

FIT2098 A2 Ideation Documentation

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Making a Dynamic Environment.

For this assignment I was tasked with creating a interactive VR Environment that was either Calming or Energetic.

I decided to create a calming environment as I instantly started having concepts and ideas for what I wanted to make for such an environment.

My primary concept is to create a Oasis where the player can solve a basic puzzle to reveal a hidden platform.

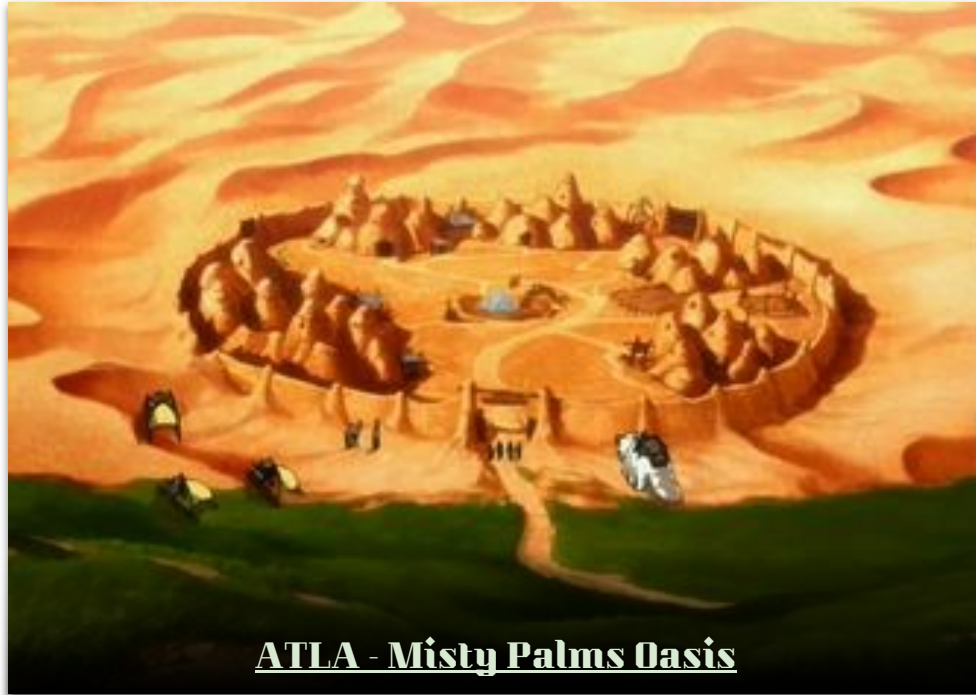
After some consideration I also decided make the mood move from a calm to energetic. This would be done through a transition in the environment.

Inspirations



Zelda:BOTW – Kara Kara Bazaar

I personally felt that this area in the game was very calming, I would stand atop the big rock and peer into the Zelda Universe.

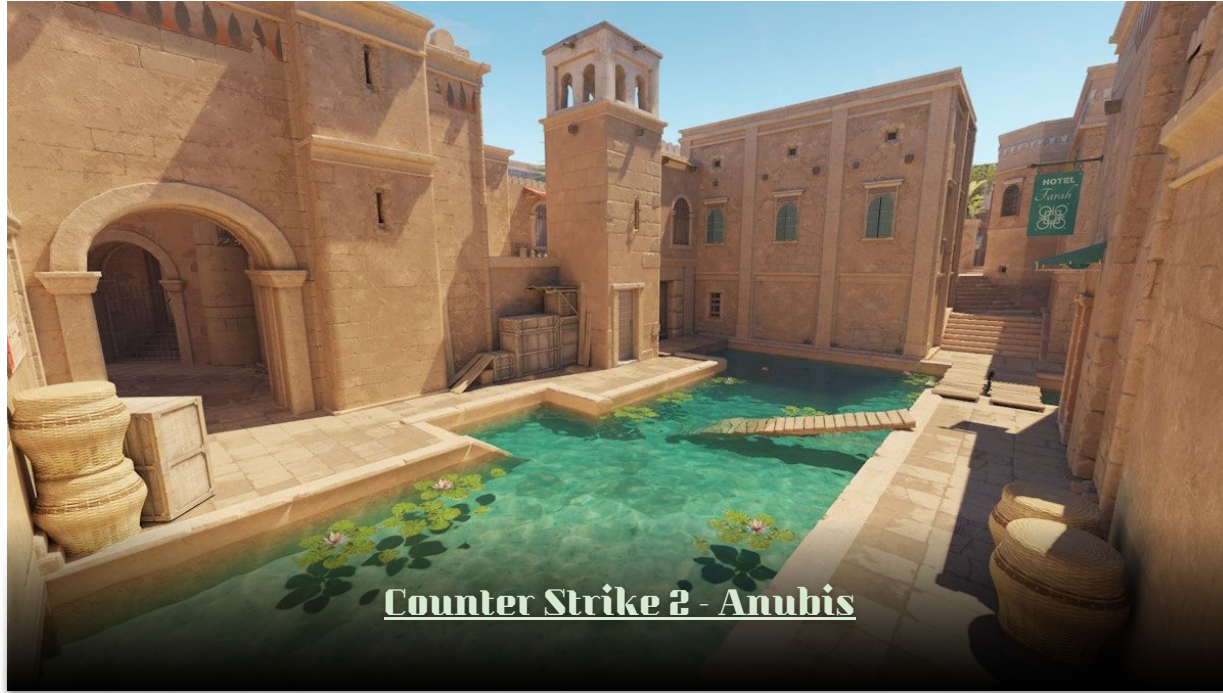


ATLA - Misty Palms Oasis

In Avatar The Last Airbender, Team Avatar, heads to the misty palms oasis as a vacation and find that it was in fact quite underwhelming, however, I thought the Advertised Idea was really cool so I thought I could use this as some inspiration. Especially the Ice!



I liked this because the colors represented look really neat and I like the general style of this part of the level in Mario Odyssey.



I really love the way the pond looks in this environment so I wanted to use this as a source of inspiration for the design of the pond itself.



This map is also in a similar art style to Mario Odyssey. And I really like the way the grass looks in this.



I think the plasma effect would be a good idea for something possibly caused by an interaction.

Mood

As mentioned in the beginning of the document I want this environment to express a calmness, I will achieve this by trying to focus on both the auditory and visual aspects of the Environment.

Auditory:

- Wind sounds
- Melodic String music in the background (slow tempo)
- Low amounts of Non-diegetic sound.

Visual:

- Low complexity of models.
- Simple pastel colour palette.

Art Style

Generally speaking, I would Like to follow the Breath Of The Wild Artstyle, and combine it with the style of Mario Kart 8 Deluxe. In Doing so I think I can reach a reasonable balance for the scope of time and also the technical limitations of the headset.

This means using flat tones, and simple shading in textures, but it also means keeping the general complexity of models low. This complexity will also work well for making the valence positive and the arousal low.

Art Style - Colours*

 #e9ffec  #99cec1  #6aeefa

 #b9ef79  #b3d6b2  #6c9560  #5c5a05

 #fdfd9c  #baa285  #96965c #6D5F4E

C6C6C6

**These colours are not final there would likely be many more, but these should set the basis.*

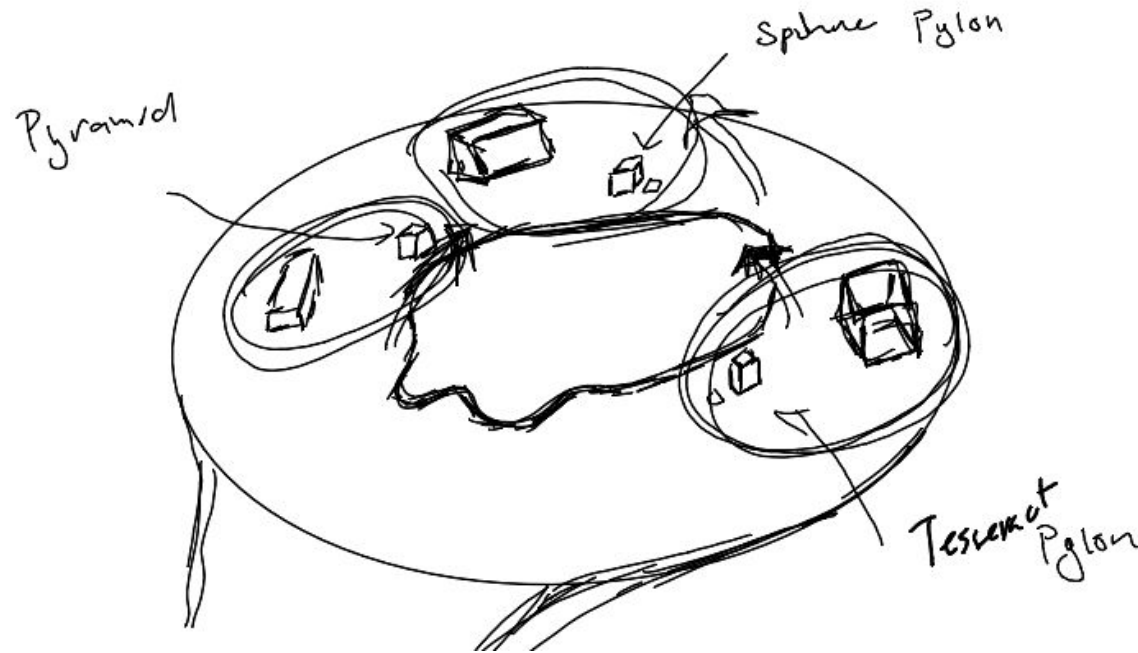
**The colours were taken from the reference images.*

Narrative

You've stumbled upon a mysterious oasis, You are a researcher, tasked with finding the long lost amulet of Arrajhom.

*the player will see UI when picking up the different items which will show the characters thoughts (generally leading the player to search the vicinity).

Layout 2D Concept



Interactions

As shown in page 13, the player will have to solve three sets of interactions (Tesseract, Sphere, and Pyramid), that will have their own subset of interactions to ascertain the amulet.

The Primary interaction is to put all of these three on their respective pylons.

Tesseract - Representing Time.

- Finding the time tesseract will be done through an interaction with two different sundials, one will be outside showing the current time, the other will be inside with a model of the sun, the player can then move the dial to change the cast of the shadow so that it matches the current time, this will then trigger a box to open where the player will find the tesseract.

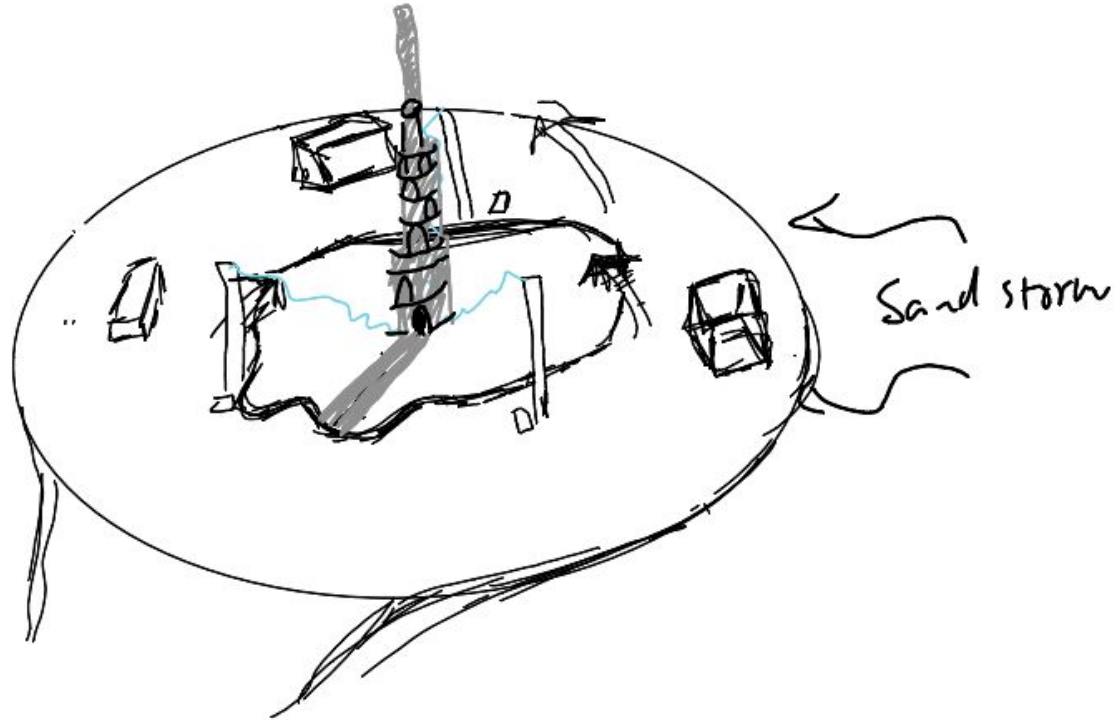
Sphere - Representing the Moon.

- The sphere will be found by assembling a bunch of shards of a 3d image of the moon on to a wall, which will again trigger a hatch giving the player the sphere.

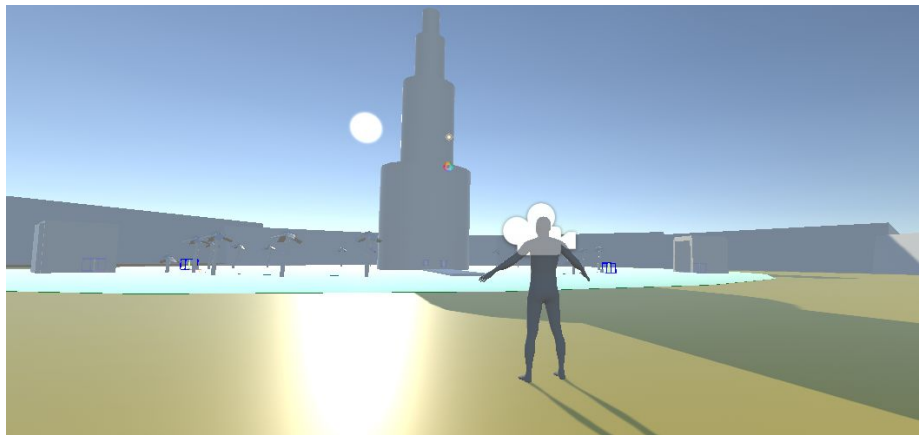
Pyramid - Representing the stars.

- The pyramid will be found by aligning 5 pillars into a star pattern where after, the center of the star pattern will have a pedestal come up with the pyramid.

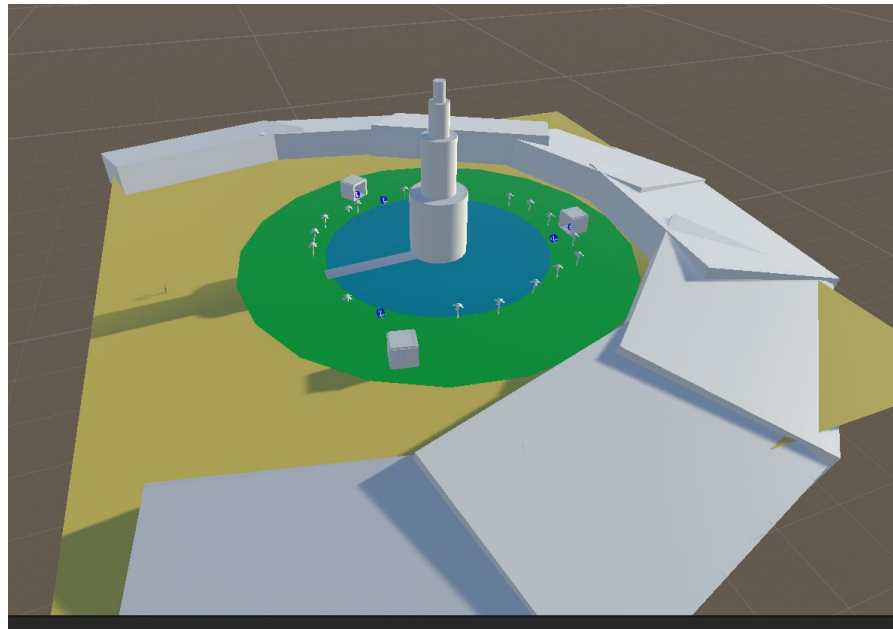
Layout 2D Concept Post Pylon Solve



Final 3D blackout



**man for scale [Taken from A1 proj]*

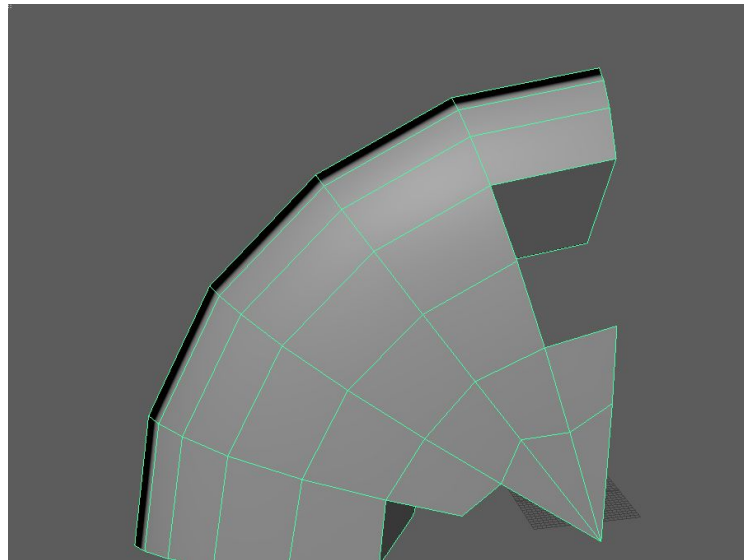


Making the moon puzzle

Making the moon puzzle was a little complicated especially the modelling aspects as I had to remake the model about 4 or 5 times due to the non-manifold geometry caused by the way I did my extrudes.

Eventually I figured out that I can use the UV mapping to figure out how to split up the moon pieces.

I made a total of 5 pieces and textured them using substance. I then imported this to unity to make the final 5 pieces.



Making the moon puzzle cont.

In Unity I made the material then gave it to the moon pieces where after I created the moon puzzle using the sockets method.

Making the Tesseract better

Similarly I made the tesseract model in maya and wasn't perfect on the way this puzzle would work . After some deliberation, with the understanding that the tesseract represents the concept of time. I decided to literalise it and made it so that the world's light would follow the tesseract. In doing so I also attached a hinge to it so that when you would reach the respective time you trigger an event that enables the lever.

By pulling the lever the player adds to an int counter that when reaching two will surace the spire.

The spire

The spire has two modes. The first mode is when the player pushes both levers. The player then teleports onto the top of the spire where it then Triggers a animation timeline and makes the player a child so that the spire can move them up. I figured this out by looking at the `C#` code in this [forum](#).

Particles

The torch particles and sandstorm particles use the default sprites.

I simply changed some of the aspects between them two to act differently.

I used both of them to ensight that change of mood from relaxed to chaotic

Audio

I tried to find audio that would suit the environment well, and I transitioned between a calm tune to a hectic one. I also included many audio cues to help the player understand that they are progressing the game.

Assets

Unfortunately due to my mental health circumstances I wasn't really able to create the assets that were required for the project, but I made the most I can and tried my best.

Video

<https://youtu.be/7pBigqI4FvE>



References

References to all images have been linked into the images' texts.

Player Parenting solution:

<https://discussions.unity.com/t/making-a-child-parent-based-moving-platform/196268/2>

Audio :

Success_low.wav by grunz -- <https://freesound.org/s/109663/> -- License: Attribution 3.0

Ambient Wind 2 (White Noise).wav by columbia23 -- <https://freesound.org/s/395684/> -- License: Creative Commons 0

Remnant by JoBot___ -- <https://freesound.org/s/795756/> -- License: Creative Commons 0

Metal Door Squeaking 25 (Very Long) by MathewHenry -- <https://freesound.org/s/700696/> -- License: Creative Commons 0

Remnants.ogg by JoBot___ -- <https://freesound.org/s/608948/> -- License: Creative Commons 0

Footsteps gravel desertwind.WAV by ikbenraar -- <https://freesound.org/s/133487/> -- License: Creative Commons 0

Decline (Loop) by Andrewkwn -- <https://freesound.org/s/476772/> -- License: Creative Commons 0

FX - Earthquake by bolkmarr -- <https://freesound.org/s/529244/> -- License: Creative Commons 0

<https://discussions.unity.com/t/making-a-child-parent-based-moving-platform/196268/3>

Jazz Background Music Loop by Migfus20 -- <https://freesound.org/s/559850/> -- License: Attribution 4.0

Suspensify by Dave_Girtsman -- <https://freesound.org/s/399060/> -- License: Attribution 4.0

Castle Door Opening and Closing by Cpfcfan10 -- <https://freesound.org/s/787809/> -- License: Attribution 4.0

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Kumar One - <https://fonts.google.com/specimen/Kumar+One>