This project is meant to familiarize you with the WorldViz Vizard IDE. This assignment will get you prepared for the final project.

Please submit your assignment by: **9/19/2018**
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_02_sharma.zip**

Description:

In this project you will create a ***University Campus*** environment. You are expected to create an entire virtual environment that combines 3D Studio Max models and WorldViz Vizard coding. You will be required to do the following:

1. **Modeling**: Create a campus and have at least 10 Buildings
    a. You have to use freely available 3D models over the internet.
        You have to use atleast 2 models from 3ds Max (import Greek temple)
        You have to use atleast 2 models from Sketch up
    b. You have to use textures
    c. At least 12 **UNIQUE** models
        i. Must be different models (trees, streets, cars, etc)
        ii. Must be uniquely textured
        iii. Must use simple animations in Max or in Vizard
    d. You must use polygonal modeling or convert non –polygonal objects to a polygonal object in order to export from Max to WorldViz Vizard.
    e. Export your model from 3D Studio Max into Vizard using the OSG/IVE exporter.

2. **Programming**: The ***University Campus*** should comprise of
    a. Add atleast ten avatars in the environment
        - Make one avatar go around the Greek temple
        - Utilize keyboard or mouse callbacks to control the movement of the avatars.
        - Change the speed of the avatar through the user of cursor.
        Refer: C:\Program Files\WorldViz\Vizard6\tutorials\GUI
    b. Add multiple windows
    Refer C:\Program Files\WorldViz\Vizard6\examples\windowViews

    c. Add a sky with environmental map, add audio file
    (Refer "Using actions example.py")
    Refer: C:\Program Files\WorldViz\Vizard6\tutorials\multimedia
    d. Create action events in the environment [refer animating avatars example.py]
        - comment the code to mention action event1, action event 2, etc.
        - Action events should be on other objects in the environment
(Refer "teacher in a book" for vizard. Refer "animating avatars example.py")

3. Create an **AI controlled behavior and path finding** for evacuation
   a. You can use the AI functionality implemented for bees as mentioned in "teacher in a book" for vizard.
   Refer "transformations and the scene graph example.py"
   (Refer path following behavior in "onTheFly.py" in tutorials)

   Or
   b. Use functionality to demonstrate the various kinds of animations that can be exported by our 3ds Max exporter plugin.
   Refer: C:\Program Files\WorldViz\Vizard6\examples\animations/ ImportedAnimations.py

Extra Credit
   1) Add Graphical User Interface
   Refer: C:\Program Files\WorldViz\Vizard6\examples\graphicalUserInterfaces
   C:\Program Files\WorldViz\Vizard6\examples\animationPaths/