

Final Video Game Project

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1 Original Idea

My first idea was to create a VR shooter game, at the beginning it was going very well as I managed to develop a complete player movement full with jumping, sprinting, moving up on slopes, crouch and slide. Then I replaced the basic map I created with pro builder with an American city I've bought some time ago from the unity asset store.

I tried to implement a grappling gun mechanic which worked perfectly and then a normal gun, after doing this I didn't quite like, therefore I wanted to implement arms that would follow your arm, also this was done pretty quickly, it was quite challenging when it came to shooting and holding the weapon and matching perfectly with the animations.

Here is also where some problems started to come up, in order to have a nice animations with a weapon you needed to have inverse kinematic which was a really big problem for me since my entire player was based on rigid body.

Since the project was due 1 month I didn't know if I could manage to finish it on time, therefore I decided to start working on something new.

2 Second Idea

For my second idea game I wanted to develop new skills, I remembered that some years ago I got a Nintendo 3DS XL, after learning unity I decided to create a game for it and requested a Nintendo developer, I took some months but as I got accepted I totally forgot about.

However as second idea I wanted to recreate a game that was made with the unity engine and the first thing that came in my mind was Among US. Of course I want recreate the entire game with the 4 maps and the multiplayer but only a single player version with The Skeld as only map

3 Assets

After looking at how many assets there are there was no way I could do them by my one so I searched some up on the internet without any success though.

My only option was to take the Among Us folder with all the files and extract the assets from thanks to a tool I found some time ago on GitHub.

[Here](#) is the repository link to download the tool.

4 Game Development

Before even starting to develop this game I had to use a scuffed version of unity 5 which is from 2015 and completely outdated and on top of that all the assets that I copied from the real among us where from unity v2021 and as I mentioned before there is now actual way to convert them, therefore I had to do that manually.

To over complicate everything was the Nintendo 3DS hardware as it has only 6 MB of VRAM and 256 MB of RAM, for example I had scale down every sprite with a maximum of 512 pixel and I couldn't leave parts of the map active if they are not rendered to the screen as I would get a memory leak.

Of course just does two things weren't enough in fact there was another problem, Nintendo removed the unity support for their old consoles, this means that I wasn't a verified developer anymore and couldn't test my game without a work around which was jail breaking my 3DS. [God mode 9](#) was what I used in order to do that.

The entire game was create by self except for the AI path finding where, since I didn't know how to get started, I followed [this](#) tutorial from Sebastian Lague which helped my out a ton.

I designed the game so that every script could be reusable and not specific to a single task for example every task will have a script "GameTask" which will contain the name of the task, how many points you get when you complete. Also the animations are and the crew mate / impostor are shared between the player and the AIs.

Creating this scripts was very time consuming at the beginning but I knew that was necessary if I wanted to build a large game, because when you start writing and writing so much code you will many files and many components on your game objects what you actually don't really want since your project must be scalable.

5 Game play

The game play is almost identical to the normal game but with less task and instead of multiplayer you are playing with AI, the game comes to an end when all the task are completed or you have been killed or you successfully killed all the players.

I'll leave here the game play video so that it is more understandable.

6 Installation

In order to test this game you will need to jailbreak your Nintendo 3DS (both the old and the new one are fine as well as the Nintendo 2DS even if I haven't test it) then with holding the START + POWER button so that you enter in the god mode then make sure to have on your SD card the .cci file that you can install from my GitHub repository [here](#) and navigate to it from clicking on SD card then select the file press A twice and go to install game image.

After those steps are completed you are ready to go and can play the best version of Among Us ever made: Among Us Nintendo 3DS Edition.