Project Report

# Group IDs

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# Gameplay Instructions

Our gameplay is intuitive to today’s standards so the button combinations are nice and easy.

W – Walk Forward

S – Walk Back

A – Strafe Left

D – Strafe Right

Mouse move left: Turn left

Mouse move right: Turn right

The player will have to collect the collectable squares around the map by walking into them causing collision, not only the boxes but walking into the walls will cause collision to keep the player locked inside of the level area. To allow the players to know their score we have boxes appear along the bottom of the screen for every object they pick up.

When the player spawns in there is a label that indicates their instructions on what to do for example it states “collect the boxes!”.

# Development Issues faced

We had a lot of issues making the game object orientated. First off we had issues creating a new MD2 model class to use for the player. We managed to have the mesh loaded and rendered with no issues. However when we tried to run the animation code, the vert data was somehow becoming unreadable which caused the program to break. After spending a lot of time on it and seeking help around it, we sadly could not fix this and had to change it to main.cpp coded.

Another issue is that when we created a static mesh class. In the original version of the class we were loading in the mesh for every object, but since we were using the same mesh for a lot of the terrain, it didn’t make much sense to keep loading in the same data repeatably. So we added a new constructor that would pass in an existing mesh and texture. Unfortunately when the class would attempt to render mesh that was loaded in main.cpp, nothing was being rendered at all. We spent a lot of time trying to figure out the issue, but we had already lost a considerable amount of time trouble shooting the issue with the MD2 model class we had before. Sadly, with this we had to create the meshes in main.cpp but the class now only holds the data for the meshes, such as positions rotations scales and textures used for each model.

# Credits

Base project (HUD label example no leakage) provided by Dr. Pablo Casaseca.

Bass sound library: <http://www.un4seen.com/>

SDL2 library <https://www.libsdl.org/credits.php>

OpenGL <https://www.opengl.org/wiki/Main_Page>

Dr Pablo Casaseca Lab files and code: [pablo.casaseca@uws.ac.uk](mailto:pablo.casaseca@uws.ac.uk)

Wooden Box texture : [Alekei on opengameart.org](http://opengameart.org/content/box-2)

Audio track: [Improbable Cadence on opengamert.org](http://opengameart.org/content/the-forgotten-age)

Building Texture: [textures.com](http://www.textures.com/download/buildingsderelict0094/82472)

Metal fence texture: [textures.com](http://www.textures.com/download/metalbare0171/98230?q=MetalBare0171_1_S&filter=all)

Barrel texture: truzipp on [opengameart.org](http://opengameart.org/content/pixel-barrel)