

# Bullet Blitz

Victor Gasior, Blade Johnson, Andrew Newbill, and Lucky Woods

UT-Martin

October 31, 2023

# Motivation

- An enjoyment of classic arena shooters
  - Doom
  - Quake
- Movement is restricted in modern shooters

# Technology

Technology used:

- Unreal Engine 5
  - Base engine for the game
- Ultimate Doom Builder
  - Map models
- Blender and Maya
  - Weapon models
  - Weapon animations
  - Changing map file formats
  - Character models

# Project Goals

Goals:

- Networking
  - Hit detection
  - Minor desync among clients
- Multiple maps
  - Works well with movement system
- Multiple weapons

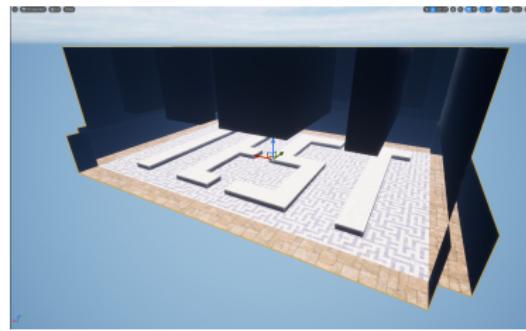
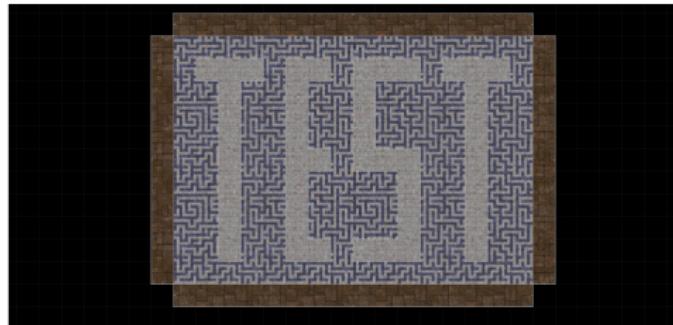


# Map Creation Pipeline

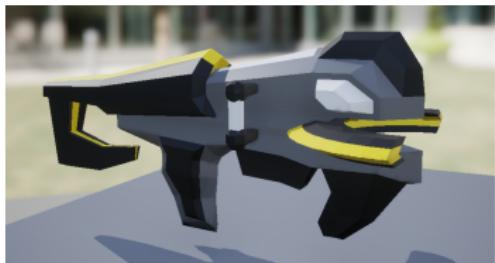


- Made in Ultimate Doom Builder
- Exported into an .obj file
- Import the .obj file into Blender
- Export as FBX file
- FBX imported into Unreal
- Unreal converts to a uasset model

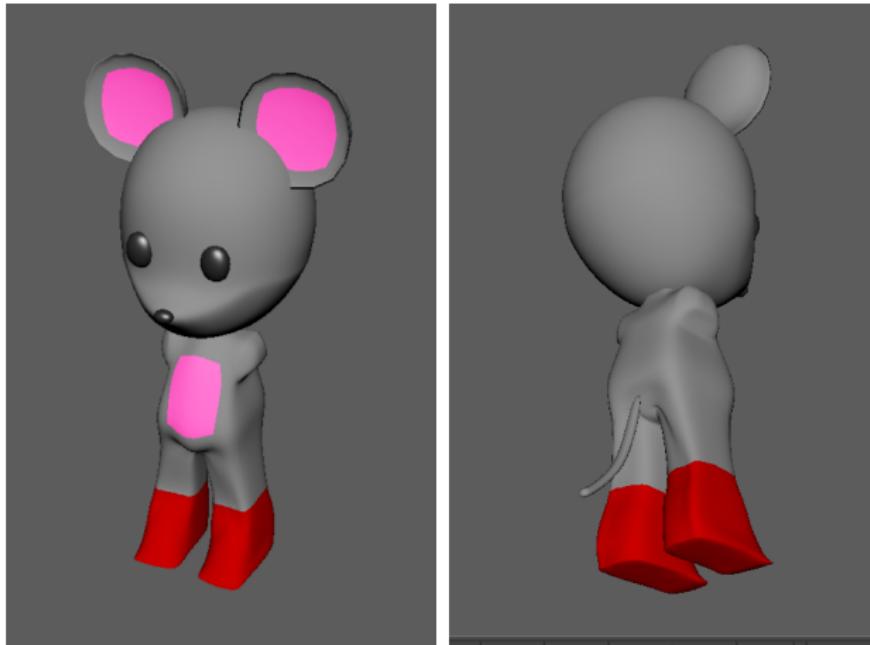
# Test Maps



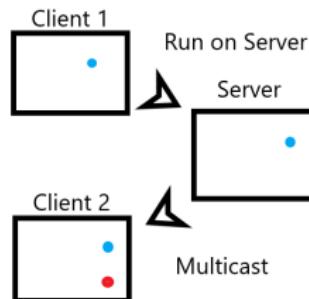
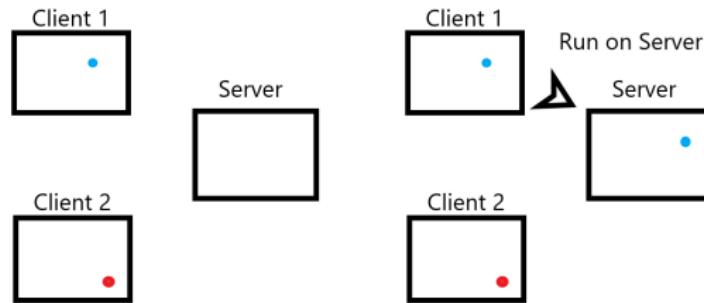
# Weapon Models



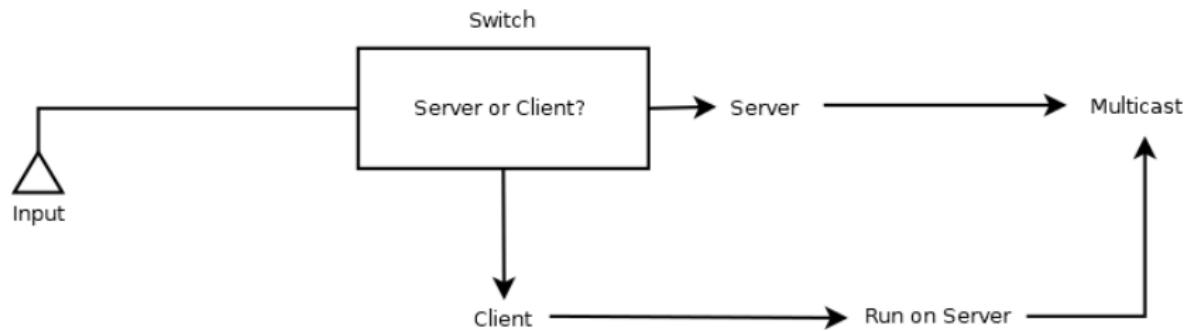
# Character Model



# Networking



# Networking



## Demo



# Difficulties

## Challenges:

- Networking
- Various weapon related bugs
- Hit detection on self
- Designing issues on the Rat Model

# Future Goals

Goals:

- Non-local networking
- Player scores and win conditions
- Adding textures to Rat model and trying to smooth the design.
- General clean up of debugging and quality of life improvements.
- Finishing the second map.

# Any Questions?

Questions?

Comments?

## Contact Info:

- ① Victor Gasior: [vicagasi@ut.utm.edu](mailto:vicagasi@ut.utm.edu)
- ② Blade Johnson: [davbjohn@ut.utm.edu](mailto:davbjohn@ut.utm.edu)
- ③ Andrew Newbill: [andjnewb@ut.utm.edu](mailto:andjnewb@ut.utm.edu)
- ④ Lucky Woods: [lucjwood@ut.utm.edu](mailto:lucjwood@ut.utm.edu)