INFO6022 - Physics 2

Project #4

Due Date: Sunday, April 1st, 11:59PM

This is an individual assignment. One submission is expected per person.

The submitted code must compile in Visual Studio 2015 or 2017.

# Constraints

For this project, you will use Bullet (or some other 3rd party physics engine) to simulate various types of shapes and constraints.

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|  | Item | Marks |
|  | **MUST HAVES: ( Just do it, or you get zero ☹ )**  **Compiles:** It must compile.  **User controls:** There must be some way for the user to interact with your scene that shows off all the different shapes and constraints you’ve implemented.  **A reasonable camera:** Depending on your scene, you may want a 3rd person camera following some object you’re “driving,” or an eye-in-the-sky. It must make the scene visible. I’m trusting your judgment here! Kind of.  **Decent 3D rendering:** I know you can do this by now! I want to see a 3d scene that *looks* and *feels* 3D. That means shading, textures, maybe even shadows and lighting!  **Smooth Input Controls:** key presses are recorded and cached between presses and releases, and ‘control’ happens per timestep. |  |
| !! | **Up to -5 marks for ugly code!!!** …. So What is ugly code?   * Bad or inconsistent formatting, indenting, and spacing. * Poor naming choices. Eg. “param5” “temp3” “MyClass” “v1, v2, v3, v4, v5, v6” names should be *accurately* descriptive. * No comments.   Inaccurate comments. |  |
| 1 | At least 4 different types of shapes are represented. Yes, two of those can be the plane and sphere shapes we’ve already used, if you’re gonna be boring. | 20 |
| 2 | At least 4 different types of constraints are represented. There are plenty to choose from! | 20 |
| 3 | There is collision feedback! That could mean hearing knocking sounds, or seeing things change color, get creative! | 5 |
|  | TOTAL: | 45 |