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BİL 424 PROJECT TASKS

As I don't have any other group member all tasks listed here will be done by me.

I decided to break the project down to 5 parts: main character, world generation & camera, enemies, UI & UX, and assets (sound and graphics).

MAIN CHARACTER

- Main character will be able to shoot and move to seperate directions (dual-stick on a gamepad or keyboard-mouse for moving-aiming).
- Character must be able to pick upgrades for weapon and abilities (faster firing, a dash/slide move for extra mobility etc.).
- Character won't be able to jump (I don't think the camera I chose would be suitable for platforming, I might change my mind after some testing).
- Character will have permadeath (once player dies it is game over), but will have several hitpoints of health (probably upgradeable).

WORLD GENERATION & CAMERA

I combined these two together because I had two different ideas about how I should generate a level and both would require a different type of camera:

Box-like Rooms

- Levels will be generated as seperate rectangular rooms connected to each other with doors. (like NES Legend of Zelda dungeons)
- Different rooms will have different contents (empty room, loot room, room with more enemies, room with columns in middle for obstruction and cover, etc.)

- Room to room transition will be like NES Megaman games. (character freeze in place while camera moves to adjacent room). Camera will be static otherwise.

Organic Rooms

- Levels will have bigger, more organic rooms like Diablo caves.
- Rooms will be seamlessly connected.
- Big rooms for fighting, smaller rooms for loot and breathing between combat.
- Fractal based generation (?) (I need to do more research about this more free content generation type)

I will decide which approach to take after some testing with both. However, I may not be able to implement a robust enough procedural generation within the project timeframe, in which case i will try to design the levels manually.

Figure 1: Legend of Zelda Room Example

Figure 2: Diablo 2 Level Example

ENEMY DESIGN

- Enemies will have predictable movement and firing patterns so that player will be able to learn to avoid them.
- Enemies will have ranged and melee attacks.
- Some enemies will be static and others will have a set of walk cycles that will be random or preset.
- Combination of movement and attack types will be used to make different enemy types, I plan to design at least several different types of enemies with two variations each.

UI & UX

- A main menu and an options menu.
- No manual save & load. Game will automatically save to a save file and player will be able to either continue on their saved game or start a new game.
- HUD to show player health and upgrades.
- Rebinding keys for controls.
- Pause menu.

ASSETS

- Models for main character and its weapons.
- Models for enemies.
- Graphics for world generation, upgrades, projectiles, UI elements.
- Sound effects for main character, enemies, UI elements.
- Background musics.