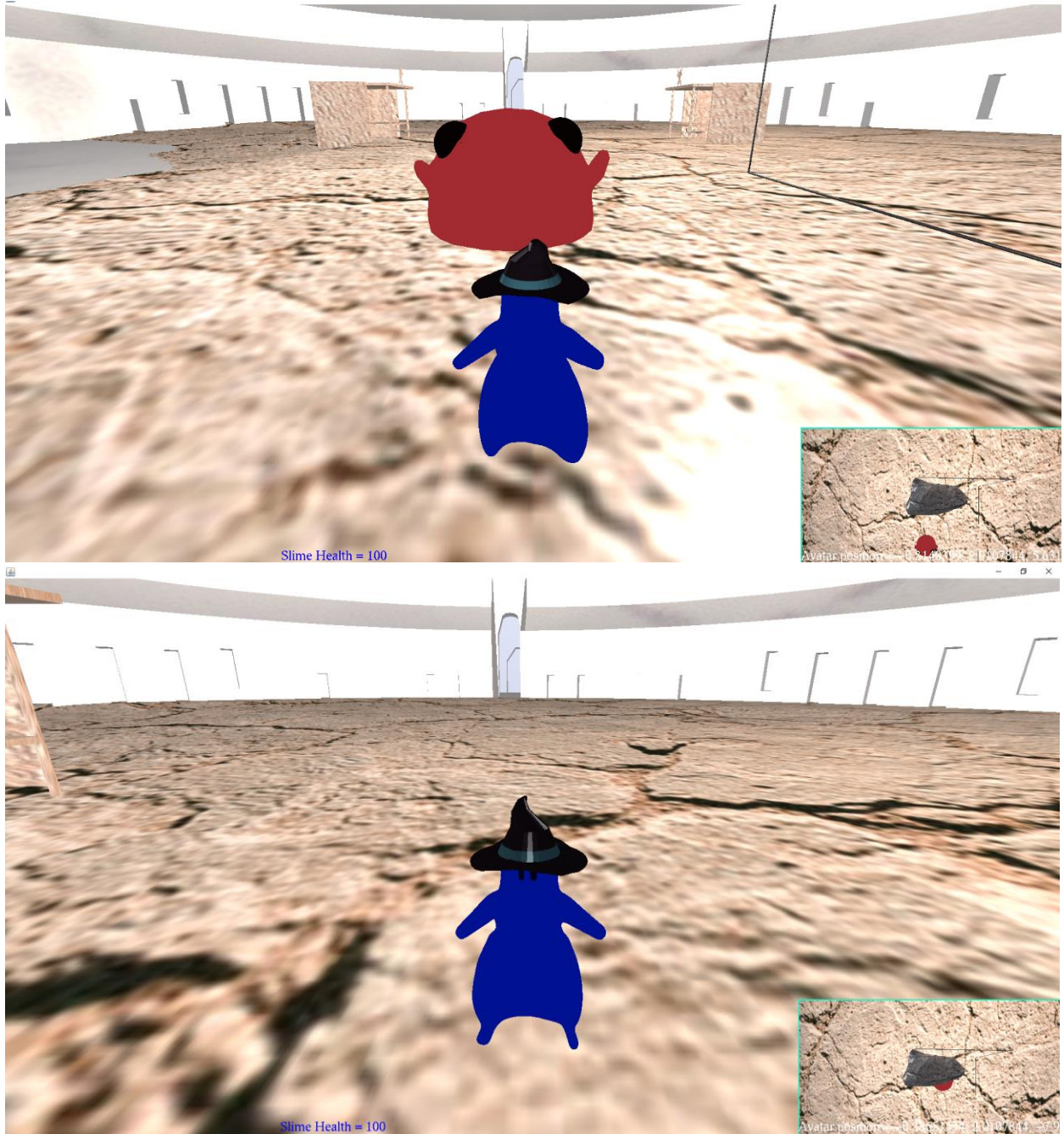


1. Joseph Cruz
Game Name: Colosseum Crash
Section:1
2. Screenshots



3. Compile and run the server first, then run clients after. If slime dies the game will need to be restarted.
4. Special devices
 - a. Only need a keyboard and mouse or a controller

5. How to Play

The game is played by moving the avatar around. The enemy will be spawned in the middle but won't see the player until it gets too close. You win by lowering the slimes health to 0.

6. Controller

- a. Leftstick up/Down: moves the character forward and back.
- b. LeftStick Left/Right: Turn the Avatar
- c. Dpad Up/Down : Zoom the camera in and out.
- d. X : Will attack and play animation.
- e. A : Will drop the rock only when in front of the lever.
- f. RightStick : Moves the Camera.

Keyboard

- a. W : Moves the avatar Forward
- b. S : Moves the avatar backward
- c. A : Turns the avatar Left
- d. D : Turns the avatar right.
- e. Arrow UP : Moves the overhead camera up.
- f. Arrow Down: Moves the overhead camera down.
- g. Arrow Left : Moves the overhead camera left.
- h. Arrow Right : Moves the overhead camera right.
- i. Q: Pans the overhead camera in
- j. E: Pans the overhead Camera out
- k. Mouse left click: Attacks.

7. Initializations in scripts

- a. Avatar speed.
- b. Turn speed.
- c. Walking Height.
- d. Bounciness of the ball
- e. Bounciness of the floor.

8. Changes to Network

- a. Added a request for the player's position and the handling for that message.
- b. Added a message to let the server know the npc is Dead so it can stop running the ai.

9. Changes to TAGE

- a. .Added the yaw() and pitch() to the GameObject Class although pitch is not used in this instance.
There is a new nodeController , Float Controller, that controls the prizes when collected.
(Unused)
- b. CameraOrbit3D : Creates an orbital camera that allows the player to control the camera without moving the avatar.

10. The genre of the game is an RPG, the theme is fantasy, 3d, exploration and combat.

11. Explanation

- a. External Models: I created the mage hat, sword, wand, character model, and the store.
 - b. Networked Multi-player: You can see other players in your world. They both see the same slime and can kill it.
 - c. Scripting: I used a couple of scripts, however the game didn't need that many the only thing I could think of is locations but the Game Objects get created before the scripts.
 - d. Skybox and Terrain: I used the skybox and terrain. The dirt floor primary seen is a terrain object that uses my custom-made height map.
 - e. Lights.: I have a couple of lights that light up the world.
 - f. HUD: There is a Hud that shows the players current location. It also gives the health of the slime.
 - g. 3D Sound: the sound when hitting the slime is 3d and the background music is also added.
 - h. Hierarchical SceneGraph. My only hierarchical object is the player model and the hat is parented to it.
 - i. Animation. I created all the animations for the player. This includes the idle, walk and the unused happy animation.
 - j. NPCs: My game has an NPC that will follow if too close.
 - k. Physics: The primary use of the physics is to drop the rock on the enemy.
12. Requirements that don't work.
- a. The player cannot choose the avatar.
13. None
14. By myself.
15. List of Items I made
- Animations
- a. Avatar attack
 - b. Avatar happy
 - c. Avatar idle
 - d. Avatar walk
- Textures
- e. All of the character textures.
 - f. The mageHat
 - g. Hills height map
 - h. Slime Texture
- Models
- i. Hat
 - j. Player
 - k. Dropper
 - l. Sword
 - m. Wand
16. Permissions to use other items.
- a. Background Music: author: Migfus20 url: <https://freesound.org/people/Migfus20/sounds/561394/>
Licensed under cc Attribution 4.0
 - b. Ground Texture: author: Jakob Owens url: <https://unsplash.com/photos/nKFPNayRbFE>

Free to use under the unsplash license. Restricts selling the photo itself

- c. Colosseum model:
Author: Carlos.Maciel
url: <https://sketchfab.com/3d-models/colosseum-e749705838044be78ced42205f9f9dda>
licensed under cc with Attribution.
- d. Impact sound
Author Kenney
url: <https://kenney.nl/assets/impact-sounds>
License: CC0
- e. Marble Image:
Author: Aleksandar Pasaric.
url: <https://www.pexels.com/photo/image-of-a-marble-surface-1323712/>
license: free to use.
- f. Wood texture
Author Pixabay.
url: <https://www.pexels.com/photo/brown-surface-301717/>
license: free to use CC0
- g. Monster which includes the slime and skeleton(unused). Includes a mesh of the models. Skeletons that belong to the models. And pre made animation.
Author Quaternius.
url: <https://quaternius.com/packs/animatedmonster.html>
license CC0
- h. Metal texture.
[url:https://www.pexels.com/photo/grey-wall-2117937/](https://www.pexels.com/photo/grey-wall-2117937/)
The author is : Scott web, the license given free to use, no attribution required, cannot sell unaltered photos.
- i. Rock: <https://www.cgtrader.com/free-3d-models/scanned/various/rock-pbr-gameready>
Author: dimdimich
Free to use, without selling or giving to other.
- j. Art Texture:
Author: FreeStockTextures
url: <https://freestocktextures.com/texture/abstract-art-created-with-hot-crayons,1523.html>
license: free to use.
- k. Ground Texture:
Author: Cethiel
url: <https://opengameart.org/content/tileable-brick-ground-textures-set-2>
License: cc0

17. Ran into a lot of issues later on. One of the biggest is that the game sometimes doesn't start. Tried to fix it many times saw that it has a light manager issue changed my lights and the order I initialized them. Retraced my steps to see if the code I added was the issue and could not find a solution.