

GOWER COLLEGE SWANSEA

M5X01044 Interactive Application Design

HND Computing and information Systems

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Project specification

Introduction

This report will help detail the steps and procedures that I will take when making an interactive based game, the report will hold all research used when the prototype was being made and will help show how the game works and the ideas it was based off. The main purpose of my design will be to demonstrate the capabilities and the advancement that gaming technologies have to offer. I will include a short snippet of how I intend to do this and the intended audience I find suited to the game I design. I will also address the best platform I find suited for the type of game also.

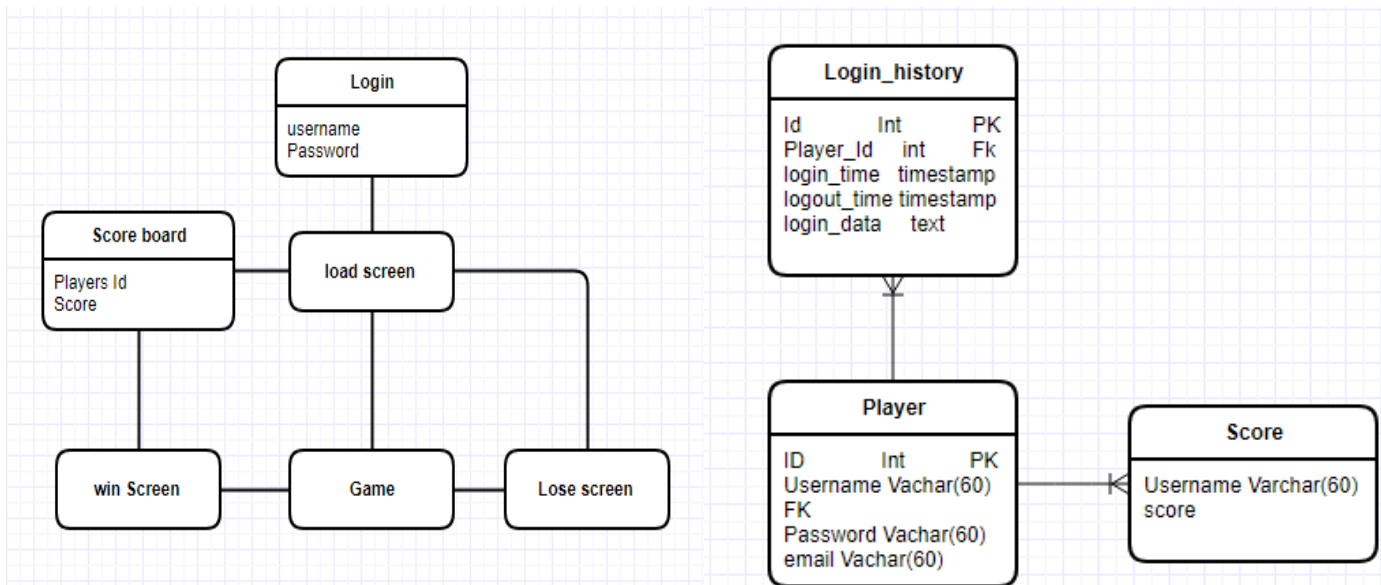
Requirements for the app

the game will be required to have many different interactivities in order to become appealing to its audience, one of which I find is that the game should require a scoreboard as research has shown that the best source of gaming is competitive, mobile games such as angry birds or games developed by eighty-eight games both work of the scores that the player gets then from the points can determine what happens next for example some games requires a certain amount of points to move on with the game, having a scoreboard helps with the interactivity of the game a great deal as it entices the players to be more involved to compete with each other as said by “psychology today, benefits include the recognition and admiration of other gaming community members”[1].another interactivity for games is sounds, now sounds are a form of communication to the player where they can have a positive sounding effect when the player does achieve their goal or they can have a negative sounding effect when the player fails. A website known as designing sound states a valid point, “turn on a movie and mute the volume. Without the sense of hearing, clues to what is happening on screen are difficult to detect” [2], sounds help set an atmosphere in games such as a iconic high pitched chime helps tell the player that an item has been collected. These days in interactive games social media integration is a must. it will help with getting your own social network of players [3].another feature is social leader boards allowing players to connect to the social media they are connected to and then comparing scores to the other players competing for top of the leader board where in most games the higher up the leader board you are the better the prizes are for the player to win.

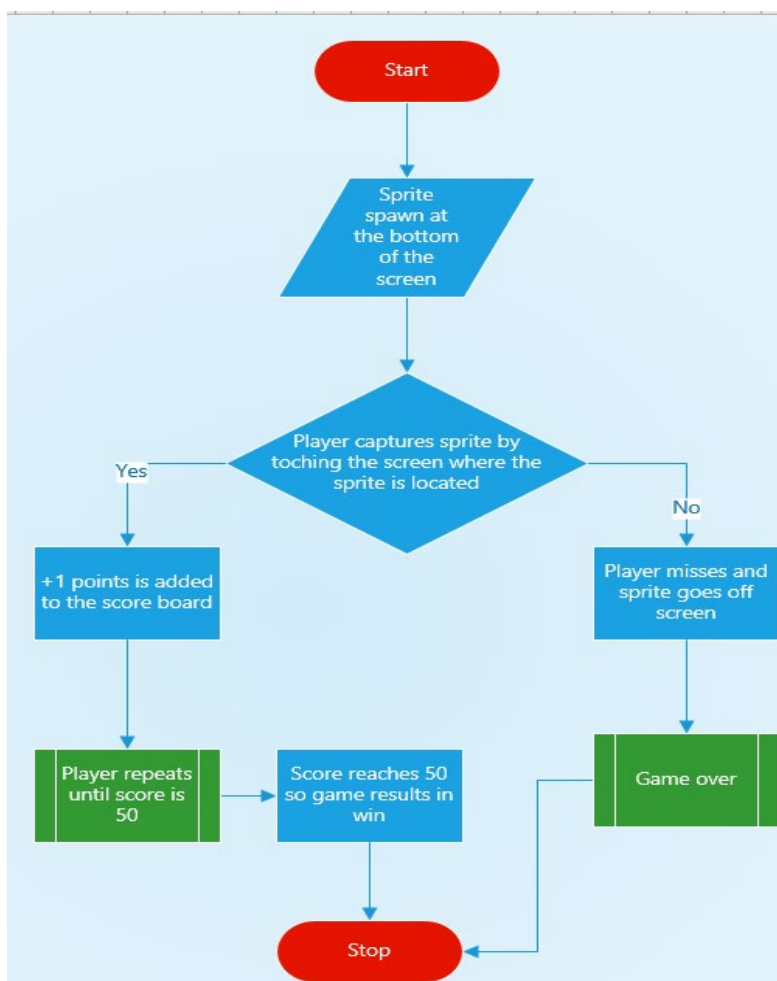
Storyboards

the storyboards help outline how the game will pan out and give an idea on how the game will look and how it will work, the first storyboard (A) shows the start-up screen where the player can choose to start the game or exit the player can also choose learn how to play the game before starting. the second storyboard (B) shows the game while in action where the sprite will randomly spawn from the bottom of the screen and the player must capture them before they reach the bottom once they reach the bottom they will then close the game and the result will end in a fail as shown for storyboard (c), or the result can be a win if the score is over 50.

ERD and data structure tables showing data requirements



Flowcharts



Here the game loads at the “start” then the sprite will then spawn, the player will then continue to use the computer mouse to click the sprites in order to capture the sprites or if the game was to be played on a mobile device then the user will use touch screen and by clicking on the sprites then the sprite will be collected. If the sprite is collected then the score will gain one point but if the player misses the sprite then the sprite will go off screen and the game will end depending on the reaction whether the sprite went off screen or got caught will then determine the outcome. Once the score then reaches 50 the game will then stop.

Platform research

It has been said that mobile based platforms are an ever growing market, for example for a typical game on a branded console would cost £40+ a game for a mobile device can cost as low as £5. Even free mobile based games such as flappy bird [4] made over \$2 billion in a few days from in game advertisements, which helps back the point that mobile gaming would be a good option for the prototype to begin on as a starting point.

Forbes[5] article has even said “Is Mobile Phone Gaming Taking Over From Console Gaming”[5], and the answer is no in my opinion but they go on to reach a valid point that from a survey “the smartphone is now the preferred gaming device of 42% of gamers. Of the rest, 32% preferred consoles and 26% the PC.”[5] Meaning that from the people they asked mobile apps were the preferred way of playing games.

Evaluation

By designing a prototype game I have been able to open a window to opportunities when the company realize that the world of gaming is now about interactivity it will open new doors to opportunities and to better games. I have found that the prototype has helped demonstrate many different possibilities and has shown all the aspects of advancements that the company have been missing out on. Reflecting back on the prototype I can easily say it has not been an easy task as I have found that finding appropriate music and sprites was very time consuming as the they had to be suited to the game atmosphere and even then I feel if I was to do this again I would still change them maybe a possible update for the game would be for the player to choose what they want as the sprites in the game maybe add unlockable for the game to have more of a personal touch to it. Maybe I would change and add a login feature so that players can keep their progress and enter in internet competitions for the game on who can get the highest score, therefore I still think that the game has a good long way to go before release but is a good starting point to work on.

Test Plan

Test Number	test	did it work	comments
1	start game	Yes	
2	exit game	No	Application did not close
2.1	Exit game	yes	Application now closes error due to missing bracket
3	click sprite 1	Yes	
4	sprite1 spawns	Yes	
5	click sprite 2	Yes	
6	sprite2 spawns	Yes	
7	click sprite 3	Yes	
8	sprite 3 spawns	Yes	
9	sprite1 respawns after click	Yes	
10	sprite2 respawns after click	Yes	
11	sprite 3 respawns after click	Yes	
12	score adds one point after every sprite is captured	No	score = +1 for every click whether or not sprite is there
12.1	score adds one point after every sprite is captured	Yes	score = +1 only when sprite is captured

End user comments

End user1

I have found the game to be quite bland but yet addictive like other games being so simple and yet so hard to play, getting overwhelmed when you are so close the goal is a major frustration when playing as the goal is so close to the end it then becomes a matter of getting over excited then your emotions get the better of you making it harder to play even though the game intensity hasn't changed at all. for future improvements I say to add more sound maybe theme music or a happy tone then a poke ball has been collected maybe even an achievement tone when the score has reached 50.

End user2

The game was boring once the game was done and the 50 score was gained the game had no value maybe by including more levels with different achievements the game will begin to become more enjoyable but for now with one goal the game literally has 10 minutes of value to the player before becoming obsolete.

Feedback

In regards to the feedback given I have decided to intensify the game so for future improvements I will include a variety of levels and different goals so that the game can have a vast amount of enjoyment in regards to the game being bland I have decided to add mini screens to show when goal is about to be achieved and for the game only having a single level I have decided to add many different levels so the game will have then more value and can be enjoyed for longer.

End user comments- After final version

End user1

After the game has taken the feedback into consideration I can honestly say that it is a brilliant and fun game by updating the colour scheme and adding better sounds I can say the game is no longer bland but is actually enjoyable.

End user2

I am happy to see the feedback given has been looked upon to help the game advance now but adding a better goal the game is now more intense and easier to enjoy I can definitely say that the game is now more fun and definitely holds more fun than what it initially did

Test Plan- After updates to game

Test Number	test	did it work	comments
1	start game	Yes	
2	exit game	yes	
3	click sprite 1	Yes	
4	sprite1 spawns	Yes	
5	click sprite 2	Yes	
6	sprite2 spawns	Yes	
7	click sprite 3	Yes	
8	sprite 3 spawns	Yes	
9	sprite1 respawns after click	Yes	
10	sprite2 respawns after click	Yes	
11	sprite 3 respawns after click	Yes	
12	score adds one point after every sprite is captured	Yes	
13	music	no	File not recognised
13.1	music	yes	File recognised(naming convention has now been fitted accordingly)
14	Message box for game over	yes	
15	Message box for score 20 level complete	no	Message box won't appear
15.1	Message box for score 20 level complete	yes	Mistake in code now fixed

Referencing

Article title: Psychology And Competitive Gaming

Website title: Psychology Today

URL: <https://www.psychologytoday.com/gb/blog/in-excess/201512/psychology-and-competitive-gaming> [1]

Author Miguel Isaza

Article title: Aaron Marks Special: Function of Game Sound Effects

Website title: Designingsound.org

URL: <http://designingsound.org/2010/10/15/aaron-marks-special-function-of-game-sound-effects/> [2]

Article title: Top 5 social features your game must have |

Website title: Gamesparks.com

URL: <https://www.gamesparks.com/blog/top-5-social/> [3]

Article title: The Vital And Depressing Lessons Flappy Bird Can Teach Indie Developers

Website title: Forbes.com

URL: <https://www.forbes.com/sites/ewanspence/2014/02/18/the-vital-and-depressing-lessons-flappy-bird-can-teach-indie-developers/#4eb558f73792>
[4]

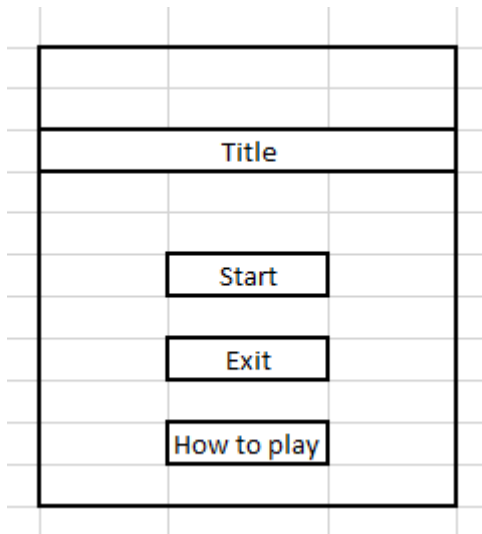
Article title: Is Mobile Phone Gaming Taking Over From Console Gaming?

Website title: Forbes.com

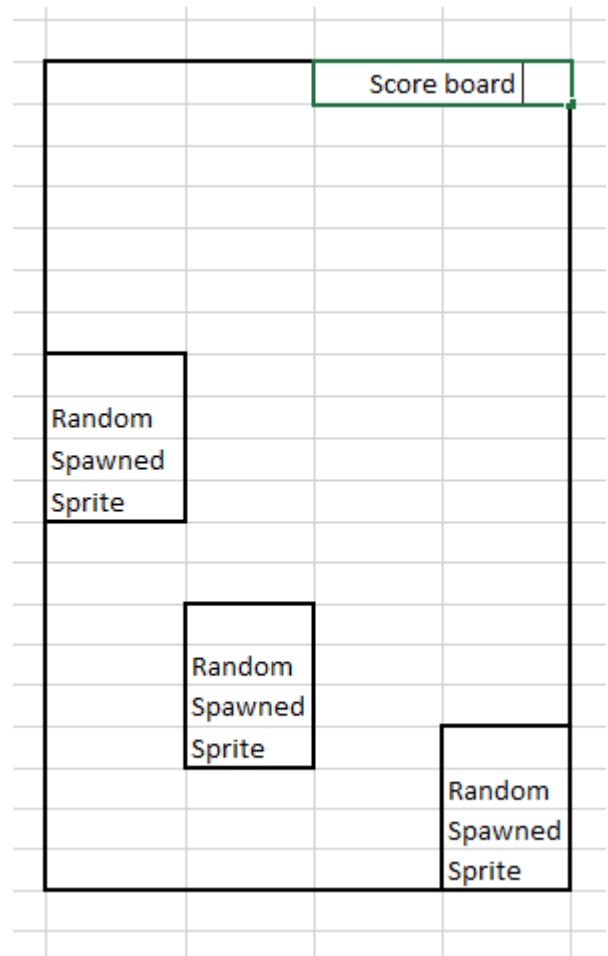
URL: <https://www.forbes.com/sites/annatobin/2018/10/11/is-mobile-phone-gaming-taking-over-from-console-gaming/#6a21e7416da3> [5]

Appendix

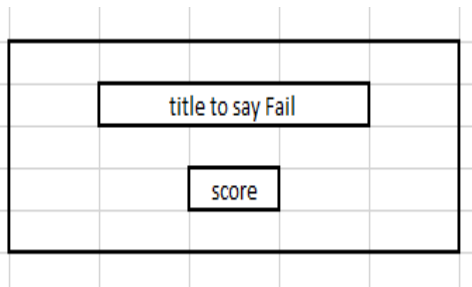
A



B



C



D

