THE CRAWL

Ryan Costin | Josh Gillum | Ben Givens | Michael King Jacob McKenzie | Chris Soto



Our story begins with a young lad. He lived a normal life with a normal family. They all lived in a small village in a peaceful valley. Their life was very quiet until this fateful day...



A man with a skull face rode a skeletal horse into town. The villagers quietly hushed amongst themselves, stunned by this new arrival. Lightning cracked through the air and set buildings on fire. This strange man did not stop until every last building was ablaze. As the events that just transpired set into your mind, a look of terror fills your face. You realize that your parents, and everybody you ever knew are now dead.



You throw yourself to the ground and pretend to be dead, praying that the stranger does not notice your racing heart and ragged breathing. After the last of the buildings have collapsed, the evil magician calls out, "Come forth my deceased warriors. Rise to serve your master." You sneak a glance behind you and see skeletal figures rise from the rubble.



You hear the familiar clip-clop of a horse from off to your side, except this horse seems to be traveling at an otherworldly speed. The horse stops directly in front of the magician and rears back up on its two hind legs. You look up and see that the magician is turning around and running away.



This newcomer has a powerful aura about him, yet you are not scared. His voice booms, "I am Orwick, the great wizard of the East. That evil man that destroyed your village is known simply as The Overlord. He used to be a normal man until he sold his soul to the underworld. He has become a powerful lich that advances the cause of the underworld—to rid our world of life. Come with me to my homeland boy. It is there that you will train to defeat The Overlord."



You and Orwick travel for what seems like ages. The days blend together as you struggle to survive. It seems like everything in this world is out to kill you. You reminisce on your simple life of the past, and thinking about your parents fills you with sorrow. After 9 days (according to Orwick), you reach his home. It is here that you spend the next 20 years of your life training and preparing to get your revenge.



On the day of your 27th birthday, Orwick confirms what you were already thinking—that you are finally ready to take on the lich. You travel back to your old home, and spend the next several months searching for his hideout. Eventually, you learn that he has constructed an elaborate dungeon in the bottom of an old mineshaft.



Immediately upon entering, you are greeted by a host of skeletons. It pains you to know that they were once living people, they might have even been someone you knew. You continue exploring this maze-like dungeon, until you find a room that seems different than the others...

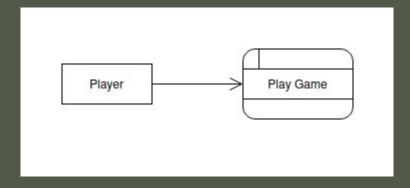


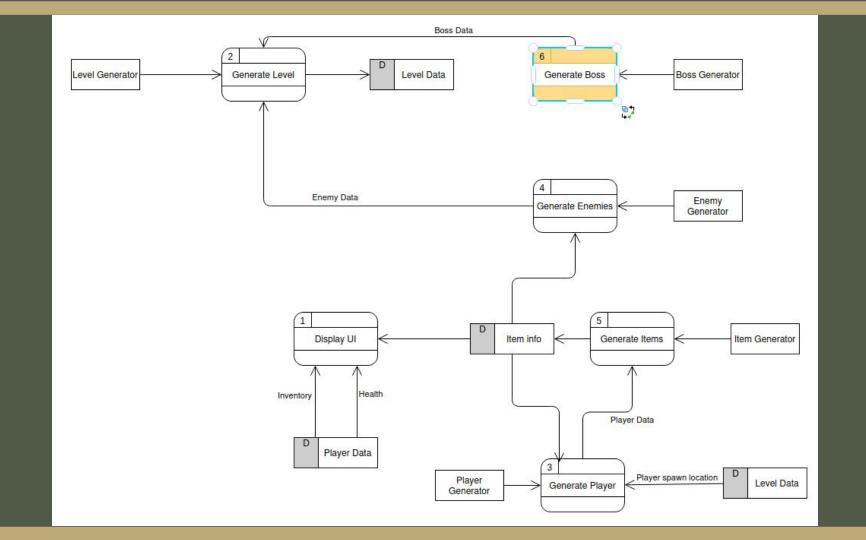
It's a tamed drake from the old world! It has long been believed that they went extinct millenia ago. It doesn't seem possible to be fighting one, unless the lich's foul magic had something to do with it. You slay the dragon and head deeper into the dungeon. The next level is largely the same as the previous one. Rooms upon rooms of underlings, with a large monster guarding the staircase.

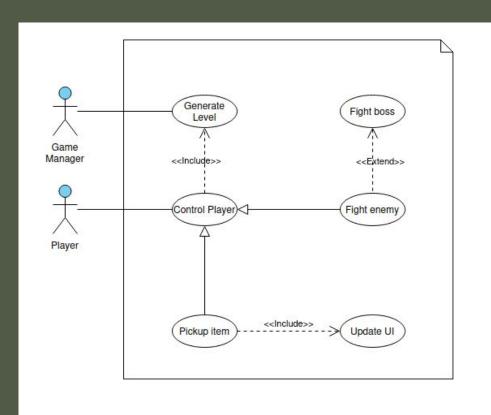


You enter another one of the large rooms, expecting one of The Overlords elites, only to be surprised by The Overlord himself. He puts up a tough fight, using various magical abilities, nearly killing you. In the end, you emerge victorious, filled with a sense of accomplishment that you have avenged all of the villages destroyed by this monster. A tinge of sorrow sweeps over you as you remember your parents, but it goes away when you realize that they are free now.

Context Diagram



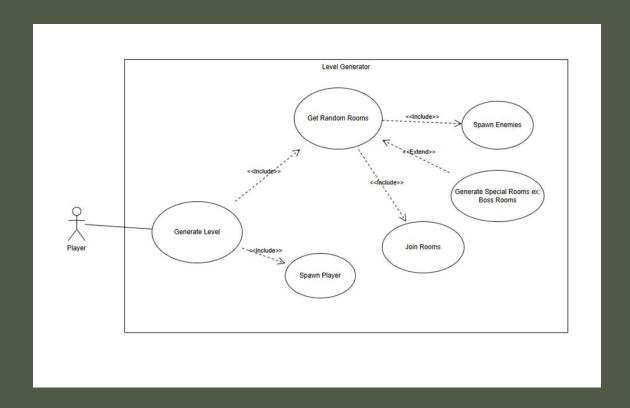




Level Generation

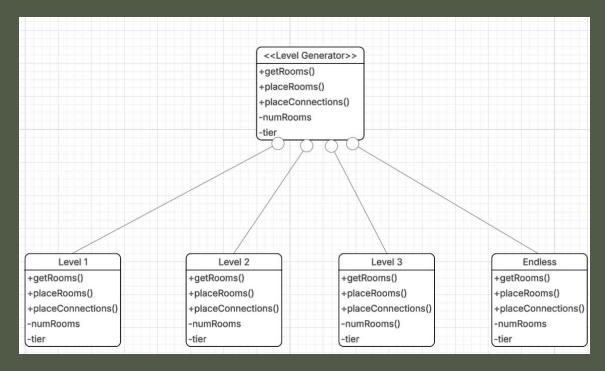
- Each level will be randomly generated
- Each level will have a "tier" for difficulty
- Priority: 1
- Complexity: 1-2 most complex

Use Case Diagram



Class Diagram (first draft)

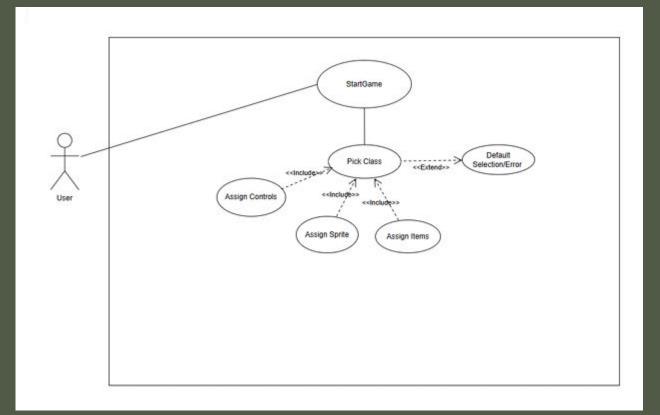
• The real class diagram will be done saturday



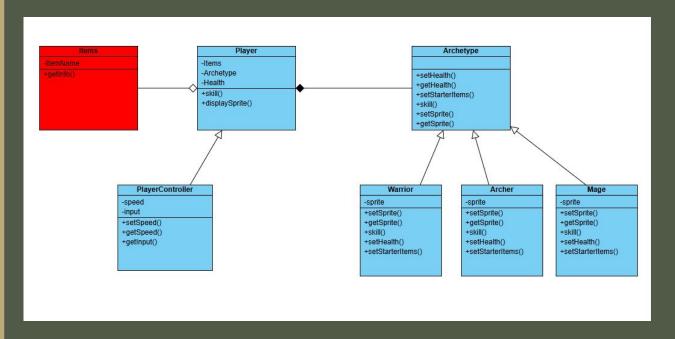
Player Overview

- Player will have multiple classes to choose from
- These classes will have special abilities to that class, starting health values, starting items/equipment
- Each weapon type will have different control schemes for the player ranged will have to aim and release- shields must be directional in blocking
- Implement Controls for Player on Keyboard/Mouse and Controller
- Priority 1
- Complexity compared to random room generation or ai enemy algorithms my feature would be less complex

Player Overview- Use Case



Player Overview- Class Diagram



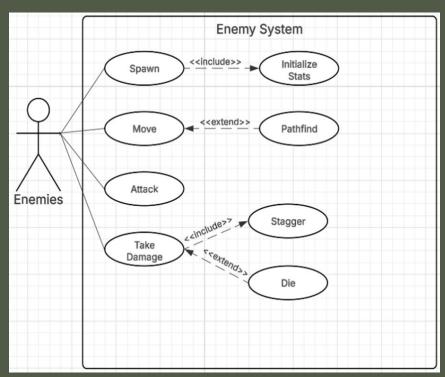
- Bridge Design
- Aggregates items
- Composition of Archetype

Enemy A.I. - Overview

- Tier difficulty levels based on floor level
- Consist of melee and ranged enemies with differing abilities
 - Wandering/idling, chasing player, shooting projectiles, casting buffing/debuffing spells
- Pathfinding utilizing navigation mesh
 - Allows to find player while avoiding obstacles and other objects
- Chance of dropping items/currency upon death
- Priority Level 1*
- Complexity Complexity will scale with amount of varying enemies types implemented

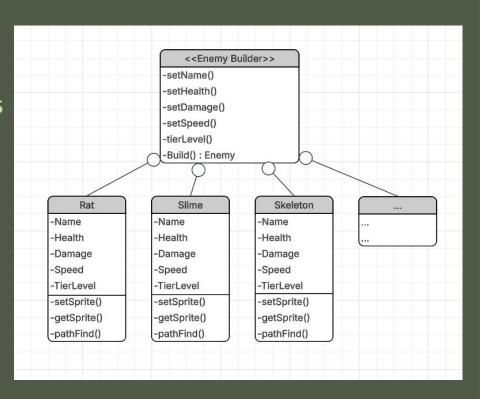
^{*1 =} Necessary, 2 = Good to have, 3 = Not necessary

Enemy A.I. - Use Case



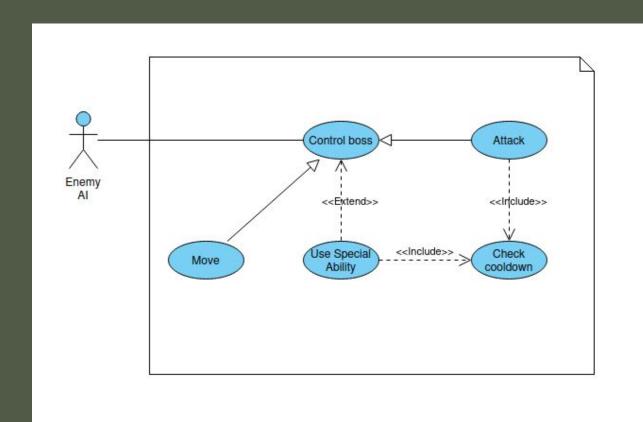
Enemy A.I. - Class Diagram

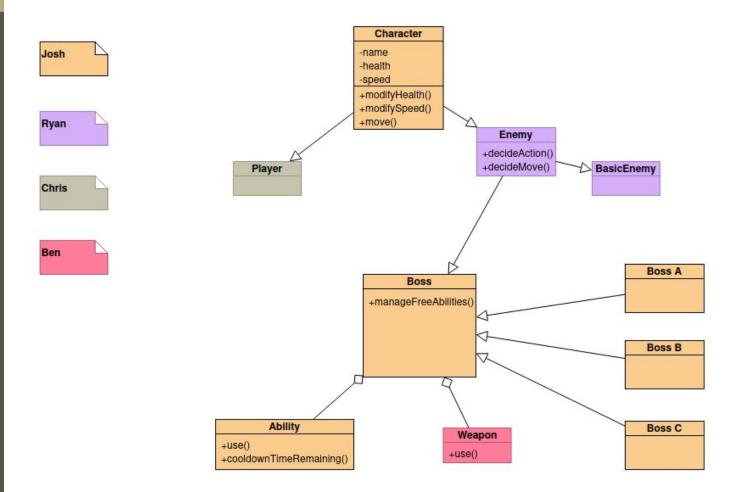
- Builder Design
- Construction of objects through its representation
- Allows for customizing multiple classes



Boss Fight Encounters

- One per level.
 - Bar you from using the stairs until beat.
- Several options per level. Randomly chosen.
- Bosses will have unique mechanics and abilities
- Boss on the third floor will always be The Overlord
 - Technical end of game

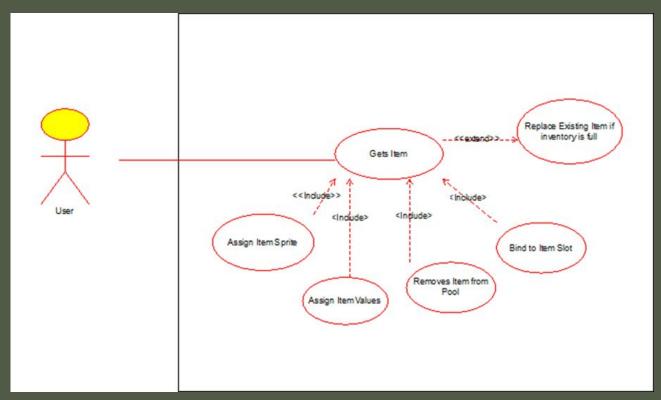




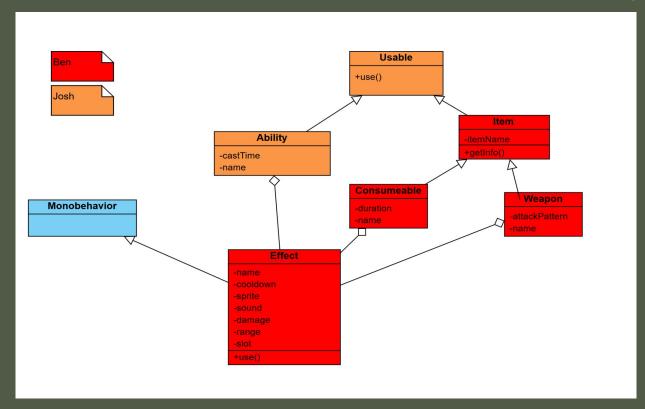
Item Implementation

- Two different types of Items Consumables and Weapons
- Consumables will offer one time buffs and/or deal damage
 - o e.g: health potion, fireball potion, etc.
- Weapons will be a permanent equipable item
 - e.g: Axe, bow, etc.
- Can be dropped by beating enemies and bosses
- Will differ in rarity and power. Later floors get more powerful items

Item/ability Implementation - Use Case



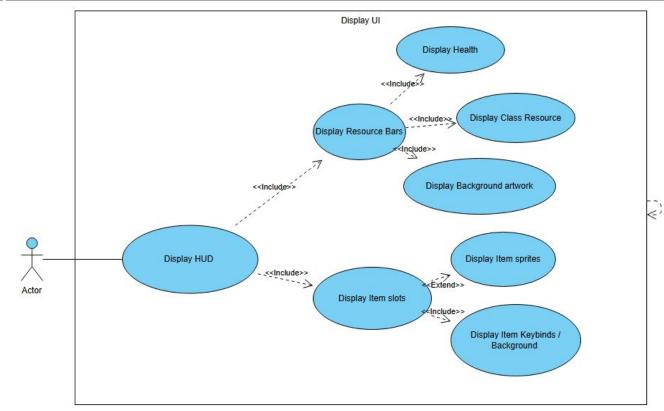
Item/ability Implementation - Class Diagram



UI HP and Resource bar item bag and Menu

- Menu With three options, One to start the game one to go over the rules and controls of the game and the finally and option to quit the game.
- Display your characters current hp and class resource amounts on your screen.
- Hp bar will flash if below 20%
- If you try to use an ability when you don't have enough of your classes resource will also make a no mana sound.
- Will display what items you have and what the keybinds are for the items.

UI Implementation - Use Case



UI Implementation - Class Diagram

