Name: Jake Morgan

Trello: https://trello.com/b/cD3YddsW

Repo: https://github.com/ThatGuyAndCo/DoorProject

The first project embarked upon by ThatGuy is a door. The design brief is to create a door of any interpretation. The only limitations are that the door must have an interaction and a sound effect. This project is to be built in 3DS Max and exported to Unity to be part of a three-project display of my modelling and artistic capabilities.

The idea of starting with a door is quite interesting. A door can be a metaphor for a large number of things. Being the first 3D project being undertaken by the students on my course, the door could symbolize the introduction to a new side of Game Development. It could also symbolize the start of a new year, a new level for us students to conquer. More likely, and more importantly, it could symbolize the beginning of a path of self-development that will guide the choices we make for the rest of our lives: our careers, our opportunities, our exploration of the world around us. This is the year that we open ourselves and our professional presence to the world, accepting real-world design briefs from real-world companies as part of our studies, building our online portfolios and demanding attention from whomever we target for our industry placements next year. It is also the real starting point of the course. The first year was just the tutorial: now we're ready to play the game.

Another important symbol the door represents is self-discovery. This Unit is an artistic one, and art is a direct representation of the self. With the only limitation on what we make being that it is a door, this allows people to express their personality through their work. What is a door to you? A simple wooden slab that stands between Room A and Room B? Or something more? Perhaps a secret sliding door hidden behind a bookshelf, perhaps a trap door pulling you down into the depths of the earth. Perhaps a vault, a large locked container with an impregnable door to keep your secrets safe.

To me, a door is a portal. Due to RAM limitations with older consoles, doors had a tendency to be at the end of a level, or linking one cell to another. A door could load a new area in a dungeon, or an NPC's house, or a boss fight. Playing these games for the first time you would be taken to a new world every time you passed through a door. After all, that is the basis for any adventure: what lies beyond the door? As a person who has always been interested in RPG's and whose mind is always drifting from one adventure to the next, a door represents a passage of infinite possibility, a plethora of worlds to discover on the other side of the portal.

In all seriousness: it's just a door. I doubt there is much deeper meaning beyond it just being a door.

Mindmap:

https://bubbl.us/NDI5ODg5OS84Mzg0MDM4L2FIZTNiMmY4MjYxN2RkNzk5YjliYzl1NTIzZGZjNGUw-X

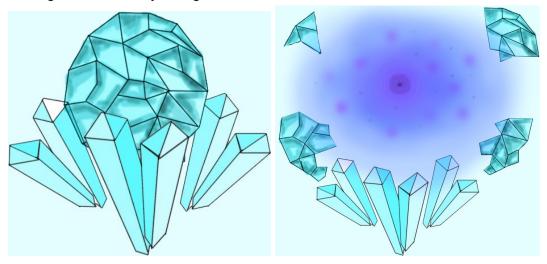
The basic design for my door project is going to be a fantasy-style portal. The design spec is below:

- -3D crystal, diamond in shape.
- -Spins in place by default, on y axis (horizontal spin), quite slowly
- -Has an ambient 'hum' sound effect
- -Has an ambient glow, same colour as crystal (maybe a bit darker)
- -When interacted with, spins in place very fast for 1 second then splits into 4 separate parts.
- -Makes 'whoosh' sfx while spinning.
- -Creates dark blue particle effect (light, sharp, transparent)
- -4 Separate parts move to create 4 'corners'.
- -Portal appears in middle and scales to just under the size of 4 crystal parts.
- -Portal created by mirroring 1 quarter.
- -Portal has dark, starry texture.
- -Portal spins in place on z axis (medium speed)
- -Portal has ambient 'whirring' noise (quiet)
- -Portal retains particle effect from opening crystal.
- -To close, portal reverses everything (except spinning direction).

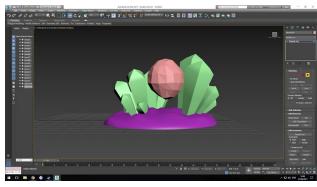
Here is a Mood-board of some ideas for the visual design of the portal. The main theme is Fantasy-Magic (in case you hadn't guessed). I think the final design will use a crystal bed, like the White Dragon Breath of Dark Souls, with a crystal floating above it (similar shape to the fluorite image), which will break apart to reveal a thin 3D portal, which will scale up to full size as the crystals are parting. The ambient effect will be similar to that of snow, but with a mystic glow and will not adhere to gravity.

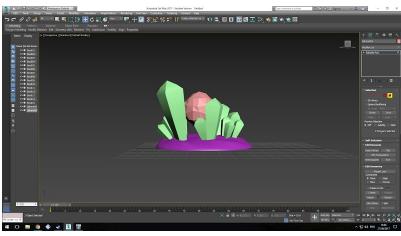


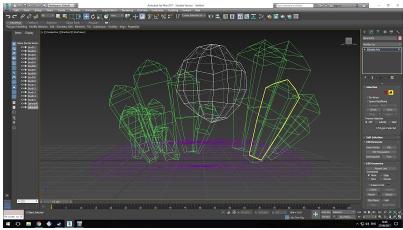
Here are a couple of pieces of concept art for the door, open and closes. Please forgive the quality, drawing is not one of my strong suits XD

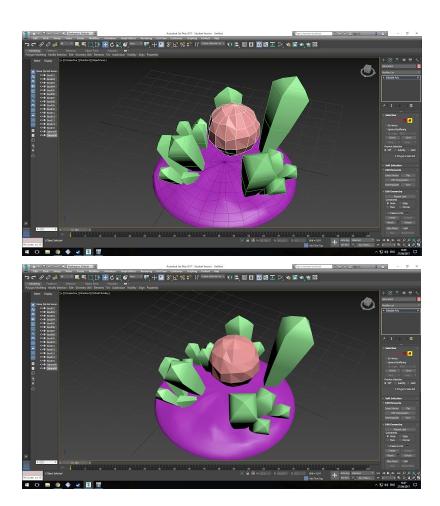


This is the basic untextured model of my Door project, including an Edged and a Wireframe view to help you see how the pieces were made. Each individual piece was very simple to make, just lightly editing the edges or faces on a hemisphere, cube and sphere. From there, I copied, resized and rotated the crystals to organize them in a somewhat natural-looking clutter. When making the sphere, I turned off smoothing to make it look much rougher with the lighting. This effect will really shine through once I apply the texture, which will be lightly translucent, and will make the shadows on each face more prominent. I left the crystals rather smooth looking to keep them looking shiny and 'magic', however I will likely add some blemishes in the texture to keep it natural looking.



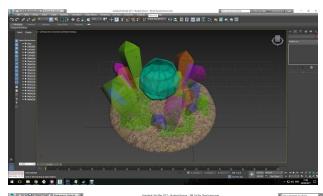


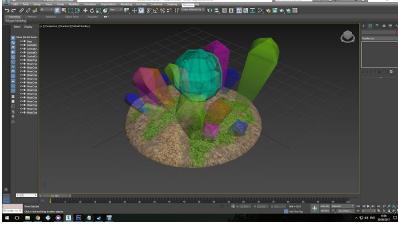


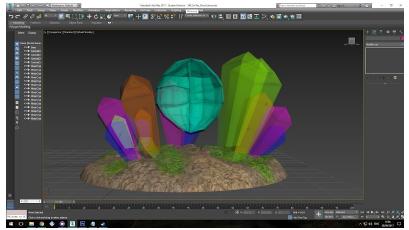


This is the textured scene for the Door project. I have used a variety of colours for the outside crystals to help add variety to the scene. The outside crystals are all highly transparent which allows the viewer to see the other coloured crystals through the one they are looking at, helping to add more colour and create a 'rainbow' effect. The transparency of the outside crystals also helps draw attention to the main crystal, which will act as the container for the portal, as this main crystal is not only a unique colour to the others, it is also much more opaque than the surrounding crystals. The base is a simple dirt patch to add context to the scene and to help with the natural half of the 'natural but magical' vibe I am going for. I used two separate dirt textures, one for the ground and one to create a path at the front of the crystal. This helps give the effect that the crystal is frequently visited, giving the scene a light visual backstory. Adding to this are the small blemishes and cracks on the crystals, which help create the feel that the scene has been there for some time, adding more to the natural vibe and the visual backstory of the scene.

The next step is to export this to Unity and add some natural lighting, and animating the opening of the door. After that I will create the portal as a separate 3DS Max object which will go inside the main crystal and expand as the crystal fragments part.







This is the first iteration of my final project.

This is my first time animating a 3D object in Unity, so it is very basic. I will be updating this project over the semester, my main update points are as follows:

The Crystal looks more like Glass than Crystal; The portal is very basic and the model needs refining, smoothing and probably adding a particle effect system to give it more of a magical vibe;

I need sound playing on animation start, and maybe a different background sound whilst the portal is active;

Whilst the portal is active, I will look at adding a slight movement to the crystal shards, as it feels strange with them being static.

I will be adding a moodboard for sound as that is what the next iteration of the project development will be focused on.

This project is a good basic showcase for the Agile development methodologies: creating a brief, narrowing down a basic design, researching and starting the iteration, creating a prototype, reflecting/getting feedback on the prototype, then restarting the cycle with more research to start the next iteration.

https://youtu.be/WSOVZKaNbII