properties and actions should have a number reference to where they exist within the game mechanics document.>

3. Player Elements

Player Definition

- Default(Status): At the beginning of the game a player does not own any cash or point. Player is in the first level and has owns one car.
- Actions: Player can start the race with the only available car in the level 1, and can choose difficulty of the race. In the race a player can move forward, back, left and right.
- Information(Status): In order to increase the amount of the money and points to reach new levels and to buy a car, a player needs to finish race in one of the top 3 places. Each difficulty level has its own relevant rewards of points and cash. As player reaches higher levels a car with better specifications is needed because overall difficulty of the races increase too.
- Default Properties: A player starts the first race in the first position in the starting grid.
- Winning: A player can be a winner by finishing the race in the first position which means he/she has to be the fastest among all the players.
- Losing: If a player does not complete the race in the first place he/she loses.



Player Properties

- **Points:** Each player earns some amount of points from each race if he/she completes a race in one of the top 3 positions. Points are required in order to reach higher levels and unlock new cars.
- **Cash:** Each player also earns some amount of cash from each race if he/she completes a race in one of the top 3 positions and also if he/she breaks the fastest lap record. Cash is required in order to buy unlocked cars.
- **Actions:** In order to be successful and reach higher levels a player buys new cars with better performance to increase the chance of winning the next race and earn more points and cash.

Player Rewards (Power-ups & Pick-ups)

As mentioned above a player is rewarded with cash and points if he/she is successful. A player can use cash to buy a new car with better performance which makes him/her faster in a race and increase the chance of winning the next races. Each level has its own point limit. If a player accumulates this required amount of points he/she will reach to the next level and new cars will be unlocked automatically.

4. User Interface (UI)

< This is where a description of the user's control of the game can be placed. It is also recommended to think about which buttons on a device would be best suited for the game. Consider what the worst layout is, then ask yourself if your UI is it still playable?

A visual representation can be added, where we relate the physical controls to the actions in the game. When designing the UI, it may be valuable to research quality control and user interface (UI) design information.>

Heads up Display (HUD)

<The HUD section is where a description of any graphics that will represent information during game play should be described. A visual representation (mock-up screenshot) here would be useful. This is another good place to seek the advice or collaboration of a graphic designer.>

Player View

<A screen shot is very necessary in the player view section. It is also beneficial to include a definition of how the camera moves for the player. Finally, a (mock-up) overview of the level relative to the screen size will help create a perspective of a levels size compared to what is actually seen.



5. Antagonistic Elements

<This is where a list of antagonistic (i.e. enemies, opponent) objects should be listed with graphics and written description. Describe the terminology that you used to describe antagonistic properties. Devise two sets of names for player elements. One set is a generic name (or code) and the other is its game name. This is another good place to collaborate with a graphic designer to ensure the game graphics match the game titles, names, and descriptors.
>

Antagonistic Definitions

<This where a description goes of what makes an antagonistic element.>

Antagonistic Properties

<This is a list of properties that antagonistic elements have in common.

Antagonistic List

<This is where a list of all the antagonistic elements goes.>

Artificial Intelligence (AI)

<This is where visuals and written description(s) of the antagonistic element's behaviors. These should be labeled in such a way that they can be used in level design without having to describe them again. Devise generic names for repetitive behaviors. This is how an AI action could be deconstructed:

- Normal State: What is the object doing if it has not come in contact with the player?
- Detection State: What does it take for this object to detect the player?
- Reaction State: What does the object do as an action after passing the reaction state?
- End State: What happens to the object after player has reacted correctly or incorrectly to object?

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6. Global Game Elements

<In this section, it is important to describe the boundaries, neutral objects, camera views and scale of the world. Neutral game world objects can be things like a static background, objects that do not interact with the player or antagonistic elements.>

The Story

<This is where the story can be described in detail. A story board can be used to tie in graphics to the text. This can later be used for splash screen concepts.>



The Story Copy

<A shorter version of the story (the in game version) should also be written here. This is where the script for in game characters or story information during the cut scenes would be placed. This category does not always pertain to the current Game Design.>

Concept Art

<Sketches that are used for the concept can go into this section as visual reference. In the case of a brand, certain creative restrictions should be noted here. This is a good place to collaborate with a graphic designer to ensure game graphics match game names.>

Level Design

<This is where information pertaining to level design and visuals of the level design goes. Level design can best be shown as a flow chart. Use generic names to create level design.>

Level Copy

<This is where the script for in game characters or story information during the cut scenes would be placed.>

Audio & Sound F/X

<This is where game audio and Sound F/X should be listed, first with generic names and then described. This section also includes deciding if you will use a device's vibration ring mode.>

7. Game Architecture

<The game architecture section is best produced using a flow chart to represent the overall game. Be sure to identify (i.e. name, number) each screen.

- Title Screen
- Option Screens
- Game Modes
- End Screens

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Game Architecture Overview

<The splash screens or video clips need to be in accordance to game story and style. If cut scenes use video then story boards should be created.

Menus should be designed with the most important options easily accessible. Be aware how many clicks it takes to accomplish a task. The game Instructions should be written so that the player understands how to play the game. Mock-ups should be made so that the game programmers get the correct layout of the menu. It is a good idea to mention and describe the high score screen in this section.>



Architecture Copy

<All text from the game can be compiled here. Review the Game Architecture Overview section.>

How to Play Copy

<This section will organize the game copy. The game copy includes information for the player, clearly describing how to play the game.>

8. References

<Insert here any document referred to in the document. An example might be articles or Web sites that you consulted during the literature search. This is not just a list of used materials, so do not forget to clearly MARK the exact points(s) of reference in the main text.>