**Conner Joseph Brewster Computer Science I**

**Tuesday, January 22th, 2013 Walter – 2**

**Super Mario Bros.**

Since I am unable to use my Space Commander game for this project, I will begin on a new project: Super Mario Bros. I plan on re-creating at least the first level (World 1-1) of the original NES/Famicom game using the programming program called Game Maker 8 (Lite). From Chapter 10 (Tank Wars), using views I learned how to create a scrolling level. I will import Mario, Goombas, Power-up blocks, floor, and ordinary bricks, but I plan on drawing out the level first. I might use a controller object for the Timer and the Score. Sound effects and background music will probably be imported too.

The first power-up will be the mushroom. These will double Mario’s current size. It will allow him to break brick blocks and take a hit from an enemy. Upon being hit, he will be reverted to small Mario. The next power-up would be, of course, the Fire Flower. This will allow Mario to shoot fireballs at his enemies. He will lose this ability upon being struck by an enemy.

I will probably draw out the level first, and then set the sprites to their appropriate positions. I will then add costumes to the various sprites to make them look animated. I plan on giving Mario 3 lives, set to repeats. I will also place a force-reset button combination in case there is a major malfunction. The starman (invincibility) will probably be implemented last, as it will be an entirely different script, and might mess up other scripts. The title screen will only have 1 Player to start, if I have time, I’ll add 2 Player. Once Mario runs out of lives and the Game Over is displayed, a credits screen will come into play.

I will tie the controller for score to enemies, adding 100 to the scoreboard when Mario jumps on one, 50 points upon breaking a brick. The score added from the flagpole is probably going to be added last. I will play Super Mario Bros. on my Nintendo 3DS XL to be able to compare and to see how the game works. I might even get it for my NES emulator so I can see the internal files of the game (this is where I’ll probably get the sound.)

If I happen to have a massive amount of time remaining after I implement everything I know, I’ll add the other 3 levels applied to the world (1-2, 1-3, and 1-4). If I do manage to get as far as 1-4, I’ll implement Princess Peach at the end of the level to end the game. Game Information will also be added, containing similar text to this document.

Similar to the conflict with my Donkey Kong Scratch Project, I believe animation for ALL of my sprites would be virtually impossible. Another conflict I can find is the timer. In the games, the timer is not set perkily to seconds, more like 1/3 of a second. I will just have to adjust the time to get around this factor.

I will avoid the scripting language for Game Maker 8 Lite at all costs, primarily because I have no idea how to operate it. I will also avoid timelines and paths although I do know how to operate those; I fear that I have not mastered those techniques at this time in the class.

I do not plan on inserting the Famicom game booting screen, nor any third-party game enhancers (Game Genie). I will also not insert Emulation functions (auto-saving, speed up and inserting cheats).

Overall, I will find this a fun project to tackle, and it may even teach me a few things about Game Maker 8 Lite edition.