**Conner Joseph Brewster Computer Science I**

**Friday, September 28th, 2012 (Revision made on October 12th, 2012) Walter – 2**

**Scratch Application**

Since I am unable to use my Pokémon Battle Simulator for this project, I will begin on a new project: Donkey Kong. I plan on re-creating at least the first level of the original Arcade game using the programming program called Scratch (v1.4). I will import Jumpman, Donkey Kong, ~~and probably the princess~~, but I plan on drawing the bars and ladders. I might use a Variable for the Timer and the Bonus GUI. Sound effects and background music will probably be imported too.

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 Jumpman 3 lives, set to repeats.~~ I will also place a force-reset button ~~combination~~ in case there is a major malfunction. ~~The hammer 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 Game Mode A to start, if I have time, I’ll add Game Mode B.~~ Once Jumpman runs out of lives and the Game Over is displayed~~, a credits screen will come into play.~~

I will tie the variable for score to barrels, adding ~~100~~ to the scoreboard when Jumpman leaps over one. The highscore variable, sadly, will probably be impossible to insert, since memory erases upon restarting something in Scratch. I will play Donkey Kong on my Nintendo Wii 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.)

Many things were changed to the project as it was being created, mostly things to prevent bugs. Jumpman’s X Position must always be divisible by 3 to climb ladders, and touching the edge of the screen will mess that up, so I set a script to set him to a position where that is impossible. Slight gravity was also added to the edges of the construction bars. An oil barrel was also added to the bottom layer, however, it doesn’t spawn Flames.

It took 5 different methods of code to program the point system for barrels, although I’m not too happy about the current method, I’m just glad it works. The reason I don’t like it too much is that it’s forced to display a tiny pixel above each barrel, and while I do tell it to give the player 100 points, it gives anywhere from 75 to 150.

I also inplemented a Victory Screen for those who are able to get to the top, which pretty much asks for your score and credits me for making the game. I also added an “All rights…” statement for Nintendo.