## GA502 - Level Design 2

- Level and environment design theory
- Game development production cycle
- Advanced UE4 usage:
  - Blueprints & scripting
  - Advanced material and shader networks
  - Level optimization and performance
- Introduction to Unity3d Development:
  - Unity3d workflow & asset pipeline
  - Unity3d C# scripting

- Grading:
  - Assignments: 70%
  - Final Project: 30%
- Final Project will be a portfolio quality interactive level which will showcase your skills the topics covered in this course.
- All course materials will be available on github.

https://github.com/maxmurder/GA502-LevelDesignII



### Context

#### Counter Strike

- Competitive multiplayer
- "Realistic" first person shooter
- Source Engine

#### **Bomb Defusal**

- Asymmetrical
- Objectives



### Layout

### **Considerations:**

- Asymmetrical teams and objectives
- LOS, Grenades, penetration and other mechanics

### **Pacing**

#### **Considerations:**

- Rounds are 1m 55s
- Bomb fuse is 40s
- Player movement speed



Discussion

Is it balanced?!



## Unreal Development Resources

Read the #@%&'n manual!

https://docs.unrealengine.com

https://wiki.unrealengine.com/

- Extremely well documented and maintained
- Huge amount of resources freely available

While you're at it, read the #@%&'n EULA!

https://www.unrealengine.com/eula

- Epic takes 5% of revenue after \$3000(USD)
- Video/Streaming content, and contracting work is exempt
- UE4 is open source!

https://github.com/EpicGames/UnrealEngine

## Free as in Freedom!

GNU Image Manipulation Program (GIMP)

https://www.gimp.org/

Blender

https://www.blender.org/

AwesomeBump

http://awesomebump.besaba.com/

Inkscape

https://inkscape.org/