COSC 729: Virtual Reality and its Applications
Fall Semester 2015
Instructor: Dr. Sharad Sharma
Assignment 4

VR University Campus Evacuation (Part 2)

This project will span a period of 1 weeks and is meant to update the previous assignment 3 you developed using WorldViz Vizard IDE. This assignment will get you prepared for the final project.

Please submit your assignment by: **3/10/2015**

Submission:

Submit your code files and all scene assets in a single zipped file (as a *.zip) and submit the file on blackboard.
Example: **Assignment_04_sharma.zip**

Description:

In this project you will update the ***VR University Campus*** environment. You will be required to do the following:

1. **Multi-agent System**: 2 **CUSTOM** avatars (such as a student and instructor) and **INBUILT** avatars in vizard to create a multi-agent system.
    a. Must use a basic bone system and animation
    b. Utilize keyboard or mouse callbacks to control the movement of the avatar you are logged in as.
    (Refer: C:\Program Files\WorldViz\Vizard5\tutorials\avatars)

*2. **Audio**: The VR University should comprise of*
    a. Add sounds for avatars (refer: C:\Program Files\WorldViz\Vizard5\tutorials\avatars\speech.py)

3. **Programming**: Create evacuation scenario

    a. **Slider**: add a slider to increase or decrease the speed of agents.(C:\Program Files\WorldViz\Vizard5\tutorials\GUI\
    b. **Click an agent**: **Add text or any relevenat description for agents when clicked. (**Refer; C:\Program Files\WorldViz\Vizard5\tutorials\picking)
    c. Add two **proximity sensors**: Refer: C:\Program Files\WorldViz\Vizard5\tutorials\proximitySensors)
    d. **Data File**: Record the elapsed time in a txt file. Record how many exits the user saw before exiting. (Refer: C:\Program Files\WorldViz\Vizard5\tutorials\data\data.py) Note: copy the data.py from program files to a different location to play the file
    e. **Virtual evacuation drill**: Incorporate the following script in your project. Make necessary adjustments to incorporate it in your campus evacuation project. C:\Program Files\WorldViz\Vizard5\tutorials\flowControl\ experimentDesign.py