Design Project 2

AwesomeSquare Arcade Game

You are to design the ***AwesomeSquare arcade game***. Your game needs to implement the **basic functionality (skills)** as described in the **Project 2 AwesomeSquare Specification 2018.doc** file on your common drive. A ***sample demo executable*** of this game is given on your common drive in the Project 2 – Demo folder also. The demo uses rectangles to represent the player and evilSquares. You are to use images. The design will be discussed in your lecture classes so that you can see what it is supposed to do.

# It is absolutely prohibited to use anyone else’s design in your project. You can ask for help with a particular problem from friends, colleagues, the lecturers in the lab etc but you must design the fix to the problem yourself.

# If you get help from someone or take design from the web or elsewhere, you have to ***comment*** in your code to state what help you got and from where.

## Design

The design should be no more than 2 pages excluding the storyboards. Describe the **basic functionality** of your game under the following headings. You can describe extra functionality you plan to implement, for example in the game progression but this should be **marked clearly** as extra functionality.

1. **Game Description:** Write a clear description of what your game is and how you play it. You should describe the game as experienced by the user. You should describe in a very clear and simple way what happens in your game, how it starts, where are the player and enemies positioned. You should describe how the player moves and interacts with the other characters (squares) in the game. How the enemies move and interact with the other sprites in the game. How the player dies, how the enemies behave and die in the game. How the enemies respawn. Etc.

It should **NOT** contain any implementation details (class names or algorithms etc). Use storyboards wherever possible to help your descriptions. You should have a written description underneath each story board to say what is happening in it. You can hand draw the storyboards. It should be clear from your description and storyboard diagrams to someone who has never played your game before how it works. See the below web link for information on what a storyboard is:

<http://www.dummies.com/how-to/content/designing-video-games.html>

1. **Game Genre:** State what game genre it is. Compare briefly to two well-known games in the same genre. Obviously your game will be a lot simplier.
2. **Goals:** Describe what the player is trying to achieve (kill a certain number, survive, find exit, score a set number of points?). How does the player fail?
3. **Player:** How does the player move? How can the player kill enemies? A storyboard could be used to show how the player moves and kills enemies. How the player dies? How does the player get scores?
4. **Enemies:** How do they move, how quickly compared to the player. Move randomly or follow path. How much damage is caused to the player and them when they collide? How the enemies die and when they die do they respawn and where?
5. **Progression:** How does the game keep the user involved, how does it get more challenging?

## Submission

Sign the Plagiarism Declaration (in the project folder of your common drive) and copy it to the folder called Programming/Project 2 on your M drive.

You are to type this design (no more than two pages) except the story boards which should be drawn by hand. Copy your design to a folder called Programming/ Project 2 on your M drive. Print and hand up a copy of your design at the **start** of your programming lecture class: **Thursday 8th of March.**

Your story boards should be attached to your design. The design is to be mainly based on the **basic functionality of the game**, though you can include extra functionality in some parts if you wish. Mark clearly any extra functionality.

**Very Important:**

You may be asked a few technical questions based on your design. You need to be available in the labs to answer these questions. If you are not **NO marks can be allocated** for your design. You should be able to answer these questions in a clear and concise manner. Failure to answer our questions adequately will result in further questions being asked and could result in low or no marks being allocated to your design.

This project design is worth **20%** of the overall Joint Project 2 marks.