ANALYSIS

> 📄 I used the **Unity** game engine (version: `2022.3.22f1`) for this assignment.

> 📄 Diagrams used for this analysis can be found in the documents folder in the repo, named as: `Diagrams.png`

Overview

For this assignment I referenced some main menus, some gameobjects from different games to create a game with a main menu that's animated and a simple cutscene to go with it.

References

Menus

Menus	Reference Videos
Minecraft	https://youtu.be/VBSzQxnk6vY
Doom Eternal	https://youtu.be/2EBm-MwJ5MQ
Animal Crossing	https://youtu.be/ENLsTh1OhOw

> 📄 All the reference videos were recorded by me and posted on my channel.

Characters

- Tommy Vercetti the protagonist from GTA Vice City

- [1]
- Link from The Legend of Zelda: Breath of the Wild

- [2]

Dynamic Objects

- Moblin from The Legend of Zelda: Breath of the Wild

[3]

- [Bokoblin](#) from The Legend of Zelda: Breath of the Wild

[4]

Static Objects

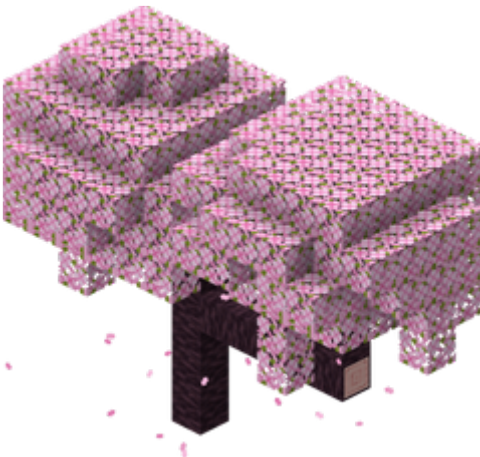- [Wooden Crate](#) from The Legend of Zelda: Breath of the Wild

[5]

- Boulder from The Legend of Zelda: Breath of the Wild

[6]

Environment

- Cherry leaves particles from Minecraft

[7]

- Firefly from Minecraft (was never put in the game, but it was announced)

- [8]

Analysis

Menus

> 🗒 **Video URLs for the analysis had been linked above in the reference section for all the menus that we will be talking about**

Minecraft
Has a scrolling background while the splash text in yellow scales smaller and bigger showing a random message.

DooM Eternal
The player character is displayed on the right side of the main menu doing repeated idle animation while the podium he stands on has two torches attached to it which produces fire particles. When switching from menu to menu, the camera moves to the left side to show the new menu.

Animal Crossing
As the game boots up, you are sent into the title screen which is also the main menu. The games camera follows around a random citizen in your island while the "Press A" text does a wave animation.

Characters

Tommy Vercetti
He is a character with a medium build-athletic build. Tommy's walking and running animations are relatively stiff compared to modern standards. If you try to attack while walking, his upper body's animation gets overwritten by the melee animation.

Animation can be found in the repos' documentation folder, named as `Tommy Vercetti.gif`.

Link

His animation is more refined and it gives the player character a more lively feel. Links character model uses a lot of IK for animations. Such as pushing boulders/crates or climbing up walls, his hand position or leg positions are not hand placed but done on the fly.

> 🖼 **The GIF for this was taken from:** https://youtu.be/hRD1EstmSPs?t=97

Animation can be found in the repos' documentation folder, named as `Link.gif`

Dynamic Objects

Moblin

Its animation is more menacing. This enemy in the game, reacts to the player, and runs at them and attacks them. This game-objects animation makes use of keyframe animations rather than IK. When defeated, its model ragdolls.

Animation can be found in the repos' documentation folder, named as `Moblin.gif`

Bokoblin

This enemy in the game, reacts to the player, and runs at them and attacks them. This enemy's animation makes use of keyframe animations rather than IK. When defeated, its model ragdolls. (*This sounds similar to a Moblin? That's because it is!*)

Animation can be found in the repos' documentation folder, named as `Bokoblin.gif`

Static Object

Wooden crate and boulder

They both can be pushed by the player. At first, their movement is slow but they speed up the more the player pushes them. They are also affected by gravity. They give off particle effects when colliding or sliding against something.

> 🖼 **The GIF for this was taken from** https://youtu.be/OU_OqIjNlkA?t=38

Animation can be found in the repos' documentation folder, named as `Link pushing crate.gif` and `Link pushing boulder.gif`

Environment

Cherry leaves particles

Falls down from the tree slowly and moves in the direction of the wind and gravity.

Animation can be found in the repos' documentation folder, named as `Cherry leaves particles.gif`

Moves around randomly at night and usually in clusters and rarely as an individual

> 📄 **The GIF for firefly was taken from** https://minecraft.wiki/w/Firefly

Animation can be found in the repos' documentation folder, named as `Firefly.gif`

Implementation

> 📄 **The build for this project has also been uploaded to:** https://github.com/sid-the-loser/Animation-and-AI-Final-Project-Stage-2/releases

Story

The story is set in a fantasy world were a knight (the player) is fighting against evil creatures to defend his land.

Cutscene

The knight pushes a wooden crate over the ledge and the crate lands on top of a beast and defeats it.

Main Menu

The main menu will consist of two buttons, one to play and one to quit. Each button will have a "pressed" animation. Below the title there will be subtext that scales up and down to show some sort of text (*Like "Cutscene Edition"*).

Extra functionality

The cutscenes have a replay option and it will also have a button to go back to the main menu.

Extra challenge!

To make things more challenging for me, I will try my best to make the cutscene as automated as possible. Instead of dealing with timelines, I will try making most of the cutscene in code. This could make the cutscene play a little different for every player.

What changed since Stage 1?

In the stage 1 of the assignment I did not submit the Blender prototype or the Unity project and to make things worse, even though I had submitted the documentation (analysis.pdf), it did not have adequate analysis. This was caused due to my poor time management, but I've managed to add all of that and do a proper job at doing it!

This time, I've added:

- A polished Blender prototype
- A polished Unity project with both a menu and a cutscene
- A well written analysis with diagrams
- Story boarding

Assets by the others

3D Models

Player and **Enemy** taken from https://www.mixamo.com/

Knight D Pelegrini

Drake

Textures

- **Crate** by Joao Paulo (https://3dtextures.me/2020/09/18/stylized-crate-001/)
- **Level** textures by Kenney (https://www.kenney.nl/assets/prototype-textures)
- **UI** by Kenney (https://www.kenney.nl/assets/ui-pack-rpg-expansion)

Animations

- **Breathing Idle**, **Male Action Pose** (*pushing*) and **Walking** were taken from https://www.mixamo.com/

Sound Effects

- **Hurt** sound generated from https://sfxr.me/
  - To get the exact sound I created: https://sfxr.me/#34T6PktrwZxCp5hA1UbsM8tokeuiUtbRywxaVfNSbgp3mye MYSugwAbiwdCnunVK7DNSQmCVw2gVCMzWfLEue8homiNYaXw8ZWNjgC F4M3LKfmFiq9ejTaXiw

Skybox

- Fantasy Skybox FREE by Render King (https://assetstore.unity.com/packages/2d/textures-materials/sky/fantasy-skybox-free-18353)

Images from external sources

1. Image taken from https://en.wikipedia.org/wiki/Tommy_Vercetti ↵
2. Image taken from https://en.wikipedia.org/wiki/Link_(The_Legend_of_Zelda) ↵
3. Image taken from https://www.ign.com/wikis/the-legend-of-zelda-breath-of-the-wild/Moblin ↵
4. Image taken from https://www.ign.com/wikis/the-legend-of-zelda-breath-of-the-wild/Bokoblin ↵
5. Image taken from https://zeldawiki.wiki/wiki/Wooden_Box ↵
6. Image taken from https://zeldawiki.wiki/wiki/Boulder ↵
7. Image taken from https://minecraft.wiki/w/Cherry ↵
8. Image taken from https://minecraft.wiki/w/Firefly ↵