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Introduction

Project Objective

To create a AAA quality game with the guidance of the gaming community, for the intent of gaining financial stability. This means, I am doing this for something to help myself stand out as a game developer and software engineer, so I can be a more marketable – but to also hope to start a brand new studio using this project.

Game Summary

Project Exploration is an adventure game designed to return to the fundamentals of game development. It will be a game for players of all ages. It will have a single player focus, with optional 4 player party play. The party will then be able to access instanced dungeons which

will be different based on single or multiplayer. Multiplayer will then have different difficulty scales at which the dungeon can be challenged. Dungeons will have different variations, with procedural randomization aided design.

Player Experience

The game will have only the single screen, and can optionally join the game in a multiplayer environment. The player will explore a massive open world over world to find and discover dungeons, items and powerups with little guidance. The game will have 3 phases in this. The first is initial 4 dungeons that can be cleared in any order, but all must be discovered to progress. The 2nd phase will have 8 dungeons, that again can be navigated to in any order and must be discovered, but the player will discover that there is connections between them based on abilities and items, and in some cases will not be able to clear a dungeon unless an ability from another dungeon is required first.

The final phase, will be a final dungeon that makes use of all of the items and abilities you've acquired until then, to solve puzzles and navigate their way to a final boss.

Platform

The main platform this will be developed for is a Windows PC, but long term goals are to have this released on Playstation, XBox, SteamDeck, and possibly Nintendo, if it becomes possible to make the game scale for each.

Development Software

- Unity 6
- VSCode for IDE and programming
- Blender for 3D model development
- Photoshop CS4 for textures
- Substance painter alternative
- FL Studio 12 for music and SFX

Genre

Adventure, puzzle, casual to expert, mmo optional

Concepts and Inspiration

To understand the inspirations of the game, we'll need to look at different mechanics.

Character Creation

I hope to feature a character creation system inspired by Phantasy Star Online (PSO), Final Fantasy XIV (FFXIV), and Throne and Liberty (TL). I want a character creator that allows you to build a look and style that is unique to you, to allow the game to feel more immersive and personal. The game should have the ability for players to fine tune all aspects of the characters avatar, such as face, eyes, mouth, iris's, outfits, and more. Special outfits can then be created and included as DLC. I want this look to also remain central to the players identity. Allowing them to keep this look throughout the game, without equipment affecting this look.

Character Structure

There will be 2 types of meshes, body type and fashion. There will be 2 primary body types Male looking and Female looking. The body types will have to be individually baked with each fashion mesh, so the mesh can be interchanged and combined with other fashion meshes. The fashion mesh structure of a character will contain a combination of choices based on the following:

- Face
 - Iris
 - Eyebrows
 - Eyelashes
- Hair
- Upper Body
- Lower Body
- Foot
- Accessories
 - Cat Tail and Ears
 - Dog Tail and Ears

Each component as necessary will have features to adjust:

- length
- thickness
- position
- color

Over world

will be inspired by The Legend of Zelda (TLZ), in which we want to create a massive over world players can 'explore' and find unique places, items and power-ups scattered through out the world behind puzzles to solve.

The over world will be broken up into regions, where an obelisk will be present to allow the user to reveal the region on their main map.

Battle System

The main inspiration for the battle system will be (TLZ) with maybe some elements of FFXVI and Nier. My goal is to create a battle system that is easy for new gamers to handle, but difficult to master for more experienced gamers. There will be some Mega Man (MM) inspiration in how some abilities will work more effectively on mobs and bosses more than others, but basic attacks can still get you through the battle. Abilities will be acquired by finding them while exploring dungeons.

Dungeon layouts

Dungeons have their inspiration from TLZ, in which there will be dungeons laid out with puzzles and challenges to be solved to get through the dungeon. Players will be allowed to leave dungeons at any time.

Bosses

All dungeons will have bosses, but the main 8 dungeons will feature a final boss, which in story difficulty will not require a unique ability to defeat, but as inspired by the Mega Man (MM) series, will require that unique ability in later multiplayer difficulties.

Multiplayer Game Play

The influence to how the game will play in multiplayer comes from PSO. Where players will be able to interact in channels in the over-world, but will party up in groups of 4 to challenge multi-player dungeons. Over world puzzles and interactions will not be synced, but those things will be for multiplayer dungeons.

Multiplayer will be established from the over world ---LFM

There should be an option to connect automatically.

Assistant

I want AI Joken to be brought into this game as an AI Assistant that helps you along your way. Just like Navi from TLZ, or Mags from PSO, I want it to be a friendly follower that comes along with you, that can help you in battle. It should also have an AI prompt system to use AI to determine what you are asking it, and respond with the appropriate predetermined response.

However it will use our special and unique voice that was created for AI Joken, for her to speak with. I want to avoid using an LLM for text-generation, to avoid the Joken from hallucinating non-relevant responses.

Art Style

Design

I want to aim for animated, cell shaded, looking graphics and environment, that looks similar and nearing Guilty Gear Strive (GGS). However, where it will be unique, is I want to focus more on a rotoscope look than 'anime'. Which I hope will have the aesthetic look of anime, but with believable natural proportions and features that we get from rotoscope animation. This will require building models with believable features and proportions, the with shaders, creating that rotoscope, cell shaded look.

It was decided to use Unity 6 for Deferred ForwardAddOnly rendering, so we can calculate all lighting in a singular pass and created a continuous cell shaded look while maintaining color gradients created by environmental lighting. This is done by calculating all directional light into a scalar combined with the unity shadow system, which is used in the procedural calculation of the cell shading of the art.

The coloring is calculated by the intensity of each light source with blending from base color to lightcolor added with each light.

Cinematic and Graphics

A lot of what I want to do with the game is push the capabilities of today's hardware to build out beautiful environments and details inspired by FFXVI. However I realize this may be difficult to achieve, but it is something I want to push for, as much as possible. Details that that should be considered into graphics and environment details:

- Time
- Weather
- Alien/Fantasy World Plants
- Atmosphere
- Water
- Light and Reflections

Theme, Story and Background

The background of this game will be one that theoretically follows, "The Angel Project". The angel project was a game in which players were 'reborn' as androids to further the exploration of space. The conclusion of The Angel Project was to break the barrier between humans and

replicants, and allow them to live alongside each other, but to also allow humans to spread across the galaxy with androids to help guide them.

In this world, both android and humans live in together on a foreign planet. Only about 500 humans and replicants were sent to populate the planet. They work together to help build out a new society for both humans and replicants. They have been living on this planet for about 200 years. It's been mostly peaceful and as society grows, more about the land is discovered. Within that time it has been discovered that a former sentient alien race once lived on the planet, but for mysterious reasons has gone extinct. Suddenly strange things start to happen that are in connection to this.

Thus comes in the player, who does not fully understands themselves. You awaken knowing nothing of your past and nothing about where you came from. All you know is it is unclear what you are, but that you are some kind of replicant. That unlike other replicant, you can interact with things other replicants can not, unlocking new paths forward for you to explore. It becomes up to the player to help discover what wiped out the previous race of creatures that lived there before them, and discover who you are.

Each dungeon will have a unique theme based on it's environment and type of boss mob.

Audio

Music

The music should have mostly an other world fantasy theme. Small elements of science fiction may be used, but it should portray an epic adventure in a new world. Towns should have relaxing theme, while the over world should have an invigorating and moving track that motivates the player to press on and explore. Dungeons should have dark themes, with the feeling of lurking through shadows, but should also reflect the theme of each dungeon. Dungeons will have various themes, reflective of it's environment.

Sound Effects

Sound effects should be soft to the ear but realistic and impactful. They should fit into the following categories:

- Obtaining items
- Battle Sounds
 - player body language
 - Weapons and abilities.
- Environment Sounds
 - wind and weather

- wildlife
- NPC
 - Task Body Language
 - Communication Body Language

Experience

UI

We will focus on creating a clean and simplistic UI, this will be planned out more carefully as we determine functionality of the game. Concepts that will be considered during this process will be:

- On screen
 - button tutorials, guiding the user on how to play
 - minimap (It isn't as expensive as every company says. I feel that has been a cop-out by developers, and there should always be one in games)
- A Map menu will bring up a fullscreen map, to help the user navigate
- A main menu with the following submenu
 - Home / Status
 - Abilities and Enhancements
 - Items and Currencies
 - Multiplayer
 - Friend List
 - Region / Server / Channel Selection
 - System
 - controls / button mappings
 - graphics

Progress

Saving the game will be completely automated. Loading an old save will not be allowed. It will be policy that the game will not leave you in a place where you can no longer progress. Users will be allowed to exit dungeons at any time.

Progress Flow

Menu Focuses Progress Flow

I want players to be able to load the game and configure their experience before actually starting the game. Having a real time rendered title screen, will help with configuring the title before the player begins gameplay. It will give them an idea of how the game will look and feel, before the go in deep with the experience.

- A special options button should on the top right, and should consistently accessible by the mouse throughout the title, it should have ways to open important sub screens, and return to the active screen at any time.
- User launches the title and sees logos
- Following the user is presented with the title screen which will feature:
 - transparent logo of games title.
 - press any key to begin
 - real-time rendered cinematic in the background, featuring different views around the games over world
 - Chose a random location at start
 - Setup multiple scenes from prefabs that are used in the main world.
- Player then is present with a character selection screen
 - Character Selection on left
 - Character Preview on Right
 - Characters should be presented in some way to 'carousel' through them in some non-generic way.
- After a Character has chosen a character slot, the unified loading scene should appear, until either the game world or character creation scene has loaded.
- The Character Creation scene then appears ...
- After character creation is completed, the unified loading scene should appear, character should be stored locally.
- The player should then enter the intro sequence, and guided through a series of basic game play instructions. It should be all brief enough to not hinder the player from experiencing the story and beginning their journey throughout the game world.

Design Patterns and Choices

Multi-layered Scenes

There will be one Core scene that drives the game, with the global UI that will remain accessible throughout the title.

Each Major scene will be loaded via LoadSceneAsync, to allow scenes to smoothly load in before transitioning to the next.

A loading scene will be used for when transferring between major scenes

Project Outline

Statement

Un-ironically there will be no timeline to this project, but instead an outline. As many things can get in the way of this game and delay it from completion. But we will follow an action plan until we can develop a cost, and this project will be cost driven rather than time driven.

We don't want to rush any aspect of this project and want it to be as high quality as possible. I hope to seek funding for myself through patreon from project supporters. All I ask for is enough to keep doing this, until we reach a point that we can present the game as a prototype to investors.

Essentially, we have a 4 phase plan, which can be simply put as:

- Planning
- Prototype Development
- Seek Funding
- Art Refinement

Below is the outline for these 4 phases.

Outline

- 1 Planning and Foundation
 - 1.1 Base documentation
 - 1.1.1 This wireframe document
 - 1.1.1.1 Continuously redefine this document to improve the end product
 - 1.1.2 The initial Story Outline
 - 1.1.2.1 NPC Character development
 - 1.2 Tools Research and Development
 - 1.2.1 Look at different game engines and tools that would be best for this game
 - 1.2.1.1 Can we do RTX? Will it be actually necessary?
 - 1.2.1.1.1 Yes, next question How, and Do we?

- 1.2.2 Test game engines for capabilities
 - 1.2.2.1 The 'camera shake' issue, can Unity get around it.
 - 1.2.2.1.1 Yes – I've decided to go with Unity 6
 - 1.2.2.2 Custom shader support, what can be done?
 - 1.2.2.2.1 DeferredForwardAddOnly shaders that greatly help with creating a rotoscope / Cell shaded look
- 1.2.3 It will most likely be Unity 6
 - 1.2.3.1 What new features does Unity 6 have that we can utilize
 - 1.2.3.2 Can we make it scale, graphic wise to be playable with maximum quality pushing the limits of PC, while still being playable on the SteamDeck
- 1.3 Stream and Funding planning
 - 1.3.1 Setting up twitch, youtube, etc. streams to maximize outreach
 - 1.3.2 setting up patreon / discord to give users a way to support the project financially
 - 1.3.3 Determine a way to Advertise in a tasteful way a goal that I need to reach to financially support myself and the project.
- 2 Build the Prototype
 - 2.1 Stubbing
 - 2.1.1 Use stub, replaceable art assets, making notes of what art will be needed and what will need to be replaced. The art assets that are there after completion of the prototype should give us an idea of how much will need to be done and help us estimate a cost to present to venture capitalists and producers.
 - 2.1.2 Fill in the story surrounding the design choices made for each planned dungeon and region of the world map.
 - 2.2 Character Design Development
 - 2.3 Graphics Preparation Development
 - 2.3.1 World Shaders, environment effects
 - 2.3.2 Character Shaders
 - 2.4 Over world Development
 - 2.4.1 World Puzzles
 - 2.4.2 Towns
 - 2.4.3 Stores
 - 2.4.4 NPCs
 - 2.4.5 Inns
 - 2.4.6 Fast Travel
 - 2.5 Dungeon Development
 - 2.5.1 Procedural tools for generation variations
 - 2.5.2 Puzzle / challenge design
 - 2.5.3 Boss design
 - 2.6 Abilities Development, how they execute how they look
 - 2.7 Battle System Development
- 3 Seek funding
 - 3.1 Calculate funding needed to replace stub art and the time and cost it would take for an artist to complete it.
 - 3.2 Begin campaign for seeking funding from a venture capitalist or producer.
 - 3.3 Begin advertising the desire for seeking funding.
 - 3.4 Determine a deal with said venture capitalist over partial ownership or repayment.
- 4 Use funding to finalize the game
 - 4.1 begin replacing art assets with high quality better versions
 - 4.1.1 Environment Art

- 4.1.1.1 Plants
- 4.1.1.2 Trees
- 4.1.1.3 Rocks
- 4.1.1.4 Buildings
- 4.1.1.5 Town Design
- 4.1.2 NPCs
- 4.1.3 Monsters
 - 4.1.3.1 ~4 monsters per region
 - 4.1.3.2 monster effects from animations
- 4.1.4 Dungeon Art
 - 4.1.4.1 architecture
 - 4.1.4.2 bosses
 - 4.1.4.3 boss effects and animations
- 4.1.5 Animations
- 4.1.6 Music
- 4.1.7 Sound Effects
- 4.2 Polish any code and being platform certification checks