Dun and Gun
Technical Design Document
(Prototype)

Game Summary

Dun and Gun is a First Person Shooter with Rogue elements. The goal is to invade a procedurally-generated dungeon, defeat undead zombies and rats, and eventually fight a boss zombie. The dungeon will be procedurally generated, along with enemy, health, and ammo placement.

Technical Summary

Our team developed the game over the course of three months, starting in early February 2019. We were comprised of six members, four with a more programming focus, and two with a art focus for the project.

Equipment

We developed the game on the following hardware:

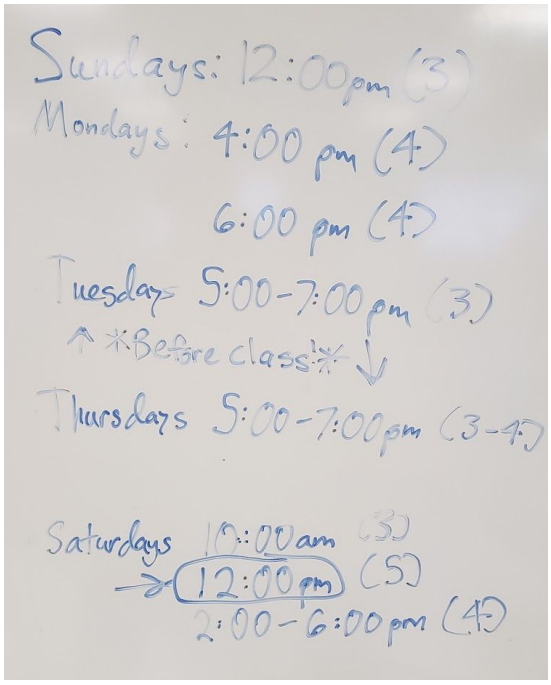
- Acer Chromebook 14
- ASUS Strix ROG 5R5LURG7
- HP Envy 360
- HP Spectre x360
- iBuyPower Trace Desktop 9220
- Microsoft Surface 2

Evaluation (Complexity)

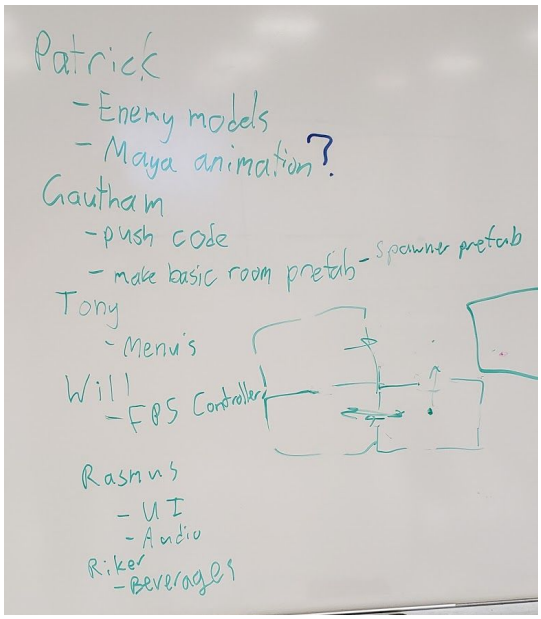
Our pathfinding is O(n^2), and our room generation is O(n) with an expected small n (n < 10). We used the Unity Engine 2019. Our game ships for Windows, x86_64 based computers.

Scheduling

We held a Doodle pool to gather data on when all of our members were free, and used the following dates for development meetups:



We also divided up the tasks incrementally. Example:



Credits

Gautham Dixit - Procedural Room Programming, Pathfinding
Rasmus Grunnet-Jepsen - Audio and Audio Programming
Patrick Perrine - Design, Modeling, Documentation
Will Pye - Combat Programming, Pathfinding
Riker Quintana - Art/Modeling
Tony Radtke - Menu Programming