
System Components Requirements

Trouble Seekers

Rev 0

Prepared by

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1 Theme/Quest

1.1 Abstract

The theme of the game is that the user is an orphan searching for his best friend after she goes missing. The player finds out that other members of villages nearby have also coincidentally gone missing, and tries to find out what is actually happening regarding the disappearances. There is a mysterious door that requires artifacts to unlock the door (like keys), so the main quest for the player is to find all these artifacts scattered around the world, in order to find out what happened to his best friend and the villagers.

1.2 Concrete

The goal of the game will be explained using various matinee sequences (10.10.a-c) which tie into the story. Villagers around town can also give insight into the missing people (10.12.j).

2 World

2.1 Abstract

The world is inspired by medieval-era design, specifically from the European cultural influences. The game also contains elements of fantasy which draw upon other fantasy related writings/art (i.e. Tolkien, Zelda). The world is designed to have a cartoon-like quality, with proportions that are exaggerated and colour schemes that are bright. The world is in 3-Dimensions, but the user can only navigate on one plane because the game navigation is similar to dungeon crawlers like Diablo or Legend of Zelda. The world contains a mountain off the to the west of the main village, the mysterious door is located on the side of the mountain. The sound effects contained in the world fit the overall theme of the game and are cartoon-like as well as vivid.

2.2 Concrete

The world will be made up of several UDK maps (10.9, 10.11). There will be pathways that allow the player to travel

between them, and each map will contain a number of static meshes (10.6.k-l) to compliment their layout.

3 Story

3.1 Abstract

The game story is separated into two categorization: the missing people story-arc and world lore. The player is told about the main story related set of dungeons/temples (at the beginning of each episode by a friendly NPC) that may contain an artifact(required to open the mysterious door). To progress through the story, the player must investigate each of these dungeons and find the artifact, when all the artifacts are found the user can open the door (but since our content is episodic, the player will not be able to open the door in this game). The dungeons can be done in any order; however each time the user completes a certain number of dungeons, more villagers will be missing and the quests to explore specific lore expansion dungeons will become available from certain NPCs (player-initiated conversation and completely optional). The game's side-quests involve the player going into other dungeons/temples but they do not contain story-required artifacts, they are mainly for skill advancement, as well as expanding the lore of the world that may or may not be related to why people are missing. The main way lore of the world can be expanded is through item descriptions, excerpts from in-game books, and scripted NPC dialog (mostly occurring in villages).

3.2 Concrete

Matinee sequences will be used to convey the story to the player (10.10.a-c).

4 Gameplay

4.1 Abstract

There will be one plot-centric dungeon in the first episode of the game. It will follow a short tutorial dungeon designed to get the player used to the game's mechanics. Each dungeon is themed (i.e. an elemental theme like fire). The dungeons are designed to be maze like (multiple ways to get to the same point, but also filled with dead-ends), with many traps designed to either kill or injure the player. The dungeons contain various enemies, also designed to fit the theme of the dungeon. At the end of each dungeon, the player finds an object of interest (either an artifact for main story dungeons, or a powerful tablet to advance their skills and abilities).

4.2 Concrete

All the UDK maps (10.11) designed will be used for gameplay. Each of the maps will be populated by NPCs (10.2.d-aa, 10.7.a-d, 10.12.d-f) and treasure (10.7.e, 10.12.h), which use various textures (10.2.d-aa), animations (10.5.a-n) and sounds (10.3.l-m,t,u,d). The dungeons themselves will use various textures (10.2.bb,cc,ff-ii) and sounds (10.3.o,r).

5 Gameplay Modes

5.1 Abstract

There are 2 modes of gameplay: dungeon play and exploration. In dungeon play, the dungeons can be explored by the player (multiple paths with dead-ends as previously mentioned) with a possibility to find lore related items but at the same time the paths of the dungeon are filled with enemies and traps. The dungeon play mode is completed when the player gets the main object of interest in that specific dungeon (the player is returned to outside the dungeon entrance). In exploration mode, the player is able to initiate conversation with NPCs around the different villages, as well as interact with certain objects that offer

lore descriptions. The player can also explore the world without looking for quests and attack enemies which will be located in the wild.

When conversation is initiated, a dialog box will appear at the bottom of the screen, which takes up approximately a third of the screen. The dialog of the person speaking (indicated in the top left corner of the box) will appear in the center of the box, and can be advanced by pressing a specific key. When speech is complete, any player options to advance the conversation will appear in the box. The choice the player makes for each specific conversation, will branch the conversation in a specific way following a conversation tree for each NPC capable of conversation.

The inventory system is different than what is found in most RPGs. The player is given a limited number of inventory slots where they can store items they acquire after killing enemies.

Certain enemies will drop a tablets which will affect the players stats once it is equipped in the tablet slots.

5.2 Concrete

Gameplay logic will be handled through Kismet (10.9) as well as a custom gamemode built with UnrealScript.

6 Core Mechanics

6.1 Abstract

The main character in the game has many different attributes: Health, Attack Damage, Attack Speed, and Defense. Each of these attributes can be changed with our inventory system by adding more tablets to the tablet slots. The player can also attach different weapons to the weapon slot and armor to the armor slots. Experience can be earned but is attributed to items as opposed to the player, which means that some items are able to level up while the player cannot. Certain items can also be obtained which allow the player to use specific abilities, these items differ from the tablets. Items which can be equipped as

weapons increase in strength as the game progresses, which means as the player defeats more powerful enemies, the items become stronger.

6.2 Concrete

Core mechanics are defined within UDK gamemodes, which make use of UnrealScript (10.12.c and 10.12.h). The sounds and particle effects that make up the abilities the player has include (10.3.a-c, 10.3.v, 10.4.a-e).

7 Characters

7.1 Player

7.1.1 Abstract

The character is originally designed as a generic male character, the player then has the choice to customize the character given certain presets. The main character does not have a voice and will only produce generic sounds when attacking or performing certain actions (10.3). Since this is an RPG where we allow player customization, the character must be very generic in order to allow as much of the player base as possible to connect with the character.

7.1.2 Concrete

The player will use a generic NPC model (10.7.a) but have a custom texture (10.2.z). The player will be able to further customize this model by using equipment and weapons, which are static meshes (10.6.a-c,e-j) combined with custom textures (10.2.a-t). The player is a human and all humans will make use of their specific animation set (10.5.a-f)

7.2 NPCs

7.2.1 Abstract

We will be implementing 3 types of NPCs: The quest givers, the vendor, and the generic NPCs. The quest givers are any NPCs which affect the main storyline of the game or the side quests which includes the main villain of the game. These

characters will be different than generic NPCs to allow to player to more easily recognize these characters. They will also have a voice as they will need to speak with the main character, each of the voice will be different in order to comply with the look of each character. The vendor will have a unique look and will be located in a shop within the village, the player will easily be able to locate him throughout the game. He will also have voice lines which try to hint at the player that the vendor is greedy. The generic NPCs will be wandering around the village as well as world and will not communicate with the player, if they do it will be a single line with generic purpose. These NPCs serve as filler to populate the world we created, they will also be the victim of the kidnappings throughout the game.

7.2.2 Concrete

NPCs will share similar models (10.6.a) but have varying textures (10.2.w-y) and equipment to distinguish them. They are constructed in a fashion similar to the player character but are made to look generic. Each NPC contains its own behaviour through scripts (10.12.d-g) which is also affected by the state of the game (10.12.k), and when players interact with friendly NPCs dialog trees are open based on (10.12.i-j).

8 Presentation

8.1 Abstract

The player will see the world from a 3rd person perspective, about 3 meters above and behind the main character. When entering buildings the ceilings will disappear in order to allow the player to see what is happening.

When the player is walking around in the open world, the players sees a HUD where the player's health is displayed. The player can also see a minimap in the top right corner showing them their surrounding area. Along the bottom of the screen is the action bar, which displays all of the actions the player is able to use at the current time. At the bottom right of the screen is an

inventory menu as well as an option menu which allow the player to access their inventory as well as quit the game. Once the inventory button is selected, the rest of the screen becomes darker and the player's inventory is displayed in the middle of screen with a somewhat low opacity setting. Selection the menu button will bring up an option menu, the rest of the screen will be considerably darker and the menu will not have lowered opacity.

8.2 Concrete

The menus will use scripts (10.12.h, 10.12.c) to appropriately extract information and display HUD elements to the user for quick access of character stats, and the HUD display elements (10.2.nn-uu).

9 Levels

9.1 Abstract

Four key areas are currently planned for the first episode. They will consist of a tutorial dungeon, the first plot-centric dungeon, the overworld, and the NPC village. The NPC village will contain most of the NPC characters, while the other areas will have enemies to fight.

The overworld acts as a hub for the player to explore and perform game actions outside of the plot. It also is the medium through which the player must travel to get from one location to another.

The first level is the tutorial dungeon. It is a small area that is based off of the larger dungeons to come. The player's objective is to exit the dungeon. They accomplish this by having the dungeon teach them how to play the game. There will be no distinctive theme for the tutorial level as it is to serve as an introduction to how all future levels will play out. This is one of the very first elements encountered in the game's storyline.

The second level is a much larger version of the tutorial dungeon. It builds off of what the player has learned in the tutorial dungeon, but still follows the first dungeon's theme. Here, the

player is expected to enter the dungeon of their own accord and retrieve an item that is required to further the storyline. This dungeon is literally an extension of the tutorial dungeon, as the player is compelled by a quest NPC to return to the tutorial dungeon to retrieve an item that they missed the first time they were there.

9.2 Concrete

Areas are built as maps within UDK (10.11). There will be kismet sequences (10.9.b,d,g-j) used for different dungeon events such as opening/closing doors and spawning enemies.

10 Concrete Components

10.2 Textures

- a. Metal Sword
- b. Wooden Sword
- c. Metal Axe
- d. Metal Chestplate
- e. Ornate Chestplate
- f. Obsidian Chestplate
- g. Demonic Chestplate
- h. Metal Greaves
- i. Ornate Greaves
- j. Obsidian Greaves
- k. Demonic Greaves
- l. Metal Gauntlets
- m. Ornate Gauntlets
- n. Obsidian Gauntlets
- o. Demonic Gauntlets
- p. Metal Helmet Covering Face
- q. Ornate Helmet Covering Face
- r. Obsidian Helmet Covering Face
- s. Demonic Helmet Covering Face
- t. Metal Skull Cap
- u. Skeleton

- v. Hulk
- w. Human (Dark-Brown skinned)
- x. Human (Pale skinned)
- y. Human (Tan skinned)
- z. Human (Main Character)
- aa. Ratmen
- bb. Tree
- cc. Rock
- dd. Treasure Chest
- ee. Ornate Treasure Chest
- ff. Grass
- gg. Stone
- hh. Cracked-stone
- ii. Dirt
- jj. Horn
- kk. Blood spatter
- ll. Artifact
- mm. Tablet
- nn. Fire Spell Icon
- oo. Frost Spell Icon
- pp. Shield Spell Icon
- qq. Sword Icon
- rr. Icon for each armor piece
- ss. Health Bar
- tt. Energy bar
- uu. Icon for each NPC

10.3 Sounds

- a. Kindling/Fire Burning
- b. Wind
- c. Twinkling
- d. Monster Groaning
- e. Walking on Concrete

- f. Running on Concrete
- g. Walking on Grass
- h. Running on Grass
- i. Bash in Air
- j. Slice in Air
- k. Hitting Metal Plate
- l. Grunting Noise
- m. Impact with ground
- n. Ambient Village Noise
- o. Ambient Dungeon Noise
- p. Ambient Jungle Noise
- q. Village Music
- r. Dungeon Music
- s. Jungle Music
- t. Mice Squeaking
- u. Bones Rustling
- v. Liquid-in-a-Bottle Sound

10.4 Particle Emitters

- a. Fire
- b. Smoke
- c. Ice/Frost
- d. Shield
- e. Healing Particles
- f. Blood

10.5 Animation Sets

- a. Human Walking
- b. Human Running
- c. Human Swinging Weapon
- d. Human Casting Magic
- e. Human Dying

- f. Human Taking Damage
- g. Hulk Walking
- h. Hulk Smashing
- i. Hulk Dying
- j. Hulk Taking Damage
- k. Ratmen Running
- l. Ratmen Swinging Weapon
- m. Ratmen Dying
- n. Ratmen Taking Damage

10.6 Static Meshes

- a. Sword
- b. Axe
- c. Artifact
- d. Tablet
- e. Helmet Covering Face
- f. Skull Cap
- g. Horn
- h. Metal Chestplate
- i. Metal Greaves
- j. Metal Gauntlets
- k. Tree
- l. Rock

10.7 Skeletal Meshes

- a. Human
- b. Skeleton
- c. Ratmen
- d. Hulk
- e. Treasure Chest

10.9 Kismet Sequences

- a. Entering House
- b. Entering Dungeon
- c. Player Death
- d. Triggering Trap
- e. Triggering Quest Availability
- f. Completing Quest
- g. Spawning Hulk
- h. Spawning Skeletons
- i. Spawning Ratmen
- j. Completing Dungeon

10.10 Matinee Sequences

- a. Intro Story
- b. Friend Kidnapped
- c. End Story

10.11 Map Geometry

- a. Overworld
- b. Skybox
- c. Tutorial Dungeon
- d. Cave
- e. Forest
- f. Volcano

10.12 Scripts

- a. Camera logic
- b. Player Movement Control
- c. Player Character Attributes/Abilities

- d. Skeleton AI
- e. Hulk AI
- f. Ratmen AI
- g. Villager AI
- h. Item Manager
- i. Dialog for Lore Expansion
- j. Dialog for Main Quest
- k. Quest Event Manager