Project Proposal

My project for this semester will be a procedurally generated infinite runner that people can download from an app store. The game is comparable to a lot of infinite runner type games on the app store currently, but instead of purely tapping the screen to jump over obstacles every couple seconds while the character runs automatically, my game will give control over where and when the character moves. I’m planning on also giving combat capabilities to the player to fight enemies along the way, that can be upgraded through collection of gems. Player upgrades will include but are not limited to higher jumping, double/triple jump, more damage, alternate combat combinations, faster running and more health. The procedurally generation will generate terrain patterns, enemies, and gems while the player is running through the game. High scores will be kept on the phone stating how far the player has gotten and compare them to previous plays of the game. The technology that I will be using to make my project will be the Unity game engine, Javascript and C# languages, Spriter Pro to make some of the art, and Audacity to mix sounds together to make the audio. The users of my application would be anyone with a smart phone and access to the internet and it would be maintained through updates via the app stores.

This game application will pull from multiple classes I have taken in the past such as Game Design, Interaction Design, Computer Graphics for making a game feel fun and challenging, but intuitive at the same time. My Data Structures, Algorithms, and Artificial Intelligence classes will help me with the high score keeping, the procedural generation and the enemies. This project will help further my understanding of all of these facets of classwork by putting them all together. The difficulty of making this project will be manageable but consistent work is necessary if I want to finish by the end of the semester. I’ve never worked with procedural generation or a high score database before, so those are probably going to prove the most challenging. I possess all the tools and knowledge necessary in order to make this game the way I have envisioned it, and possibly even have some stretch goals to try and meet if I am able to finish earlier in the semester than I originally thought. This project is interesting to me because I want to go into the game design field after college and this would be a good jumping off point after graduation as well as something I can show off to potential employers.