

Impossible 3

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Project Description

Our senior group project will be a video game designed in the Unity Engine using C#/Javascript. It's going to be a roguelike dungeon crawler with a 3D isometric camera view. The game will use a real time turn-based combat system.

One of the key features of the game is that there is permanent death, in other words when a character dies the player won't be able to bring them back and will have to find or hire a new combatant. The game is centered around a team of 3 combatants (hence the name "Impossible 3") each with a unique combat ability.

The game utilizes real time turn-based combat in that each player may act only within the range of a cooldown timer. Within each combat scene, all characters' cooldown timers run simultaneously. Characters with faster cooldown timers, therefore, have an action advantage over slower characters. This system is halfway between real time combat (wherein all characters move in real time) and turn-based combat (where actions are mutually exclusive to other characters).

As a 3D isometric game, the graphics are halfway between a top-down game (wherein the player has a limited 2D view from the perspective of the sky) and a 3D third-person game (wherein the player has an unlimited 3D view from the perspective of a combatant on the ground). The isometric viewpoint allows the player to view all his team members from the "corner" of the room and maneuver his team members accordingly.

Our style of combat will be governed by a mix of real-time and turn based action. Each player character and enemy will have the ability to move and do an action, whether that be an attack or spell. After they do their movement and action a timer will appear and the character will have to wait until the timer is up to move and have an action again.

Each character class will be broken up into around 3 playstyles, each of these playstyles has its own skill tree progression, and loot type. This allows players to choose the specialties and playstyle of each of their three party members, and also forces the players to make decisions when choosing loot based on tier and type. Characters also have some ingrained traits which push them toward a certain playstyle. Players can choose to either magnify these traits or try to re-focus that character's skills. Each team member fulfills a vital function and thus synergizes with the other members, i.e. one member specializes in long-range combat, while the others may specialize in short-range blitzing. Characters can also be exchanged to suit different

challenges when they travel back to town. In town the player can also buy or sell loot for more items to help out the party of 3.

The game is a standard dungeon monster slayer. The player moves through progressively more dangerous dungeons until he reaches the most evil boss and slays him. Because of the way the viewport works, the player cannot see all of a dungeon, or even a room, that they are in at the time. This factor is intended to contribute to the suspense the player feels while he explores a large and dark dungeon.

Project Justification

Our group has decided to focus our efforts on making a client side game in Unity. We are taking on this project because it is challenging, but doable under the MVP paradigm. We are all also gamers, and getting the chance to create a video game that we would enjoy playing is something that appeals to us. We want to make a game that is challenging and fun to play. We cannot guarantee that there will be as much content as would be necessary for a retail release, and graphics are currently up for discussion, but we hope to create a fully working gameplay prototype including all of our desired base functionality.

Members of our group have taken Game Design, Interaction Design, Graphics, and many other programming classes. These and prior Unity dev experience will help us to complete this project. We will all be working on multiple aspects of the project, but we will try to distribute the work so that each member can spend time on aspects of the game that focus on his individual field and skillset.

Some other games which we have taken inspiration for in this project include: Darkest Dungeon, Binding of Isaac, Final Fantasy VII, XCOM, Rogue Legacy, among others.

We will work hard and assure that a playable demo, at minimum, is completed by the end of this semester. If the project goes well, we will try to polish the graphics and content, but at the outset we are focusing on gameplay, and creating a fun, difficult, and strategy based dungeon crawler.