

# Mobile and Web Games Development Project Document

B00188409

B00168419

B00210129

a. The stage one overview of the game in March outlined the implementation of a 2D fighting game where two characters on screen, one controlled by the user and the other by the computer, would fight one another with a three button attack system and one special move attack. They would both have a health bar and a score would also be kept for the player which would increase as he hit the computer controlled character. It would be implemented as a classic best of three rounds system with a timer also counting down each round. Whichever character got to two rounds first would win. The game would be set in the setting of the popular 2D fighter BlazBlue, as sprite sheets and other game images were made available by it's publishers for user created content. There would be three choosable characters each with their own unique aesthetic differences but also varying moveset. The three characters originally chosen for the game would be Bang Shishigami, Jin Kisaragi and Arakune. The menu would be a simple Start game, which would take you to the character select screen and put you against an opponent which you then chose from the remaining two characters and would then be taken to Bang's Dojo for the fight. The main influences for the design coming from original 2D fighters like Street Fighter II and Vampire Savior.

b. The game has strayed from the original specification in a few ways, mainly because of our elements that we were incapable of being able to code properly and so needed to change the element to something that we were capable of coding. The first major change was changing the game to a projectile based game in which a now preset character and opponent would fire their respective projectile which was originally planned to just be their special attack at one another. This change came almost exclusively from not being able to work the frame sequence changes we wanted with the original sprite sheets that we edited so that the four different animation sets could be activated properly and so had to change it to this linear one set animation sequence and firing projectiles. The format was also changed, only the player's character now has a health bar and score increases when the other character is hit by the player's projectile and the aim is to get as big a score before losing all your health. As well as this change

the round system and timer implementation were also not completed. We were also unable to implement the proper AI for the other character, this and the other changes were mainly to running out of time due to how much time was spent trying to fix and then solve other major problems that took up much of our time which we didn't perceive.

c. By far the biggest challenge in developing the game, which ended up crippling the progress, was getting the sprites to move through there animations properly and then change the frame sequence according to the key presses that corresponded to them. We made the sprite sheets as one long row of all the sprites frames, each having about twenty six frames. The row being organised in animation sequences of idle, walking, light punching, and strong punching. We would setup the different frame sequences as variables in the characters class and when constucting the sprite would set it to the idle frame sequence. The key presses where then meant to set the sprites frame sequence to the corresponding frame sequence nad it would constantly cycle through the animations of the current animation but we were unable to get the effect we were wanting and so after spending a long time trying to change the code we decided we would had to change the design to suit what we were able to acheive and thus we went with the one animation sequence and firing the projectile.

The main challenge outwith the coding problems we found in trying to develop the game was realising how easy it was to go outwith your capabilities and add to many features in when initially designing what you are going to make before thinking about if you can actually do it. We set out with to many features for us to handle that we didn't properly take into account the time it would take to do them ontop of the key elements which proved the main problem.

d. Being able to work around our major development problems and work with what we were able to get working with the time constraints that were on us from the time taken trying to fix the problem. Even though the end game is much weaker than we had planned it does have a basic frame of what we were wanting to make and hopefully once we improve our coding skills we will be able to go back and implement and fix it up to what we were originally planning for.

e. The domino effect that the frame sequence problem had on the game and the time sink it created has made the implementation of the smaller features, which would of added up, the most affected part for the game and what went worst. The small things can be what matter and the struggle to create what was a much more limited core element for the game than we wanted where the biggest problem for our game.

f. Changing the design of the game from a one versus one fighting game to a similar kind of game. Moving to a design that was more of a side scrolling 2D beat em up game that would follow the kind of traits from the numerous games of that genre on the sega mega drive and genesis era. This tweaked design would still use most of the elements we were planning but with the major problem we faced, we would of still been able to of made a better game as the level would of progressed and more targets could of been played against and made it a bit more engaging to play. The other main change would of been to try another method of sprite animation like loading each frame individually and going through each one in turn.