Software Development and Training

Game plan

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1. Describe your core mechanism

This shoot 'em up pits the player against an endless horde of demons (may change) in a race to escape from an infested castle (may change). The player must constantly scavenge for ammunition in order to combat the oncoming horde long enough to escape. The player must not stay longer than necessary in the danger zone as the demons will stack up and it will become impossible to combat them.

A. Game genre

Side Scroller Demon shmup with lane based movement and some survival aspects.

B. Rules

Don't get eaten! Kill or avoid demons in close range to keep from taking damage. Take enough damage and the player dies. Once the level has started you are in danger, it is not until you reach the end of the level that you can rest.

C. Winning, losing conditions

The player wins the game by reaching the end of the level and escaping from the hostile territory. This end of the level will be a place in the map that the player is required to reach. The losing condition is losing all of the player's health before reaching the end of the level. You lose health by receiving attacks from the demons, get enough hits and you will perish.

D. The goal of the players

The player's goal is to reach the end of the level alive by any means necessary. Using ammunition and resources will help complete this objective.

2. What Inspired this Idea?

This game is centrally inspired by Zombieville and loosely inspired by Project Zomboid.

3. List the possible obstacles for:

A. Design

Design obstacles for this game include player and enemy damage balancing, level traversal and general level design, enemy behavior, and a repetitive core loop. To mitigate repetition and improve UX, we plan to implement various weapons and randomized loot available throughout the levels.

B. Implementation

Technical obstacles for this game primarily revolve around implementation of a 3d walking space in a 2d perspective. To elaborate, the player will be able to move left to right, but also "Up" or "Down", which will be interpreted into moving closer to the screen or further away. Optimizing collision boxes in this environment may provide some additional challenges.

4. List reason why this plan is doable

A. Why do you believe it is playable?

Our core game loop is quite similar to the references we've mentioned above, and thus is already proven to work to some degree (assuming we're able to implement it correctly).

B. Why do you think this can be done between the time allotted

We've had experience with this type of game before. We have dealt with collision which will be the main subject in the game, and are aware of the additional challenges we'll face in reference to the player movement mechanics described. The initial plan is to have two main weapons, one enemy type, and a single static level. As we progress we will evaluate the time we can invest into adding more to it. Our resources are based on prior programming experience, some artistic work, and more than anything the Internet.

5. Describe the features that you expect to accomplish by the end of this course, and what features you believe can be risky to finish before the final delivery time.

We expect to completely implement player movement and combat, enemy movement and combat, and at least one entire level before the end of this project. Two main weapons, a crossbow and any melee weapon. The features that we want to implement that we might not be able to finish are different levels, different types of weapons, and a scoring system.