Assignment 2 – Fruit Ninja 3D
CAP6121 – Spring 2015
Due: 3/4/2015

You will implement a first person or third person shooter version of Fruit Ninja using the Kinect. The goals for this second assignment will be continuing to work with and learn about Unity 3D, the Microsoft Kinect, and 3D stereo if you wish.

Requirements

The requirements for this assignment are pretty loose. You are to build a Fruit Ninja game that takes place in a 3D virtual world (not a maze, although it can have a portion of it as a maze) and you can create any type of world you want. As part of the game, ninja must move through the environment collecting cookies and cakes to sustain his energy (he does hate fruit).

As part of the game, you will have to design a method for ninja to travel through the environment. Ninja must be able to jump and duck under objects, and can even fly for brief periods of time. The method you use for moving ninja can be adapted from an existing travel technique discussed in class or from your own design and must use the Kinect.

In your game, ninja will have to fight various fruits. You will need to choose up to five different fruits that ninja will fight. Each fruit can have different abilities as you see fit. For example, some fruits might take several slices to destroy but don't move while others might be move very quickly and attack ninja but can be destroyed easily.

In addition to navigating through the 3D virtual world, ninja also has several attacks. Ninja can stab, slice or chop, and parry to block incoming fruit attacks. In the most dire circumstances, ninja can call on the fruit gods with his voice to make the fruit moldy, rendering it harmless for a short period of time. Ninja also has a finite set of throwing stars that he can use to fight enemies. Finally, ninja has a grappling hook that he can use

to select fruit and throw it. You should use one of the selection and manipulation techniques discussed in class to do this.

The rest of the game is up to you. I am looking for creativity beyond the listed requirements. It should be fun to play. Extra credit points will be given for those students who go beyond these specifications.

Deliverables

You must submit a zip file containing your source and any relevant files needed to compile and run your application. Also include a README file describing what works and what does not in your application, any known bugs, and any problems you encountered. To submit, you must put your files on the ISUE Lab drive. Please note that both team members must submit an individual README describing what parts of the assignment you worked on and what parts your partner worked on.

Grading

Grading will be loosely based on the following:
60% correct functionality
20% documentation
20% creativity