

PLURALSIGHT

Design Document for: Project Swords 'n Shovels

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Version # 1.10

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Design History

In this section, we will document any changes to the design. These are only examples that follow:

Version 1.10

Version 1.10 includes some tuning and tweaking that I did after making my initial pass at the design. Here is what I changed.

1. I included initial story elements.

Version 2.00

Version 2.00 is the first version of the design where a major revision has been made now that much more is known about the game. After many hours of design, many decisions have been made. Most of these large design decisions are now reflected in this document.

Included in the changes are:

1. Pairing down of the design scope. (Scope, not design)
2. More detailed descriptions in many areas, specifically A, B and C.
3. Story details.
4. World layout and design.

Version 2.10

Version 2.10 has several small changes over that of version 2.00. The key areas are in many of the appendixes.

Included in the changes are:

1. Minor revisions throughout entire document.
2. Added "User Interface Appendix".
3. Added "Game Object Properties Appendix".
4. Added concept sketch for world.

Game Overview

Philosophy

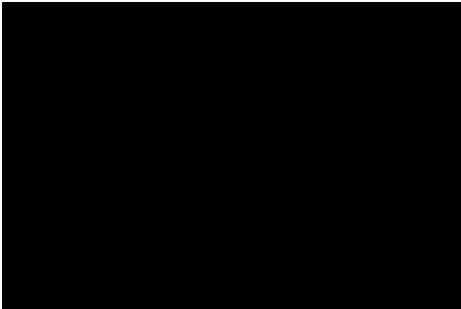
Philosophical point #1

The game will serve as the goal for all of the content created in the game dev vertical from here on out.

- Introduction (The starting point for the game dev learning path)
- Core Feature Introductions
 - Introduction to Materials, Particles, Lighting, etc.
- Skill Development
 - Game Concept Art, Game Modeling, Game Texturing, etc
 - Props, Environments, Weapons, Characters, etc.
 - These course will show the in-depth process for creating assets they saw in the Introduction course
- Internal and Creative Dev authors will help author this content

Philosophical point #2

Swords 'n Shovels is a fast-paced dungeon crawler game with emphasis around strategy. It's a mix of hack 'n slash and tower defense.



Philosophical point #3

Players can purchase upgrades to enrich the gameplay experience.

- Mining equipment, weapons, defense equipment, companion upgrades

Common Questions

What is the game?

- An isometric dungeon crawler that requires strategy to help balance the risk and reward built for the PC platform.

- The player enters a (procedurally generated?) dungeon to obtain as much treasure as possible.
- Enemies will attack and try to steal the players collected treasure.
- The player must dig to obtain treasure but also defend the mine cart.
- Treasure allows the player to purchase upgrades.
- Upgrades can be bought for the hero, companion, and mine cart.
- The deeper the player goes into the mine, the more difficult the enemies but greater the reward.

Why create this game?

- Our number one goal is to create a learning path that will take our game dev customers from concept to deployment.
 - Every single game dev tutorial site is fragmented, we can position ourselves now to be the go-to tutorial site for game devs.
- Create a fun and visually interesting game that will keep our customers focused and motivated.
- Motivate Creative Dev authors to create tutorials toward a common goal.
 - Draw new authors.

Where does the game take place?

The game takes place in an abandoned dwarven mine that has been sealed for centuries because of the threat of an ancient evil.

What do I control?

The player will take control of [unkown name], a fearless dwarf warrior who hopes to obtain a fortune in the depths of the ancient mountain.

How many characters do I control?

The main character directly, but the player may issue commands to his companion and mine cart.

What is the main focus?

Upgrading equipment to help the player delve deeper into the mine and unravel a compelling story.

What's different?

This game should be quirky and fun in every element, not just gameplay.

Feature Set

General Features

- Comic book style graphics
- Fast-paced combat with a splash of strategy
- Dungeon exploration packed with surprises
- Hordes of enemies with a ton of ways to destroy them
- Upgrade your hero and companion to change the way you play
- Collect ancient blueprints and components to create mega equipment
- Insanely fun and unique boss battles

Multiplayer Features

(Possible in the future)

Gameplay

- Intense Action
- Player driven strategy
- Equipment Upgrade System
- Dynamic Looting
- Blueprints
- Procedural dungeons

The Game World

Overview

The Mountain of the [Ancients] was once a thriving fortress for the eight dwarf clans of [Umbrar]. It was filled with treasure and great wealth. Everything that the dwarf clans needed to thrive. But the most coveted stone in the mountain was the [Moon Stone]. No tool could cut these stones. They could only be harvested and manipulated by the [Moon Whisps], the keepers of the mountain. Only dwarves who were found worthy would be granted a [Moon Stone].

The dwarves lived in relative peace for centuries. Until one day, something began to corrupt the hearts of the dwarves. Because of this, [Clan Durenbrow] started a rebellion and tried to take the mountain for themselves. Their greed and corruption awakened something deep within the mountain. The [Moon Whisps] suppressed the [Nightmares] and forced the dwarves out of the mountain, sealing it until the dwarves could prove their honor once more.

Now, even 200 years after the rebellion, members of [Clan Durenbrow] live as outcasts in their own city, oppressed by their own kind.

World Feature: Procedural dungeons

Procedural levels of the mine allow for a unique experience every time.

World Feature: Boss levels

Boss levels break up the loot grind. Boss levels are unique and provide over the top action for the player that can result in great reward and harder dungeons.

The Physical World

Overview

The mountain has an enormous amount of mines that can be explored and excavated. The deeper the player goes, the more difficult the enemies become. The player may also stumble upon a boss level which can result in vast reward.

The following describes the key components of the physical world.

Key Locations

Boss level 1 - 10

Travel

The player will exclusively travel on foot.

Scale

The dungeons are self-contained but the mountain feels extremely large.

Objects

See the “Objects Appendix” for a list of all the objects found in the world.

Weather

No weather effects.

Day and Night

No day/night system

Time

No time element

Rendering System

Overview

The game will have comic book style graphics. Both Unreal and Unity support such styles out of the box.

2D/3D Rendering

We will be using Unity 3D and Unreal Engine 4.

Camera

Overview

The camera will be isometric much like Diablo 3.

During boss battles, the camera angle may change to help gameplay.

Game Engine

Overview

Both Unity and Unreal Engine 4 will be used. We will start development in Unity as most of our customers are using Unity. Much like Maya to 3ds Max.

Lighting Models

Overview

We will be going for a hand-painted, comic book look and will be using an unlit lighting model in Unity.

Lighting Model Detail #1

The World Layout

Overview

The world is based around the Mountain of the [Ancients]. The 8 clans have set territories around the mountain. [Clan Durenbrow] is under the rule of [Clan Duren] until a new king rises for [Clan Durenbrow]. The mountain has multiple levels which all have different themes.

The Mountain of the Ancients

- The Mountain of the Ancients is the center of everything for dwarves. It is shared by the 8 dwarf clans. All entrances have been sealed to keep the evil in the mountain in and the unworthy dwarves out.

Clan Durenbrow Territory

- Clan Durenbrow is highly policed in their own territory. All weapons and armor is prohibited. Even work equipment must be checked out and checked in. Clan Durenbrow used to be a highly militaristic culture. They were always on the front lines of battle when the territories are threatened by outsiders.

Clan Duren Territory

- Clan Duren live by the Law and expect everyone to do the same. Otherwise, it will upset the balance of their hierarchical society.

Game Characters

Overview

The player takes control of an exiled dwarf warrior looking to make his fortune in the ancient mountain. He is also accompanied by [The Last Moon Whisp] who helps open doors and crafts legendary weapons and armor.

Main Character

- Starts with basic equipment
 - Rusty sword and shovel
 - Determines effectiveness of attack and excavation
 - Basic clothes
 - Determines the effectiveness of attack defense
 - Small rucksack
 - Determines how much equipment can be carried

Companion

- Can attack, defend, search
- Attack
 - An aggressive behavior that seeks out enemies. Could die if not prepared
- Defend
 - A defensive behavior that can protect the player or the mine cart
- Search
 - A searching behavior that can help the player find rare treasures

Enemies and Monsters

Enemies will have a wide variety of size, shape and color. They will be divided into classes.

- Grunts
 - Weak enemies but problematic in dense hordes
- Berserkers
 - Weak enemies that blow themselves up to do medium amounts of damage
- Boomers
 - Slow enemies that have higher HP and attack damage
- Streakers
 - Fast enemies that stick and move, mostly used to steal treasure
- Bosses
 - Very strong. Strategy is needed to defeat them. Great reward.

User Interface

Overview

Provide some sort of an overview to your interface and same as all the previous sections, break down the components of the UI below.

User Interface Detail #1

-

User Interface Detail #2

Weapons

Overview

The player will begin with a rusty sword and shovel. Eventually they will be able to upgrade to new, more effective equipment. They can also find ancient blueprints and components to create Legendary Equipment like the Shovel-gun.

Basic Weapons

- Rusty Sword
- Rusty Axe

Excavation Equipment

- Rusty Shovel

Traps

- Bear Trap

Turrets

- Black Powder Turret

Legendary Weapons

- Shovel Gun

Legendary Traps

- The Catapult Trap

Legendary Turrets

- Rocket Turret

Musical Scores and Sound Effects

Overview

This should probably be broken down into two sections but I think you get the point.

Red Book Audio

If you are using Red Book then describe what your plan is here. If not, what are you using?

3D Sound

Talk about what sort of sound APIs you are going to use or not use as the case may be.

Sound Design

Take a shot at what you are going to do for sound design at this early stage. Hey, good to let your reader know what you are thinking.

Single-Player Game

Overview

The player will dive into vast dungeons riddled with enemies, treasures and puzzles. They will fight off enemy hoards while trying to gather as much treasure as possible so they can purchase new equipment and upgrades.

Single Player Game Detail #1

Single Player Game Detail #2

Story

Story beats:

1. Once upon a time there was an Anti-Hero
2. Every day he would struggle to live in an oppressive society as a tavern brawler.
3. One night, he was asked to take a dive. He decided taking a dive just wasn't in him.
4. Because of that, his "boss" puts a hit out on the hero.
5. Because of that, he is beaten almost to death and thrown off the edge of the city.
6. Because of that, he is healed by a legendary Moon Whisp, the keeper of the Lost Mountain.
7. Because of that, he is the only dwarf who has entered the Lost Mountain for over 200 years.
8. Because of that, he explores the mountain to seek riches, adventure and answers as to what happened to the Old Ones.
9. Because of that, he awakens the Nightmares that seem to come from deep within the mountain.
10. Because of that, he fights deeper into the mountain to discover the source of the Nightmares.
11. Because of that, he discovers the Void, a deep darkness that festers the evil within all living things.
12. Because of that, the anti hero discovers his true calling, to be the kind of dwarf his forefathers failed to be, a hero.
13. Because of that, the hero, along with the Moon Whisp challenges the Void.
14. Because of that, the Moon Whisp sacrifices herself to defeat the Void.
15. Until finally, the hero becomes the keeper of the mountain and teaches all dwarves to live peacefully together once more.

Hours of Gameplay

Ideally, unlimited.

Victory Conditions

Finishing the story, but there will be tons of gear and equipment to collect.

Multiplayer Game

Overview

Describe how the multiplayer game will work in a few sentences and then go into details below.

Max Players

Describe how many players can play at once or whatever.

Servers

Is your game client-server or peer-to-peer or whatever.

Customization

Describe how the players can customize the multiplayer experience.

Internet

Describe how your game will work over the internet.

Gaming Sites

Describe what gaming sites you want to support and what technology you intend to use to achieve this. Perhaps Dplay or TCP/IP or whatever. It is probably a good idea to break the tech stuff out into a separate area, you decide.

Persistence

Describe if your world is persistent or not.

Saving and Loading

Explain how you can save a multiplayer game and then reload it. If you can or why this is not possible.

Character Rendering

Overview

Provide an overview as to how your characters will be rendered. You may have decided to include this elsewhere or break it out to provide more detail to a specific reader.

Character Rendering Detail #1

Character Rendering Detail #2

Extra Miscellaneous Stuff

Overview

Drop anything you are working on and don't have a good home for here.

Junk I am working on...

Crazy idea #1

Crazy idea #2

“XYZ Appendix”

Provide a brief description of what this appendix is for and then get down to business and provide data to the reader.

Here are a few examples of some of the appendices in my latest design...

“Objects Appendix”

“User Interface Appendix”

“Networking Appendix”

“Character Rendering and Animation Appendix”

“Story Appendix”