

DUNGEON DELVERS

VERSION 0.1

Concept

Dungeon Delvers is a 3D rogue-lite RPG dungeon crawler with 2D elements. The player takes the role of the leader of a branch of the Adventurers Guild, seeking adventures and fortune. The player will enter the dungeon with a party of four adventurers, from there the player explores the random dungeon layout for loot, equipment, and enemy encounters. Eventually, the player will have to make a retreat out of the cave to keep the loot they collected. Back at base, the player can sell what they find for gold, spend that gold on better equipment, and form a better party with higher-level adventurers. The next time the player enters the dungeon they will travel a little further than last time.



Theme

In the Village of “Snakes Bend”, The Adventurers Guild has set up a branch so that they can put a greater focus on the local problems. The Guild is offering a large bounty for anyone with the courage to venture into the Nest within the city to smite out the creature terrorizing the town and recover the ancient artifact hidden deep down at the bottom of the Nest.

World Design

The design of the world is that of a Medieval Fantasy world. The game takes place in the small Village of Snakes Bend on the banks of The Snakes Causeway. The other main area of the game is a nearby dungeon complex known as The Nest. There is also a forest nearby the village that serves as its primary source of lumber as well as a game for the hunters.

Snakes Bend:

<i>The Curled Horn</i>	(Tavern)
<i>Lloyd & Sons</i>	(General Shop)
<i>Harthers Fire</i>	(Blacksmith)
<i>The Parade</i>	(Where the Traveling Merchants show up)
<i>Snakes Bend Guild Headquarters</i>	(Guild)
<i>Farrocks Tent</i>	(Looter)
<i>The Cracked Vial</i>	(Alchemist/ Collector)

In this world Magic is described in a hushed tone as it has the potential to destroy great swaths of the land if not properly controlled. Magic is not inherently a mortal construct, magic was a part of the universe long before even the Gods. Magic as a whole is unaspected and differs based on where it is drawn from. The magic that the mortal races are able to control naturally are split into two main schools, The Arcane or The Divine. Arcane magic is drawn directly from the source of magic and is the more destructive of the two, it takes a powerful and learned practitioner to control the torrent. Divine magic is drawn from the power of the Gods. It is a more split school as the type of power drawn depends on the God, that the practitioner is drawing from.

References





Target Audience

- Age: 16+
- Gender: N/A
- Midcore Gamers
- Fans of Strategy and Role-playing games
- Platform: PC
- Single Player Game

Game Pillars

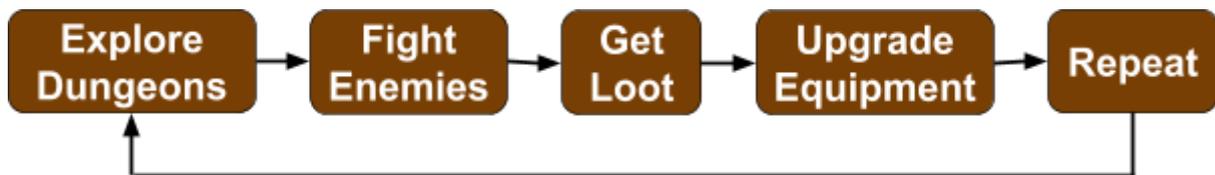
- Classes will have different Strengths and Weaknesses
- Equipment sets are customizable

- Random dungeon layouts
 - Failure is not the end of a playthrough
-

Core Experience

Your first attempt in the dungeon will feel simple and easy to get the player used to the controls and mechanics. Eventually, the player will hit a roadblock that prevents the player from making progress. This is due to enemies getting stronger and the player is running low on hp. When this occurs the player will retreat back to the entrance of the dungeon and arrive in the town outside the cave. The town is where the player can interact with NPCs and gain access to shops and guild quests. The town acts as a starting point to prepare before entering the cave again. Any last-minute decisions must be made. In the player's second attempt they might make it a little further than last time with the better equipment and party members at their disposal. But eventually, their fate will meet an end and send them back to the beginning. This process keeps repeating until the player reaches the end of the cave.

Gameplay Loop



Moment to Moment

- Roaming the dungeon
- Fighting enemies

Short

- Changing equipment layout
- Getting further through the dungeon

Medium

- Upgrading equipment and town

Long (optional)

- Reaching the end of the dungeon
-

Gameplay

Controls and Movement Overview

- Control of combat will be based on mouse movement left-click confirm and right-click deny. The movement will be tied to a grid-based structure that the

players will select a square within the Adventurers range of movement. Default ability controls will be tied to the number of keys (1-0) on the keyboard.

Movement

- The movement of the Adventurers will be through a grid that is *'laid out'* over the game environment that will dictate how and how far the Adventurer is able to move on their turn. This will be controlled through the mouse movement.

Initiative

Dungeon Delvers uses a turn-based combat system, where the Initiative Value of each unit will be calculated to determine who is to act first. All the heroes will always act before the monsters.

Each encounter is divided into different rounds, and rounds are divided into different turns for the heroes/monsters. At the beginning of a round, the game should calculate the heroes' initiative values and determine which unit goes first. After the end of each turn, the game will check which of the remaining heroes has the highest Initiative Value. The heroes(PCs) will perform their actions first, and the monsters will perform their actions in response. After every unit has performed their actions, the round ends and a new round begins.

For heroes, their Initiative Value is mainly determined by their dexterity. Dex will set the base value of the initiative, while certain equipment will alter the hero's initiative. A further calculation will be adjusted based on the buffs/debuffs the hero has to increase or decrease his initiative value. Keep in mind since the initiative check is performed every turn, a previous hero can buff the latter hero to make it go earlier than other heroes.

Leveling

The leveling system is used by the player to progress the effectiveness of their adventurers by using them. The system starts with every adventurer at the start of the game being a Rookie, and on the clause that they can survive a job out in the field they can progress to having a fully fledged class out of the pool of six. Their levels are measured in ranks with the rank upon receiving a class they are considered to be of the *Normal Rank*.

Full List of Ranks

1. Rookie
2. Normal (Class)
3. Bronze
4. Silver
5. Gold
6. Platinum
7. Diamond
8. Ace
9. Master

10. Grand Master

The ranks grant to the adventurers new abilities and base stat increases and the rank increases. Ranking up will also unlock harder jobs from the guild after the player has adventurers of the appropriate rank to complete the job.

Skill Unlocks

As a character grows in power they will gain new skills pertaining to their class, when a character transitions from a rookie to a class they will gain the first skill of the class. They will then gain new skills at ranks 3 and 4 when they gain a subclass they will gain the first ability from their subclass. They will then get the second and third ability at 7 and 8 respectively. At ranks 5, 9, 10 they will gain a point they can use to increase the power of one of their skills.

Stat Point Increases

At (Odd or Even) levels starting at either rank 3 or 4 they will start gaining a single point they can invest in an ability point to increase its effectiveness.

Sub Classes

The Sub-Class system is designed to improve and specialize the adventurer after they have progressed to the halfway point of levels. The subclass adds abilities to the abilities already granted by the base class.

Combat

The Combat system in Dungeon Delvers is Turn-based in nature and uses a square grid structure. It will use smaller numbers for health and damage to make the decisions for the player feel as though they had weight.

In Dungeon Delvers all interaction is ruled by six basic stats; Strength, Dexterity, Constitution, Intelligence, Wisdom, and Charisma. These six stats will have different levels of effectiveness based on the player's class and they will gain bonuses to specific stats based on their race. These bonuses will lead to certain races being more fit to take up certain classes and roles. It would be ideal to be able to include a basic flanking system that is 2 adventurers are standing on either opposite sides of an enemy they would gain a numeric bonus to their chance to hit for doing so.

The default method of combat would be entering the room and establishing turn order for all units inside the arena. Then from there going down the turn order and allowing the player units and enemy units to make their actions as their turns come up.

The default level 1 adventurer would have a 10 in each of their starting stats with adjustments being made from there based on class and race. This default unit also has two distinct actions they can take *Move* and *Attack*, their movement is based on their race movement speed but the default is six squares.

Combat Breakdown

- a. Basic Combat
 - i. Basic Melee encounter
 1. Approach from the front
 2. Select the attack action
 3. Select the enemy to attack
 4. Deal damage
 5. End units turn
 - ii. Basic Ranged Encounter
 1. Determine range
 2. If with range
 - a. Select ranged attack
 - b. Select the enemy to attack
 - c. Deal damage
 - d. End units turn
 3. Else
 - a. Move
 - b. Back to stage 1
- b. Advanced Combat
 - i. Advanced Melee Actions
 1. Charge
 2. Shield Slam

Combat Formulas

Hitting the enemies is calculated as

1. #1-20 + Characters (strength or dexterity) bonus depending on if the attack is melee or ranged respectively

Damage is to be calculated using the following

1. Melee
 - a. Base weapon damage
 - b. Strength attack bonus
 - c. Any weapon enhancements
2. Ranged
 - a. Base weapon damage
 - b. Dexterity attack bonus
 - c. Any weapon enhancements

Magic

Magic is divided into the main two schools, Arcane and Divine. Arcane casters scale their spells based on their intelligence. While Divine casters scale their spells based on their Wisdom.

Basic Damage formulas for Magic

- Base Weapon Damage

- Int or Wis Bonus
- Dex Attack Bonus

Spell Strike Damage

- Base Weapon Damage
 - Int Bonus
 - Dex or Str Bonus (Whichever is higher)
 - Any Weapon enhancements
-

Difficulty

The normal difficulty for the game will be around that of other games in the strategy genre. With the Adventurers having a small amount of starting health and gaining more as they level up. Their initial outgoing damage numbers will also be reasonably low as they gain levels and new weapons, this too will increase.

Features and Mechanics

Features

1. **Party Members:** Before entering the dungeon, the player must decide on which party members to bring with him. Each member carries similar stats as the main character, however, they all carry different strengths and weaknesses. If a party member dies, the match continues, except you're going to be down a party member. It's a game over if all party members die before leaving the dungeon. Each of the 6 classes has two subclasses that they can become as they proceed through the game.
 - a. **Fighter:**
 - i. An up-close melee specialist
 - ii. Adept at using all armor, melee weapons, and shields
 - iii. Does not Utilize any magic
 - b. **Cleric:**
 - i. A ranged holy caster
 - ii. Adept at using medium armor, 1-handed weapons, and shields
 - iii. Utilizes Holy magic to heal their allies and damage their enemies
 - c. **Paladin:**
 - i. An up-close melee holy knight
 - ii. Adept at using all armor, melee weapons, and shields
 - iii. Utilizes Holy magic to strike down their foes
 - d. **Wizard:**
 - i. A ranged arcane caster
 - ii. Adept at using light armor and 1-handed weapons
 - iii. Utilizes Arcane Magic to strike down their foes at range

e. Ranger:

- i. A ranged Attacker
- ii. Adept at using medium armor and ranged weapons
- iii. Utilizes limited nature magic to provide access to utility effects

f. Bard:

- i. A ranged support attacker
- ii. Adept at using medium armor and ranged weapons
- iii. Utilizes the magic of song to support their allies and harass their enemies

2. **Equipment:** It's important to assign different equipment to your party members to make them more reliable in a fight. Each party member can equip 5 different pieces of clothing (head, torso, leggings, gloves, and an accessory). Each piece of equipment affects how much hp, mp the player has, while applying additional buffs to a party member's abilities. Every party member has 2 weapon slots, Some weapons are 1 handed use, while 2 handed weapons like a war hammer or bow require both weapon slots to wield them.

3. **The town itself:** After leaving the dungeon the player returns back to the town. This general area acts as a preparation spot before entering the dungeon. The town will consist of shops to buy different items. The town and its many buildings can be upgraded with coins to encourage shops to sell better items. As part of the story, it will be your mission to turn this town into a proper landmark. In addition, each building is a jpg and replaces itself when the building is upgraded. Entering a building simply opens up the shop menu, there will be no indoor exploring.

a. Guild: The guild is the main place you travel to in order to acquire quests. You can't enter the dungeon without picking a quest to complete.

b. Blacksmith: crafts weapons and armor for players. Can sell unneeded equipment there.

c. Looter: Sells accessories for the players. Can sell rare valuables.

d. Collector: A place to primarily sell the many items dropped by monsters.

e. Alchemist: Sells potions and herbs for the player's adventure, can sell potions and herbs there.

f. Traveling merchants: After each run, a merchant with a large bag offers a variety of different items. The prices will vary based on what he's offering, and what you're selling. You can sell any item to him.

- i. **Archmage:** Can buy wizard weapons and magic scrolls there. Mage accepts staff and scrolls for a price.

- ii. **Consumable Vendor:** Sells rare consumables

- iii.



4. **Guild Quests:** Once you picked a quest, it's your job to complete it before leaving the dungeon. Quest rewards consist of large bounties of coin for completion. The coin you make from exploring the dungeon and selling items fail to compare to how much is earned from quests. In addition, more challenging quests offer a better deal if completed, but if you return without completing the quest, you get no reward. The more quests you complete, the higher your rank of a guild member rises. Higher rank guild members offer harder quests, but the reward is worth the risk. Of course, this also comes down to balancing the experience, it would be less interesting if the player grinds coin by doing nothing but easy quests.



5. **Enemy Encounters:** Throughout the dungeon exploring, the player will have to fight their way past enemies. Each group of enemies stay stationary in their

rooms. Once the player enters the room they're in, the enemies become alarmed and move towards the player to start a battle. Each enemy has a specific attack value and max hp. Certain enemies will have weaknesses that you can exploit to make battles slightly easier. After a battle has ended, the player will be given a few coins, and there's a chance the enemy will drop a monster part for you to collect and sell back in town.

Mechanics

In Mission

The in-mission mechanics will be centered around the tactical combat system, with the grid-based movement dictating all actions that are able to be taken. During combat, it will be turn-based combat allowing the player to think tactically about their actions. Outside of combat the player is still covered by the grid-based movement but not tied to the turn-based nature of the combat.

The in-combat mechanics will be tied to the player using their mouse cursor to direct their party of adventurers around the dungeons. The player will also have use of actions through the use of a set of icons along the bottom of the screen that is also able to be accessed through the use of number keys (1-0). The abilities the character has access to are reliant on the Adventurers class and level in said class.

In Town

The in-town part of the game will be centered around the increasing of your Adventurers' power through the use of the gold acquired through the completion of contracts. The Town is a background image with the buildings in the town being selectable to access their services.

Guild Recruitment

The guild recruitment system is designed to allow the player to add adventurers to their ranks. The system initially will only offer more rookies to the player but this can be expanded by upgrading the (Building where adventurers are recruited), upgrading the building will allow the recruitment of increasingly powerful adventurers. The initial offering will be of 6 adventurers between jobs of which the player can recruit as many as they have room for in their camp. Upgrades are obtained through quests that the player can accept after certain other undetermined quests.

Upgrades

Tier 1

6 available Adventurers

All Rookie Adventurers

Tier 2

10 available Adventurers

	Chance of base class Adventurers
Tier 3	15 available Adventurers Guarantee of base class Adventurers
Tier 4	20 available Adventurers Chance of Bronze rank Adventurers
Tier 5	20 available Adventurers Guarantee of Bronze rank Adventurers
Tier 6	22 available Adventurers Chance of Silver rank Adventurers
Tier 7	22 available Adventurers Guarantee of Silver rank Adventurers

Engine Platform: UNITY

The game will be targeted towards Unity. With Unity, we can focus more on the C# side for the programmers. If we used an engine like unreal the development would become excessively more challenging to complete. Unity is great for building 2D style games, and other compatible software can be implemented into the program.

Music Audio

The targeted music is designed to feel atmospheric throughout the player's adventure. The Nest develops a sense of mystery and danger the deeper down you go. The first portion of the Nest is easy so we want to convey that area 1 is the least dangerous area in the game. The deeper areas create a greater fear since the player has come so far, and losing down there would be a real let down for the player. Furthermore, a boss fight is supposed to generate an immense battle taking place. You feel a challenge present before you. It's more like a test to see if the player is capable of moving forward. Lastly, we need a theme for the town, at first the melody for the town will be soft, but as you grow stronger and the town develops more, the theme starts to breathe life and excitement to the player.

- **Initial Dungeon Music:**

<https://www.youtube.com/watch?v=ka5wv0ZGcMs&list=PLBNBEpf9ivBFLSIReah7-ldsgghL72PKH&index=7>

- **Deeper Dungeon Music:**

<https://www.youtube.com/watch?v=lod8eNA6-l0&list=PLBNBEpf9ivBFLSIReah7-ldsgghL72PKH&index=9>

- **Boss Fight Music:**

<https://www.youtube.com/watch?v=A4oiY1Mqj90>

- **Town Music:**

<https://www.youtube.com/watch?v=V30-wKxYBw0&t=6s>

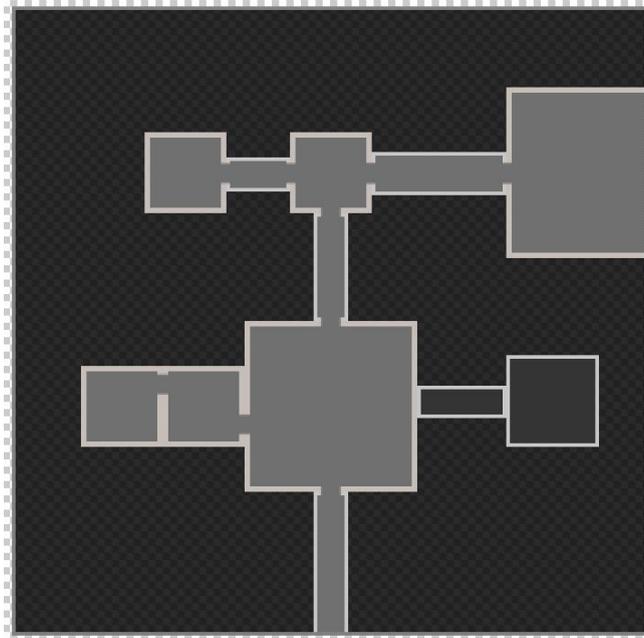
UI/UX:

1. Player Stats:



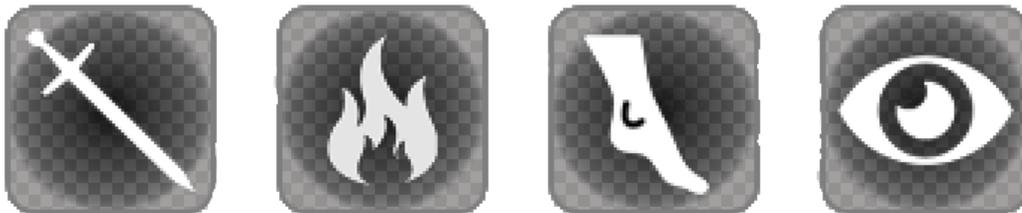
This is the General player stats. This menu displays the basic player information during a run. The red bar above represents the player's maximum health. The purple bar is the player's magic amount. The yellow bar in the corner is the player's XP count, every time they win a fight the yellow bar increases until the player levels up. The Blue diamond on the left shows the player's class level, the value increases every time the player levels up. When a player gets hurt or uses magic, the values will decrease, the bars will also drain until they are completely grey. If the player increases their max HP and MP, the values change, but not the size of the bars itself.

2. Minimap:



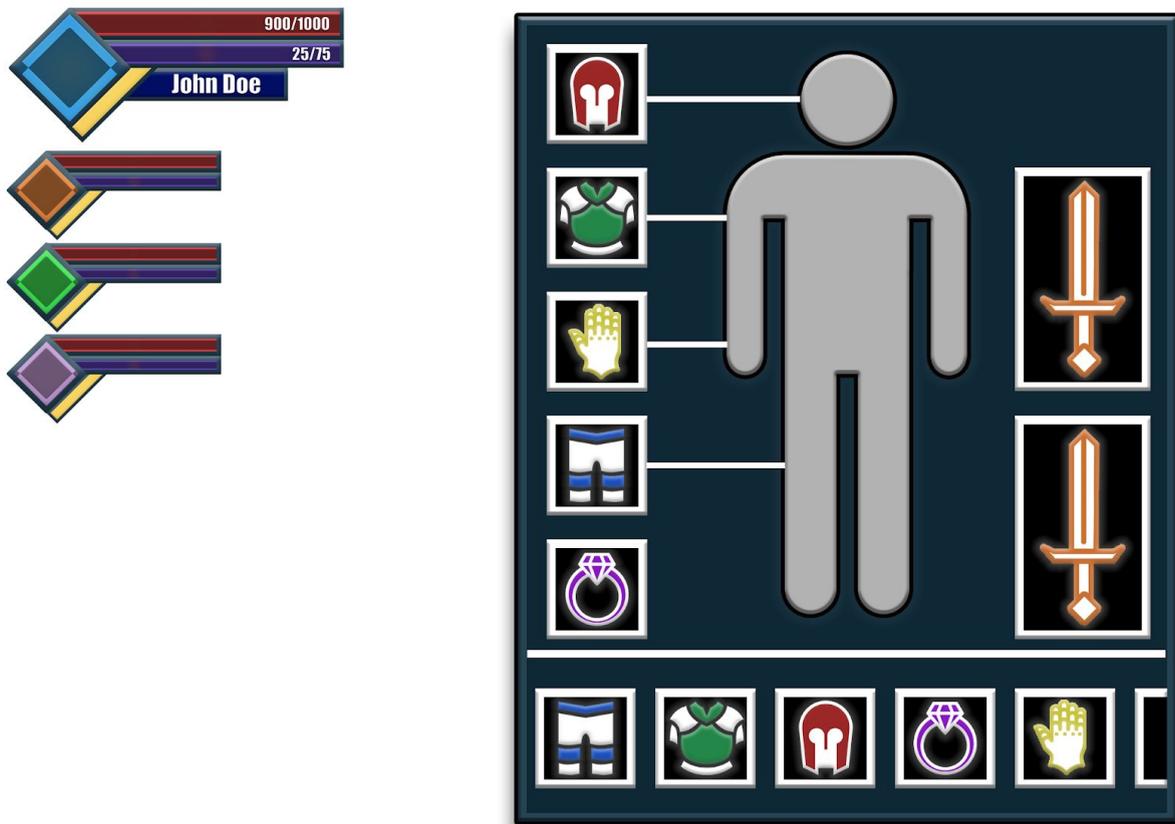
While exploring the dungeon, the player will carry a minimap on the screen. The layout of the rooms will be mostly squared. Any rooms you visited will be highlighted with a lighter grey color. Rooms you did not visit yet will remain with darker grey contrast. If you need a better view of the map, you can select it and have it more zoomed in.

3. Action Icons:



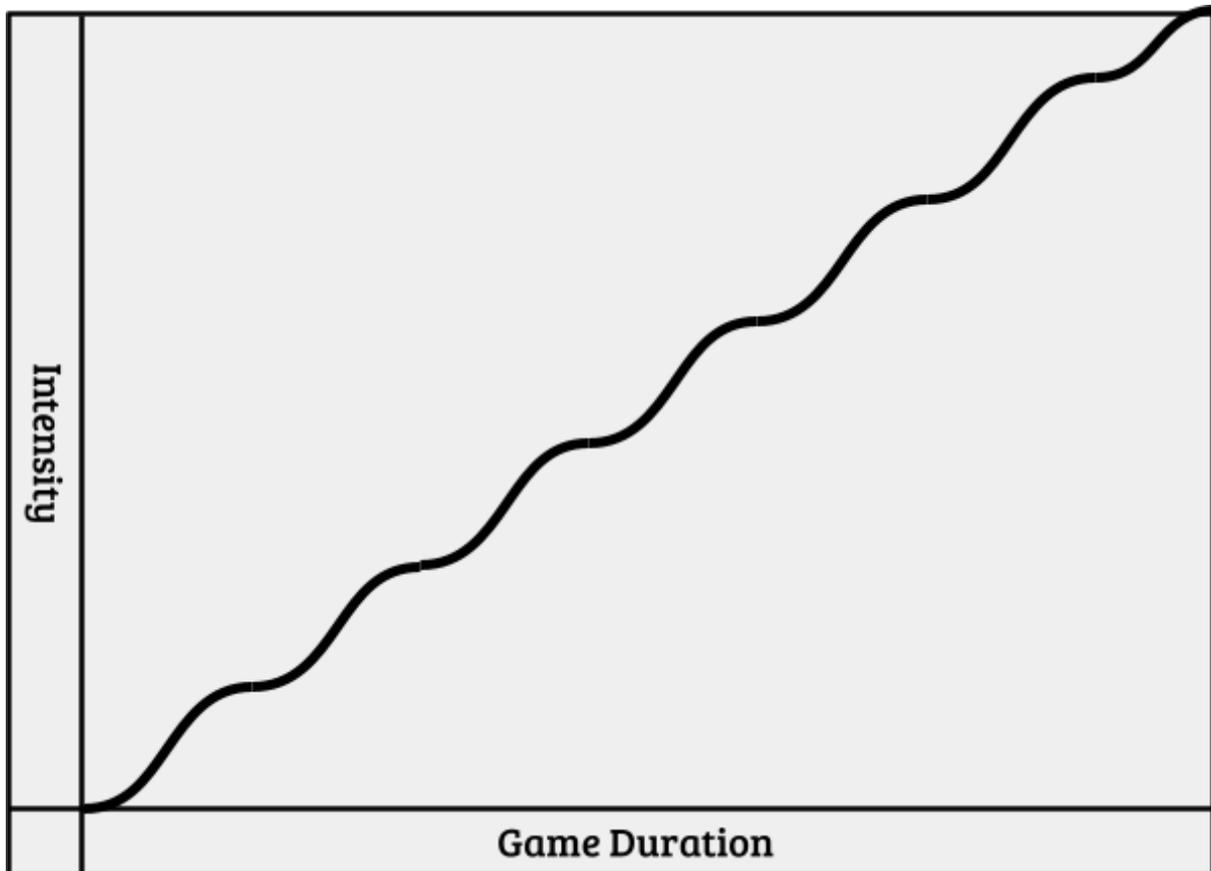
During combat scenarios, the player will be equipped with 2 icons. These icons are actions the player can perform in a fight. If an action cannot be performed, the icon will change to a dark grey color.

4. Equipment Menu:



The rough idea behind this design is to make an easy access tab to a party member's equipment. By clicking one of the diamonds located near their stat bars, a window will pop up to the right of the screen to reveal what the player has currently on. If the player selects 1 piece of equipment on them, a scrollable menu will show up below to quickly swap out a piece of equipment. The menu is also organized based on which item you want to replace. Click a different diamond to change the party member's equipment menu, click it again to close the menu.

FlowChart: General pacing



Prototype Plan: first official build of the game

1. Short Room layout.
2. Basic movement implemented.
3. A rough idea of equipment loadout.
4. Prototype UI buttons and stats.
5. 1-2 types of enemies.
6. Enemy encounter behavior.
7. Combat encounter behavior.
8. Background music and sound effects.
9. Simple low detailed animations.

MVP(Minimum Viable Product)

1. Pay more attention to how character movement works through the Nest.
 - a. Character Movement
 - b. Pathfinding
 2. Define how combat works and operates.
 - a. Basic Combat
 - i. Basic Melee encounter
 1. Approach from the front
 2. Select the attack action
 3. Select the enemy to attack
 4. Deal damage
 5. End units turn
 - ii. Basic Ranged Encounter
 1. Determine range
 2. If with range
 - a. Select ranged attack
 - b. Select the enemy to attack
 - c. Deal damage
 - d. End units turn
 3. Else
 - a. Move
 - b. Back to stage 1
 3. Remove magic options to have simple actions for combat.
 4. Have just a menu for the town to minimize choices and structure.
 5. Have 1 fighter class with no buffs or complicated stats. Make sure a party of 4 is operational.
 - a. Have a Base Class template that is editable
 - b. Create 2+ Classes from there
 - c. Determine how Adventurers function in 2 man squads
 - d. Scale to 4 man Squads
 6. Have starting enemy Ai for the player to fight.
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Game Research

Competitive analysis

There are 2 categories of gamers we have to look out for. The casual players want an experience they can breeze through with ease. The hardcore players want a serious challenge that's unforgiving but the reward is worth the trouble, it comes down to skill and action for them. Since Dungeon Delvers is targeted for mid-core gamers, we need to define a balance between flow and difficulty. Our game is focused on progression and strategy, so gamers that want to feel like they're getting somewhere. They want a game that fits their standards. We will have to establish what makes a rogue-lite fun for the player.

Presentation is hugely important when you want to encourage a player to play your game. There are 4 key components that gamers look for when they first hear about a game. 1) is the game going to be fun to play, 2) do the graphics look appealing, 3) is the story worth experiencing, 4) is the core gameplay loop engaging. If we don't nail those components, no one is going to want to check out our game.

XCOM 2

Public

XCOM 2 is targeted at promptly Strategy game playing audiences. It allows its players to experience a top-down management structure of the military.

Gameplay

The gameplay of XCOM 2 is focused around embarking on missions from the base that are self-contained arenas. This gameplay experience is in line with the play experience that is expected from the strategy game playing audiences.

Size

It is a larger game with both a full single player campaign and also a suite of multiplayer missions and versus battles

Price:

Normal Price	\$79.99
Sale Price	\$19.99
DLC	
Content Expansion	\$53.49
Expansion Addon Pack	\$10.49
Weapon Pack	\$21.99
Mission and bonus items	\$10.99
Mission and Bonus Items	\$10.99
Total DLC	\$107.95

Darkest Dungeon

Public

The game is targeted for strategy roguelike players. It's more about team management in order to stay alive and progress through the game. Of course, difficulty is necessary if you want to up the stakes for the player.

Gameplay

It's all turn-based, so it gives the player time to think about what they want to do in a match. But it also saves your progress every move you make, so you won't be able to exit out of a match and suffer no penalties for the decisions you make.

Size

It's pretty standard for size, you have your main set of adventurers, there's plenty of equipment and items to use from, and each dungeon has its own sets of enemies to deal with.

Price:

Sales price: \$ 27.99

DLC1: \$ 10.99

DLC2: \$ 5.99

DLC3: \$ 9.99

Total DLC: \$26.97

Dungeon Delvers

Public

People tend to play strategy games for the feeling of accomplishment they grant upon success and the feeling that success was almost within grasp they offer in defeat. The mixing of roguelike elements into a strategy game allows the player to not fully lose upon a defeat while always feeling like they are making some progress towards the ultimate goal of success.

Gameplay

The gameplay target we are striving for is centered around tactical combat and the management of the player's roster of Adventurers. The variety aspect comes from character classes, equipment loadout, enemy variants, and room layouts.

Size

We aim for the initial release to have to above six classes and the one major outlined dungeon complex. This will be smaller in initial size but will be

easily scalable by adding new classes and dungeon areas. The game should at least have more than 1 type of enemy so the player doesn't get bored of fighting the exact enemy every single time. The town will not be priority 1 until the gameplay has been refined and works correctly as planned.

Price

Generally, most roguelikes don't drop the bar for being expensive. The highest to offer is \$30, every other rogue-lite features a price under that mark. Of course, Dungeon Delvers is not a game made by a high-end studio. Therefore, the game will have a much lower price. We want to aim for something around \$10 since the product isn't going to generate enough sales if we find a way to advertise it. We don't want to go too low, otherwise, the game won't generate enough income for the team. Maybe in the future when we have a working Alpha build of the game. We can release it to the public as a free demo to try out and give feedback to the team to see if our product is on the right track, or if there's something that needs improvement.

Price: \$9.99