

**Interface Design**  
**Assignment 1 – Report**  
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# Game Creation

## Level Design

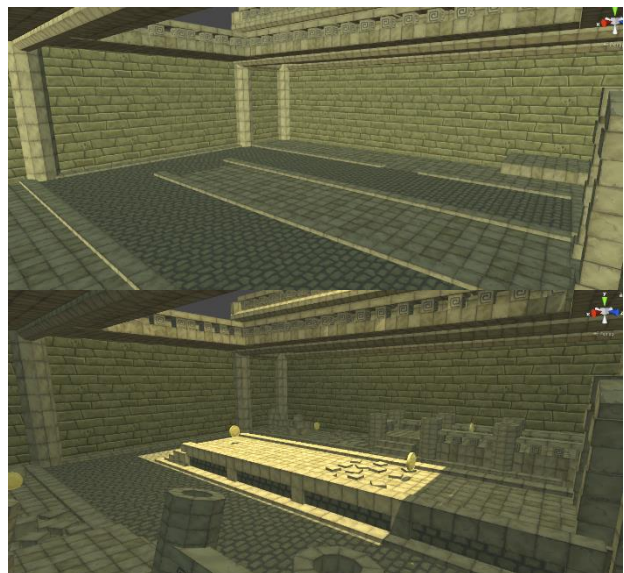
Upon browsing the Unity asset store and testing some of the asset packs I discovered a pack named “**Cartoon Temple Building Kit**” and decided to create my level around this package. Using my general knowledge about stereotypical temple designs as well as being inspired by the assets themselves, I began creating my level.

I knew from early design ideas I wanted to have a grand front area before the temple with multiple layers. I started by adding the planned paths in first, added stairs to connect them and added grass to clear the gaps.



The front of the temple was a mix of spontaneous ideas. If I had referenced other known temples I may have been able to have designed this more elegantly but I enjoyed letting my creativity with the available blocks take centre stage on designing the temple.

After working on the front I made the sides and back with simple copy-pasting. I knew the player wouldn't be able to see that far around the temple to worry about putting in a lot of detail. I then looked into decorating the insides of the temple, adding hand-made golden coin collectables and platforms to give the room some detail and life. The pack was quite limiting on centre pieces and if I were to improve this area in the future I would try and add some large objects of importance into the design.





Finally I decorated the outside with stray blocks and plants and added named locations for the player to explore.

With collectables in and dotted around the map I needed some kind of map border to stop the players leaving the designated play area. A barrier of trees I took from “[Low-Poly Park](#)” Suited the theme nicely and acted as a good decoration.



## Bugs

In the current build of my game I have a few known bugs:

### Clicking a collectable.

When the player clicks on a collectable, the character will run to the collectable but will not trigger that it needs to stop moving. This causes the player swings to a 90 degree angle and be stuck in the running animation until the player clicks again (on something that isn't a collectable). This will reset the location and the player and play will return to normal.

I am currently unsure what causes this bug, or any way to fix it. My initial suspicion is to do with the rotation of the collectable, however this is just a guess with no proper testing.

### Leaving the map.

To stop the player leaving the map I have created cubed I've named NavMeshBlockers, which act as a barrier to stop the navigation mesh connecting to the outer areas of the map. This does stop the player, however the player remains stuck in the running animation loop until the player clicks again within the map boundaries.

I could fix this by segmenting the outer area into two separate blocks instead of 1 long block and make the outer block be ignored by the navigation mesh

### Player turning upon walking long distances with corners.

In the map there are raised, elevated parts at which the player can explore, however the player can get the character to walk up and down these areas with a single click. This causes the player to state at the point clicked while it moves to the intended location.

A potential fix to this could be forcing the player to always face the way it is moving, which is something I will need to research and learn to be able to fix this problem.

## UI

I decided to keep with the simplistic theming my level and its design has when making my UI. Making a hyper-detailed UI wouldn't suit the theme and wouldn't suit the game. I started by opening the source files of the temple and finding the textures, as I know I could use these as a colour pallet. After taking 4 colours from key parts of the tile I made the UI according to the spec.



I knew I wanted to keep it minimalist and symmetrical, just like the map I had created and decided that the top centre would be a good location to design my UI around. I kept with the temple bricks theme, sticking with straight lines with layering colours to create a brick-like effect like the asset pack used. Using the spec as a guide I cut it up into 5 main blocks:

- Steps (Top Left)
- Health (Bottom left)
- Location With a drop-down Menu (Bottom Right)
- Collectables (Top Right)
- Points (Centre)

I wanted to keep the player in-game for as many of the menus as possible. Having the screen block for UI displaying something so simple seemed counterproductive and bad design.

Because of the point-and-click style gameplay, I came to my consideration while designing that the UI will cover up areas where the player may want to move to. Keeping the In-game UI to the sides of the screen and the game ending/starting in the centre not only improved quality of life of gameplay, but also in displaying how important each UI was to the players progression.

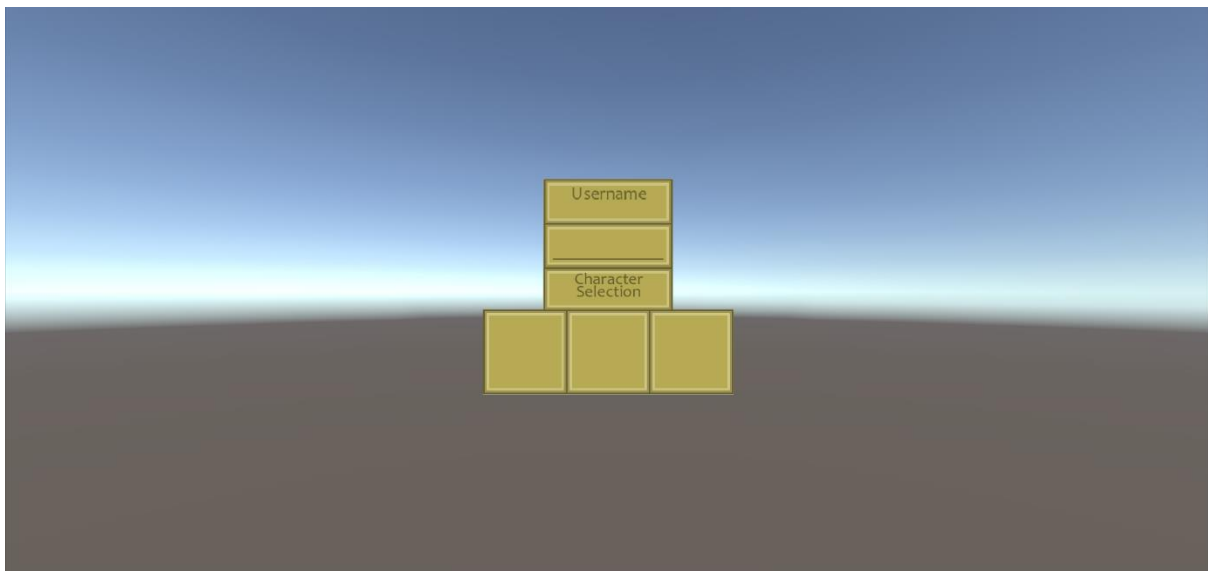


## Problems

I wanted to add an animated spinning coin onto the UI collectable like the ones in the level but lacked the knowledge of how to create this.

Something I had forgot to take into consideration was the in-game lighting changing how the bricks would appear in-game in comparison to their texture, making the UI appear to be a different shade compared to its surrounding objects.

Finally, when converting my bit-map design into vector, I lost a lot of detail due to being unexperienced in using vector-based software, and not allocating enough time into researching how to use it.





## References

A3D, 2018. *Cartoon Temple Building Kit Lite* [online]. Unity Asset Store: Unity. Available from: <https://assetstore.unity.com/packages/3d/environments/dungeons/cartoon-temple-building-kit-110397>

Thunderent, 2018. *Low Poly Park* [online]. Unity Asset Store: Unity. Available from: <https://assetstore.unity.com/packages/3d/environments/urban/low-poly-park-61922>