

Overview:

Making a game is not all fun and games believe it or not. You do have to put in work to getting a video game together. Work including programming (using languages such as C++, Java and Python), design, art, sound, etc. but the payoff is not playing the game itself, it is watching other people enjoy what you have created and having fun. That's why I make games. The payoff of watching someone play your game, being happy they completed an objective, frustrated that they couldn't defeat a boss, or the satisfaction of finally beating the game is what drives me to try and make great games and why I want to be a game designer. If you have the drive to learn and want to create something you can be proud of making a video game is a good way to start.

Learning Outcomes

This game experience will teach you what a game jam is and what goes on behind the scenes to create a game.

My name is Ryan Floyd, I am a Senior at Florida Polytechnic University studying Computer Science. I am the Lead Game Designer for Undercave and an associate artist.

This game was developed by a team of 5, including myself, for the Florida Polytechnic Respawn Game Jam 2021. A game jam is a short competition where people get together to make a game that follows a certain theme in a short amount of time. This year's theme was "Déjà vu" and we were given 72 hours (3 days) to make a game. You are given nothing, but the theme and the rest is up to you. The main purpose of a game jam is to test your skills as a game developer, whether that be in programming, design, sound, or any other aspect of making a game. However, the most important aspect of a game jam is to have fun. There are game jams where you can make money by having the best game but most of them are just for fun and to put your skills to the test.

This game was made in 3 days using various software to create the game. The game itself was built in the Unity game engine, a free game engine used for making video games and virtual environments. We also used Magica Voxel to create the art assets in the game, giving it that unique look to it. To do animations we used Blender, a free 3d modeling software that is used to make assets and animation riggings.

Materials

- Computer/Laptop, must be a windows computer, unfortunately this game will not work on Macs or mobile devices
- Keyboard and Mouse, for controls
- Access to <https://goonsquad.itch.io/undercave>

The Activity

You are an adventurous dwarf who craves the riches of a long-forgotten tomb. However, the tomb is guarded by many dangerous foes and creatures. With the aid of a wizard's enchantment, you are able to die and resurrect stronger than before and retain a vague sense of knowledge you gained from before to defeat the creatures that reside within the tomb. How many deaths will it take for you to plunder the riches of the UNDERCAVE?

How To Play

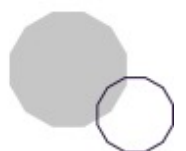
Opening the Game:

In order to play the game, follow the link above to the itch.io page for the game and download the latest version of the game. Once downloaded, find the downloaded folder and extract it to a easily accessible place, preferably the desktop. Once done, simply open the extracted folder and double click on the application and the game will launch.

Controls

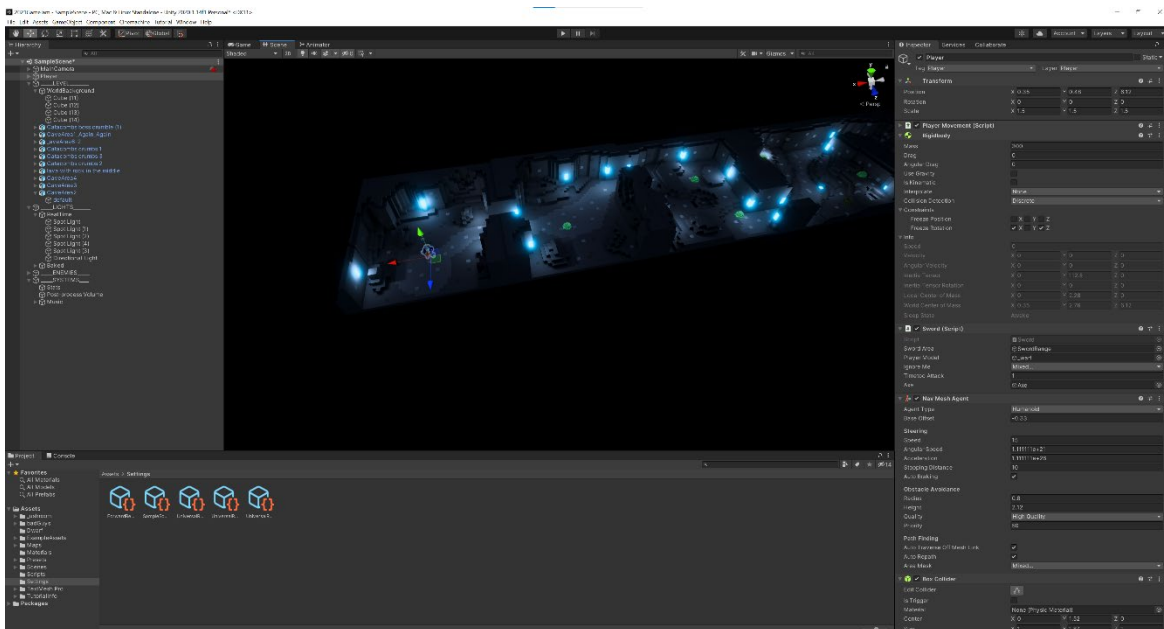
(subject to change as we are planning to update the game so the gameplay isn't as terrible.)

- Left click to Move and Attack enemies
- Spacebar while moving to Dodge



Objective

Use your mouse to move and attack enemies and make your way through the Undercave. Fight through the dingy cave, to cross a lava lake to the catacombs. Once there defeat the monster of the catacombs to claim the treasure of the Undercave and win the day.



Assessment

1. Name three programming languages that are used for creating video games
1. Explain the concept of a "Game Jam"
2. What is the purpose of a "Game Jam"?
3. Tell them what you think- [comment here](#)

Additional Resources

1. Lesson Plan pdf
2. [Unity Real-Time Development Platform](#)



3. itch.io an open marketplace for independent digital creators with a focus on independent video games
4. [Magica Voxel](#)

Creators:

Orion Mendes: Lead/Only Programmer, Computer Science, 2022

Keagan Macdonald: Lead Artist, Computer Science, 2022

Ryan Floyd: Lead Designer and Assistant Artist, Computer Science, 2022

Oscar Tavera Jr.: Music, Mechanical Engineering, 2023

Andrew Reimer: Sound/Music, Mechanical Engineering, 2022

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Created by Ryan Floyd, Computer Science '22

