

COSC 477/590: Virtual Reality and its Principles  
**Fall Semester 2018**  
**Instructor: Dr. Sharad Sharma**  
**Assignment 3**

***University Campus*** Evacuation [Part 2]

This project will span a period of 1 weeks and is meant to update the previous assignment 2 you developed using WorldViz Vizard IDE. This assignment will get you prepared for the final project.

Please submit your assignment by: **9/26/2018**

**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\_03\_sharma.zip**

**Description:**

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

1. **Programming:** Create evacuation scenario [40 points]
  - a. **Landmarks:** Like pigeon hunt game, add 4-5 landmark places to visit in a time duration. ( C:\Program Files\WorldViz\Vizard6\examples\pigeonHunt
  - b. **Click an agent: Add text or any relevant description for agents when clicked.** (Refer; C:\Program Files\WorldViz\Vizard6\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 (key points in the city)the user saw before exiting. (Refer: C:\Program Files\WorldViz\Vizard6\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 city evacuation project.  
C:\Program Files\WorldViz\Vizard6\tutorials\flowControl\experimentDesign.py
2. **Behaviors** [40 points]
  - a. Add fire and smoke in the environment
  - b. Animate the viewpoint: Use keys to move the viewpoint to a different location (refer C:\Program Files\WorldViz\Vizard5\examples\viewAnimate)
  - c. Create different behaviors for agents in the environment.
3. **Creativity** [20 points]
  - a. Add menus. Check Controlling Imported Animations (walking animation speed)  
<http://kb.worldviz.com/articles/2087>
  - b. Add collision for action events (relevant to evacuation)  
<http://kb.worldviz.com/articles/350>

*Extra credit:* Add an active shooter in the environment and have avatars running away from the active shooter by keyboard press.