Wrath of the Dungeon Lord

Game Description:

We are making a first person game that is visually similar to Doom. This will be a multiplayer CO-OP style game where you can play with others to defeat the dungeon. The weapons system will be a mixture of melee and ranged with items scattered around the world that can be picked up for a health/weapon buff. The objective of the game is to clear all of the enemies in the dungeon with your weapons and power ups. The game takes place in a dungeon full of tight corridors and large rooms enclosed by walls. There will also be various doors that you can open to move between areas that you can even close to block off enemies. Since the game takes place in a dungeon, the lighting will be dark and hard to see far distances. The game will be fun because it combines fast-paced action with enough variety in weapons and enemies to keep the player engaged.

Development Strategy:

Milestones:
- Starting point
  - Starting from scratch
  - Will reference/use path finding code from Project 1
- Alpha demo/Group status report - at a minimum we will have:
  - Basic gameplay complete
  - Moving around/colliding with the scene
  - Using melee weapons
  - Hitting static/non AI enemies
- Nov 30th
  - Game Low bar finished
  - Will use remaining time to test/bugfix/balance/highgoal

Work distribution
- Git
  - Large feature branches
  - Later on there will be issues for bugs
- Who do what?
  - Rendering (isaiah)
  - Enemies/AI (isaiah)
  - Networking (david)
  - Weapons (david/isaiah)
  - Power-ups (david)
  - Player Interaction (david/isaiah)
  - World design/item placement (david/isaiah)

High Bar:
- Boss fight (multiple stages)
- Portals to help transition between rooms (boss fight, hidden rooms, etc.)
- Multiple levels

Low Bar Checklist:
- Raycasted 2.5D rendering in first person
  - Rays projected into scene to create a fake 3D illusion
  - "Doors" that can be opened/closed by players
- Player
  - Can hold 1 melee weapon that they choose at the start
  - Additionally 1 ranged weapon if found and can freely swap between
  - Limited health
    - Health regens to "checkpoints" example: every 30% it can regenerate to.
  - Stamina for dodging/blocking/heavy attacks
  - Dashing gives small amount of immunity at the cost of stamina
- Realtime melee/ranged combat
  - Melee moves
    - Light attack - fast and repeatable
    - Heavy attack - slow harder hitting, uses stamina
    - Block - blocks damage at the cost of stamina when hit
  - Melee weapons (start with one of these):
    - Sword
    - Halberd
    - Mace
    - Brass Knuckles
  - Ranged weapons (pickup only, limited ammo):
    - Crossbow
    - Musket
- Enemy AI
  - Path finding
  - Interesting behavior based on type of enemy
  - Aggression
    - Enemies can spot you and attack and also trigger aggression on nearby enemies
    - Enemies can lose sight of you and loose aggression
  - Types
    - Goblin (melee, sword)
    - Skeleton (ranged, bow)
- Powerups
  - Items dropped when enemy dies
  - Pick up in world
  - Multiple types of power ups:

- - - ■ Ranged weapons
    - ■ Health packs
    - ■ Weapon Buff
    - ■ Etc.
  - Multiplayer/Networking
    - Realtime CO-OP gameplay
    - Players respawn in set amount of time if atleast 1 player is remaining
    - Level resets if all players die within the respawn time
  - Custom Art/Animations
    - Assets built in Blender then rendered as animated sprites
      - ■ Weapons
      - ■ Items/Power ups
      - ■ Enemies
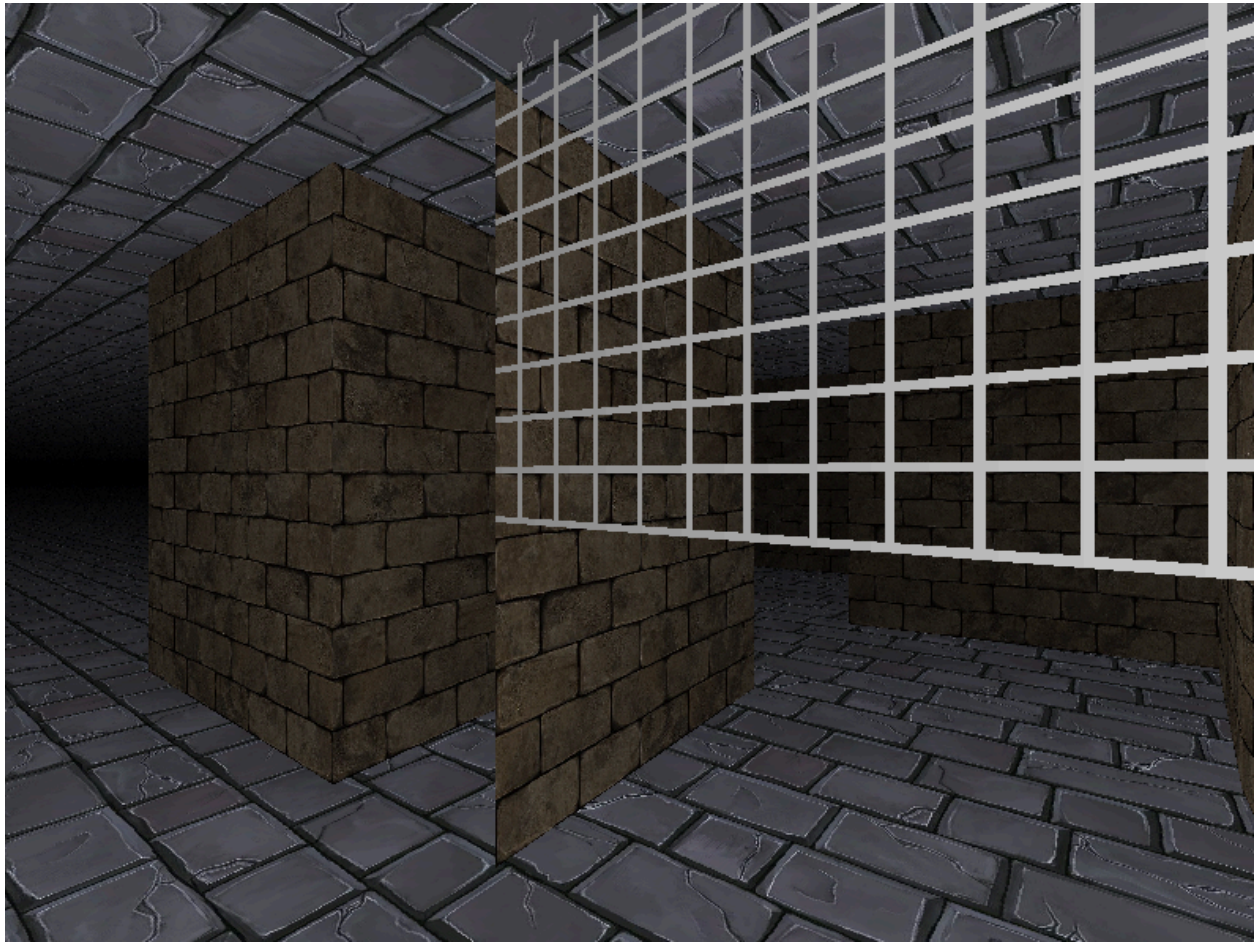   - ■ Remote Player (multiplayer viewed)

Draft Complexity Rubric:
- Raycasted 2.5D world (?? pts)
- Realtime Game (15 pts)
- Multiplayer (10 pts)
- Networking (50 pts)
- Power ups (20 pts)
- Art (20 pts)
- Rich Behavior (20+ pts)

Current Progress:

Rendering:
- Walls
- Doors/transparency
- Floor/ceiling
- Sprites occluded by walls

Items
- Basic sword animation/weapon system
- Basic powerups

Physics
- Basic item pickup/prompt giving when standing over an item
- Wall/Door collisions