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FIEA Project Proposal

I've always been a fan of story games - games that engage the player so deeply that they feel as though they've entered a new world. Growing up, I found myself particularly drawn to experiences that combined engaging narratives with inventive gameplay mechanics, elevating what a game could accomplish beyond familiar boundaries. Over time, my passion for such projects led me to develop two complementary skill sets: programming and digital art. When these disciplines converge, they empower me to create interactive worlds that are both technically robust and visually captivating.

During my research at FIEA, I plan to build a Unity game, Crossover, that merges elements I don't often see in game titles - an innovative gameplay with a dual-character, dimension-shifting puzzle system paired with a plot-driven narrative. The story of this game centers on two old friends who, after years of drifting apart, decide to reconnect by visiting an escape room. What begins as a nostalgic reunion quickly turns into something far more sinister when they realize the escape room is an undercover testing ground for dimension-shifting technology. Each character's unique backstory shapes how they react to the story unfolding around them and the mounting tension between them. As deeper layers of conspiracy emerge, they question why they were drawn into these experiments, who is behind such groundbreaking yet dangerous research, and - most importantly - whether they can navigate their fractured friendship and find a way out before the escape room traps them forever.

At its heart, Crossover is a puzzle adventure where you control two characters who each have a dimension-shifting device. Whenever you switch between characters, you can send the other character into an alternate dimension where they can find objects or reveal alternative paths that don't exist in the normal world. You can then use these discoveries in the original world to progress through the story. By swapping between the two characters and dimensions, you'll tackle puzzles and uncover secrets that only become visible in one reality or the other. Though these overlapping realities may sound complex, I plan to introduce every mechanic incrementally, ensuring the difficulty curve remains well-balanced. The result is a dynamic interplay of exploration, character-driven problem solving, and the innovative use of dimension-shifting game mechanics combined with appealing art style.

I believe that immersing the player in a believable game world is key to keeping them engaged. Therefore, one of the key objectives of my project is to create a replayable, dynamic and puzzle-driven gameplay experience within a very detailed world populated by characters with their own backstories and personalities. Each character's individuality will be reflected not only through dialogue or cutscenes, but also in the ways they approach puzzles and utilize the dimension-shifting mechanic, ensuring their unique personalities shine through every aspect of gameplay. By bringing depth to the story and merging it with puzzle-driven mechanics, I hope to show how the characters themselves can drive the story.

This game will be developed in Unity using the C# programming language, allowing for streamlined integration of both 3D and 2D assets and core gameplay logic. The dimension-shifting mechanic will be implemented by creating two separate room environments - each representing a distinct reality - so that when the player activates the dimension-shift, they are smoothly teleported between these two rooms.

During my time at FIEA, I aim to expand my Unity experience by exploring new editing tools, refining existing techniques, and deepening my mastery of the C# programming language. By integrating puzzle design, multi-dimensional mechanics, and character-driven narrative, I aim to challenge my creative and technical limits. In particular, I plan to focus on balancing the game and ensuring the difficulty curve is implemented well, ensuring players remain engaged without feeling frustrated. Through the support of faculty and the insights gained from collaborating with peers, I hope to strengthen my abilities in level design and programming. By the end of this journey, I aim to have a refined demo with several polished levels with core mechanics implemented, and I will record my journey by videoing my development process as a demonstration of the skills I've learned.

If given the opportunity, this experience will help me grow as both a student and a professional in the game development field, while also enabling me to create a puzzle-centric project with near-limitless potential. I've already gained foundational skills in 3D modeling and animation, but there's still much more to learn to build the multi-dimensional, story-rich world I envision. I aim to expand my foundational skill set by diving deeper into advanced game design concepts and immersive dimension-shifting mechanics, ensuring I can build the multi-dimensional, story-rich experience I envision. Approaching my senior year, I plan to extend this FIEA project into my senior research by focusing on 3D modeling - creating detailed character models and animations (idle, walking, running, picking up objects, etc.) - and leveraging my 2D animation skills for

cutscenes and additional assets. Also, I would continue working on this project, implementing sound design for the game, which would give even more character to this project.I believe that immersing myself in this hands-on process at FIEA will help me push my creative boundaries and hone my skill set to its fullest potential.

Abstract

While most contemporary games tend to emphasize either engaging narratives or inventive gameplay separately, Crossover stands apart by seamlessly integrating both. My project is a puzzle-adventure video game developed in Unity that integrates an interesting story, fresh puzzle mechanics, and artistic visuals. The game is about two friends who reunite after years apart by visiting what seems like a regular escape room. Their nostalgic reunion turns dark when they discover the escape room is a covert testing ground for experimental dimension-shifting technology. Both characters are controlled by the player, each of whom possesses a dimension-shifting device, which allows them to travel between worlds, uncover hidden routes, and solve puzzles together by switching between parallel worlds. These interdimensional mechanics are applied to interactive storytelling, where each character's backstory directly affects how the plot progresses.