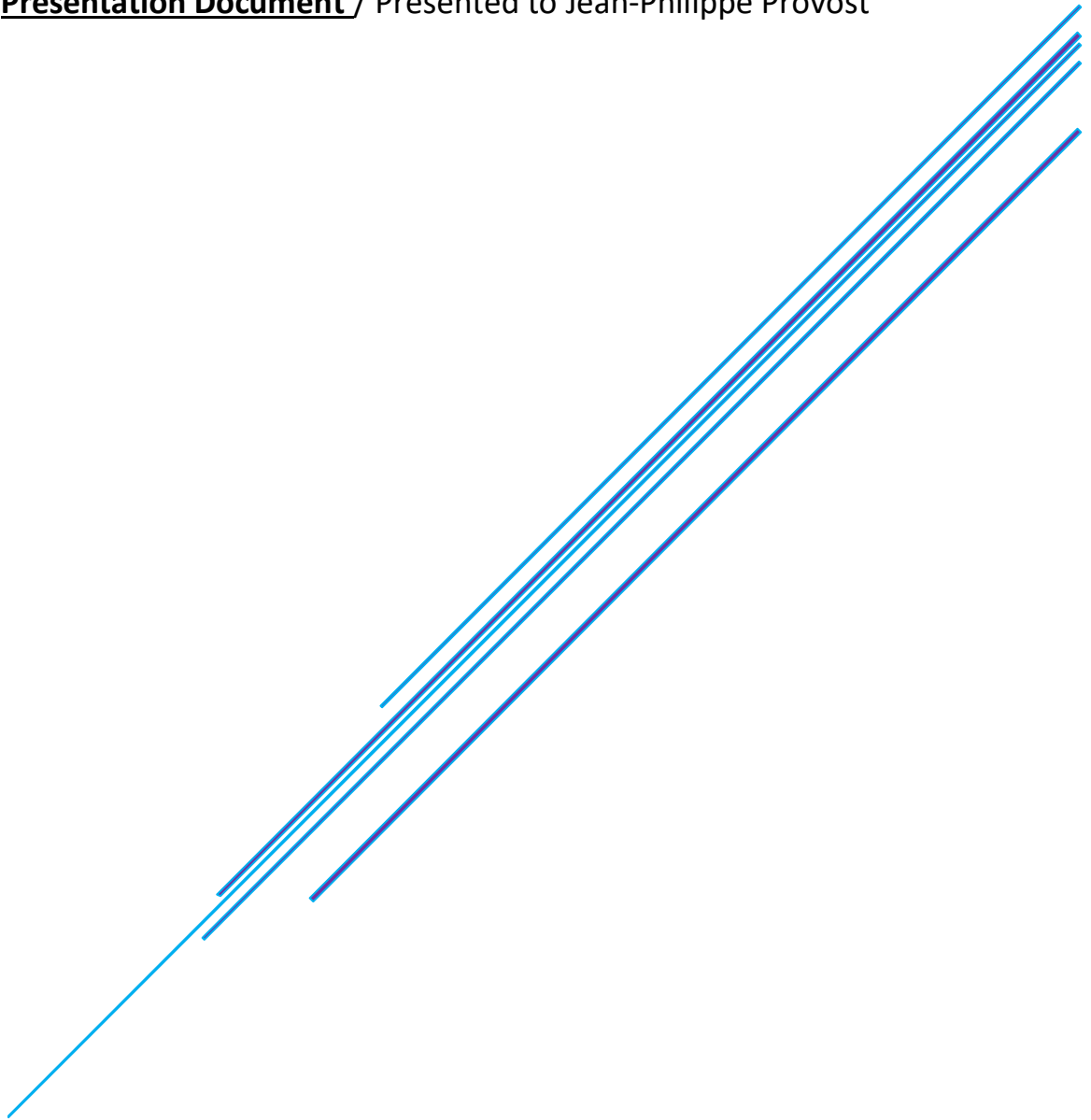


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GAME ENGINE II

420-JV9-AS sect.

Presentation Document / Presented to Jean-Philippe Provost



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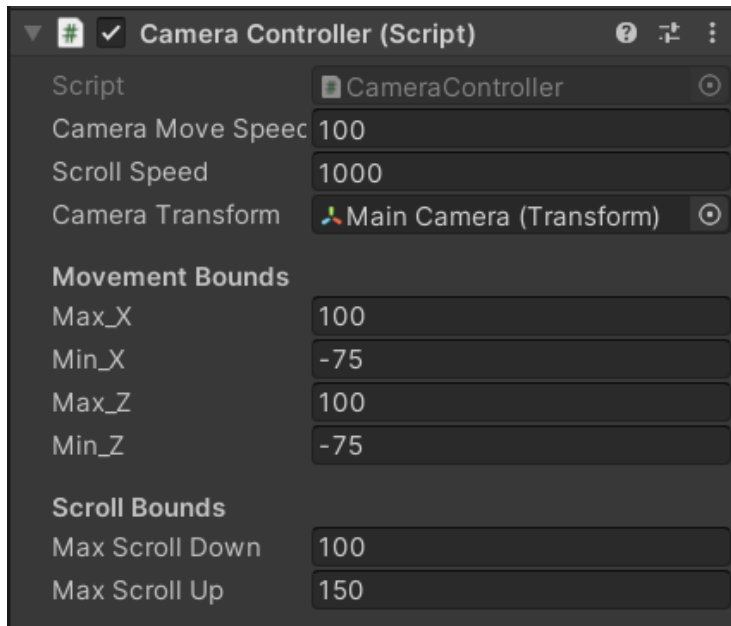
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Isometric camera in 3D space



The camera rig and the main camera are in 45 degrees angle and with a very small FOV to create an illusion of the isometric 2d camera with 3d depth.

Camera controls



The movement of the camera is done on the CameraRig.

The scroll of the camera is done on the MainCamera.

The camera controller makes sure the camera will always stay in bounds of the level/scene based on the minimum and maximum values entered in the script from the editor.

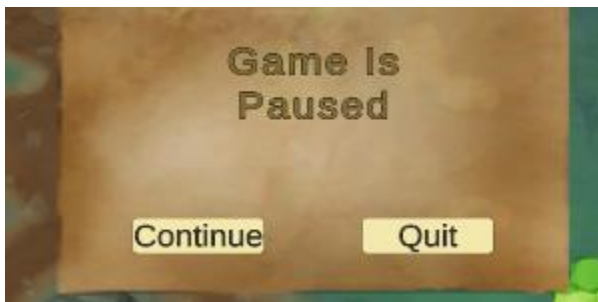
Game Managers

This game object holds all the important handlers and managers of the game:

- Selector – Reads the mouse position and checks if it hovers over objects that are “Selectable” (Empty bases, Towers) and triggers their UI’s



- WinLoss Handler – main logic handler for the game loop and its conditions and displays appropriate win/loss UI panels.
- PauseHandler – Handles the input for the pause game and the resume game after pause. Displays appropriate UI panels.



- Economy Handler – A singleton objects that controls the flow of money the player has.
- Scene Handler – Changes the scene based on the Win/Loss condition

Enemies

- Vampire – The vampire is a physical resistant unit. He can regenerate its HP when he is injured.



- Aqua Lizard – A magical resistant type of unit. It is a basic unit, and he is a bit faster than the vampire.



- Final Boss – He resists damage in general.



Towers

Archer Tower – the archer tower hold base to the archers, units that deal physical type of damage.



Crystal Tower – The crystal tower inflicts magic damage to a single enemy on sight.

Mage Tower – the mage tower holds base to a peaceful mage that only slows the enemies down.



Gold Tower- Generates gold every 10 seconds



USER MANUAL

PC Controls:

Movement: W, A, S, D

Build and Interact: Left Mouse Button

Menu/Pause: Escape Button

Mouse Wheel – zoom in and out

Sources and Imports

<https://www.youtube.com/watch?v=rnqF6S7PfFA&t=8s> - Camera

<https://www.youtube.com/watch?v=szsWx9IQVDI> - render object behind

<https://assetstore.unity.com/packages/2d/textures-materials/handpainted-grass-ground-textures-187634> - Terrain textures

<https://www.youtube.com/watch?v=ccqiNWsYJnI> - Face Camera UI

Arrows - <https://quaternius.com/packs/ultimaterpg.html>

Mage Tower - <https://www.kenney.nl/assets/pirate-kit>

SFX CrystalTower - <https://www.soundfishing.eu/sound/laser-gun>

Majority of the Sounds effects - <https://assetstore.unity.com/packages/audio/sound-fx/free-casual-game-sfx-pack-54116>