BSc in Software Development – Year 3

Mobile Applications Development 2 Project

Part 1 – Design

Create a design and storyboard for a game. This is a 2D game to be developed as part of the module requirements. This is a shooter game in either classic, top-down, vertical or horizontal scroller format. You need to research these game formats before deciding which you will design. Look at different examples and try to understand what makes them popular to different players. Bear in mind that "clone and tweak" is a valid design method in which you pick an existing game and then modify the game world to suit your design. You may design from first principles.

If you are taking the "clone & tweak" approach, you need to identify clearly the game or games you are using as basis and present the evidence of the type of game it is within the options provided.

For the design, you need to create the following components

1. **Front End**: A term applied to all menus and screens, including splash screen, that occur outside of the gameplay. This takes the player from the title screen to the point that gameplay begins.
2. **In-Game Menus**: A set of menus and screens accessed in-game, often by using a pause option. These form part of the game mechanisms rather than being distinctly separate.
3. **Control Mechanisms**: The way in which the player controls the game entities. Many games have just one control mechanism.
4. **The Game**: The gameplay screens showing the initial setup, how the action starts, a midpoint in play and the winning/progression conditions depending on the game you are designing. If the game is episodic in nature, then explain how episodes are defined and how the player moves between them.

Keep in mind the principles of *simplicity* and *expressibility* and the *learning curve* when designing the interface. The interface should be as simple as possible to support the required actions. The tighter the game design, the easier to achieve. The more extensive the design, the harder to achieve. Expressibility is concerned with the degree of options and choice available to the player. The more extensive the game the greater expressibility required. The learning curve is a conceptual measure of how hard it is to learn to control or use a game.

Deliverable

A **design document** for the game that presents evidence of research to understand the different types of game and the reason for choosing one in particular.

The design document should contain initial sketches for the game with detailed notes on how the control mechanisms work, how the menus will look and how the player will be taken from the initial game screen to the gameplay itself. You can use the basic components as section headers for the document.

It clearly lays out the reasoning behind the control mechanisms, the choices made in the design of the game menus and the options there, and the pathway for the player through the game.

It details how difficulty will be increased in the game, how the player is challenged and the dynamics of any rewards based system that is used in the game as well as winning conditions for the game.

Your sources need to be referenced – it is not possible to write this document without references.

The design document needs to be uploaded to LearnOnLine in PDF format. It is worth 20% of the final mark for the module.

The deadline for this is February 7th, 2020 at 4pm. You will then have approximately 7 weeks after that to complete the project.

Marking Rubric for Design

0 – 35	35 – 75	75 – 100
Poor structure & content with little evidence of knowledge of the problem domain Limited introduction background & storyboard Limited evidence of critical analysis and conclusions	Good structure & content with satisfactory evidence of knowledge of technical design Acceptable introduction, background & storyboard Satisfactory evidence of addressing technical requirements Satisfactory evidence of critical analysis and conclusions	Written and structured to a high standard with content that exhibits expert knowledge of the problem domain Extensive project introduction, background, storyboard and evidence of addressing technical requirements of the game Critical analysis and conclusions written in a comprehensive manner Initial tests presented during design phase