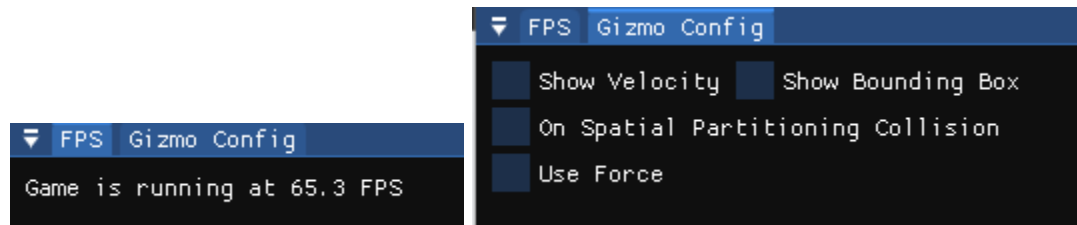


## Top-Left

Toggle between **FPS** & **GizmoConfig**



Gizmo Config includes:

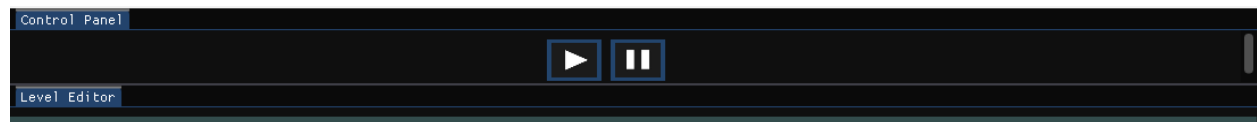
**Show Velocity:** Debugging arrow from the center of gameobject to show the direction of velocity.

**Show Bounding Box:** Red outline around the gameobject to show AABB collider

**On Spatial Partitioning Collision:** Spatial Partitioning is turned on by default.

**Use Force:** When unchecked, the movement of the controllable entity/player is updated by increasing velocity with a constant variable. Whereby once it is checked, the controllable entity/player is then updated through usage of force where acceleration and mass is taken into account.

## Play / Pause / Stop button



**Tip!!!** Do not spawn too many game objects before pressing the play button. The play button is using a “save” file at Asset/Lua/state.lua. When the user presses play the current scene will be saved to this file. Meaning every single gameobject will be slowly saved one by one into the state.lua file.

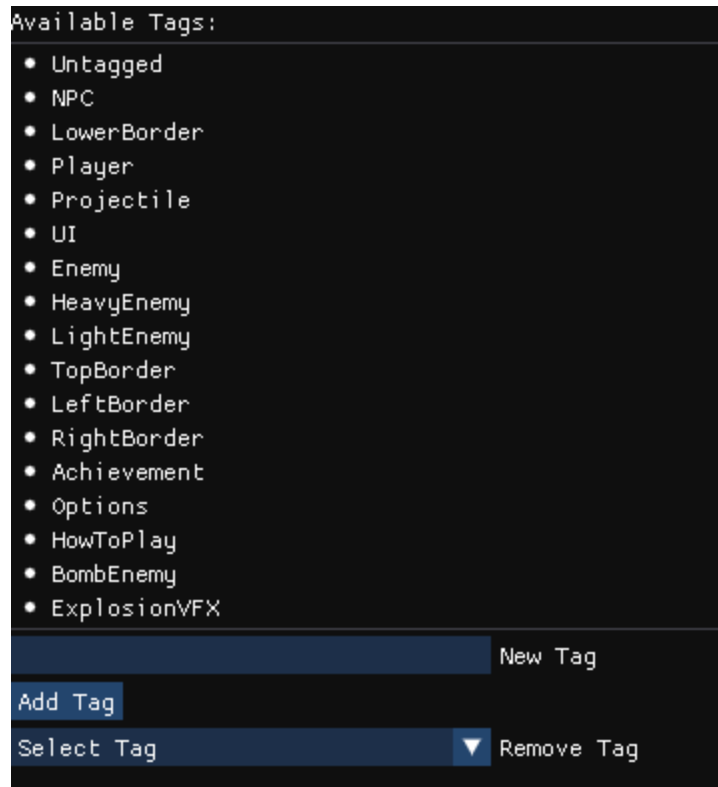
This state.lua is used again when the user presses the stop button to return back to the original state of the scene before playing.



**Play:** Start the game, a state will be saved such that stopping the game would reset the game objects back to their initial state.

**Pause:** Every component within the game would pause, audio would pause as well. Pressing this button after pause would resume the game.

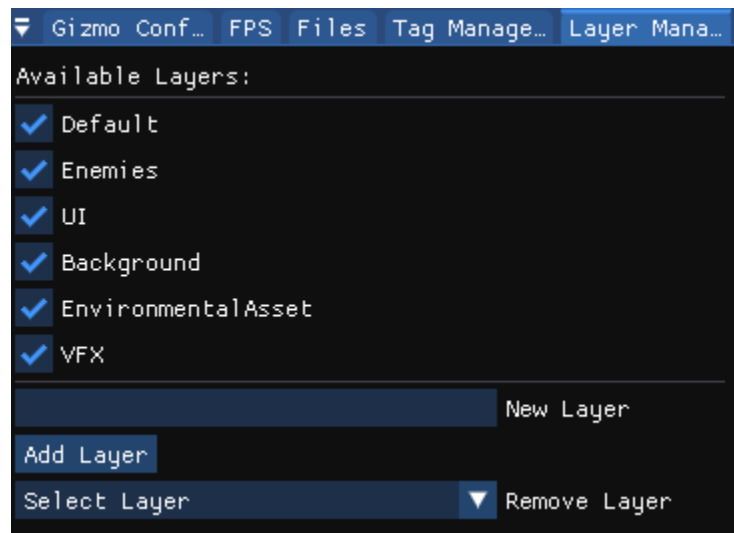
**Stop:** Stop the game, components of the game would stop updating and the values would return to their initial state before game start.



**TagManager:** Displays available tag in the system.

**New Tag:** Add new tag into the system.

**Remove Tag:** A drop down bar whereby the user could select an existing tag and remove it.



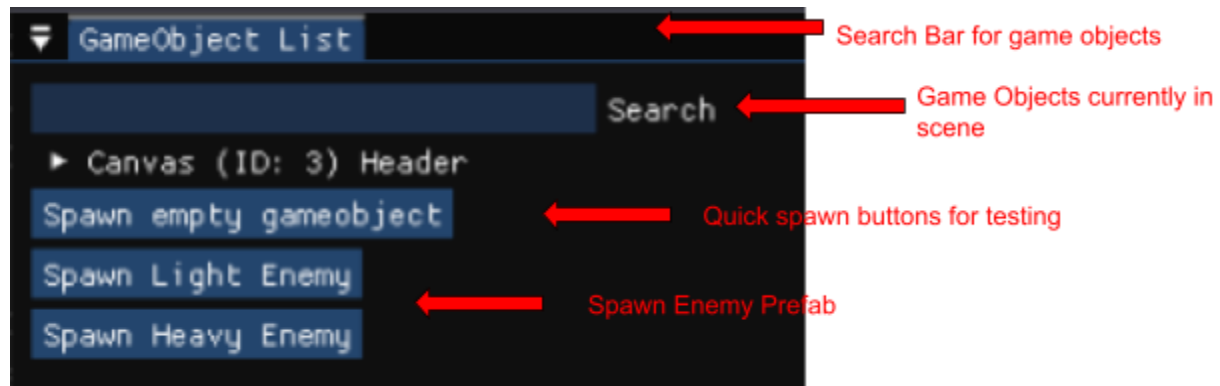
**LayerManager:** Displays available layer in the system.

- **Checkboxes:** User could disable/enable sprite rendering, physics and collision amongst of specific layer

**New Layer:** Add a new tag into the system.

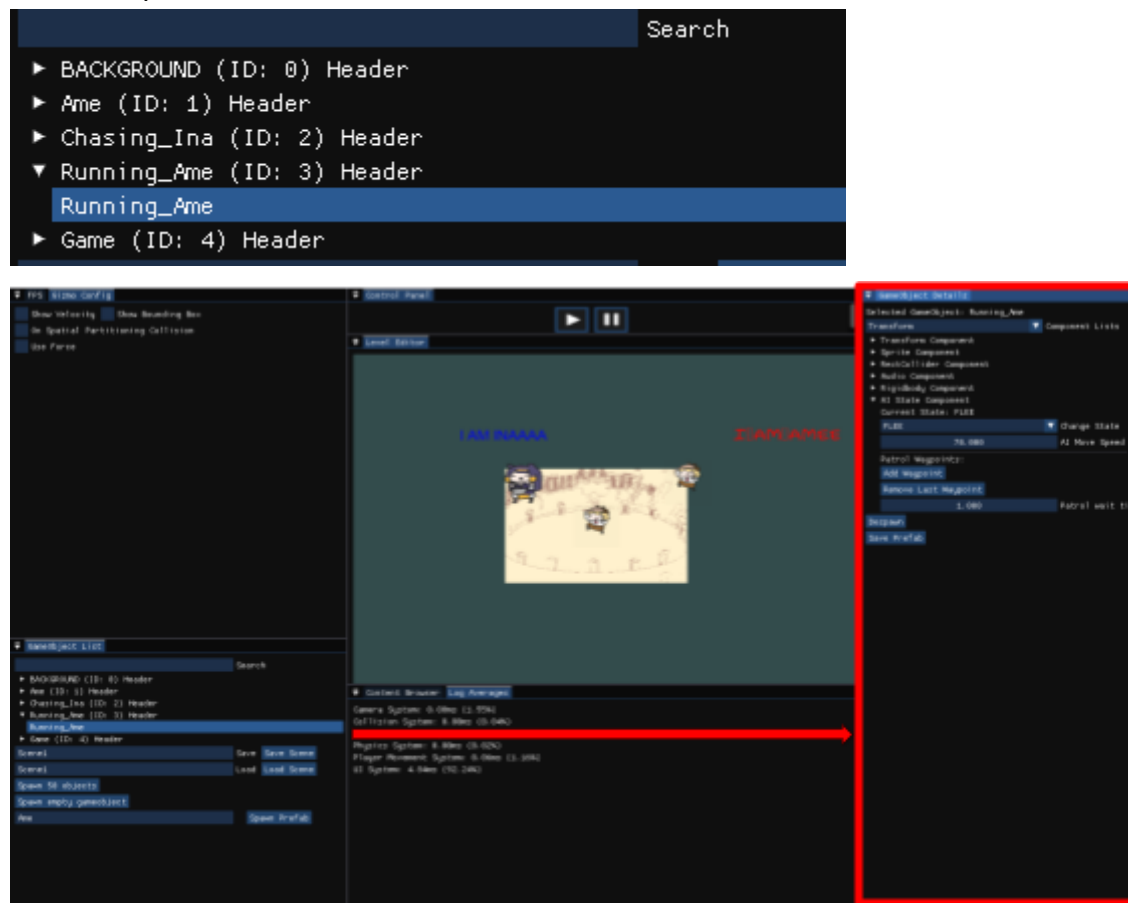
**Remove Layer:** A drop down bar whereby the user could select an existing tag and remove it.

## Bottom-Left



**Search Bar:** Can be used to filter out gameobjects for easier selection

**GameObject:** Click **once** to access a drop down button to show the actual game object, a new panel will appear on the right to access that gameobject's components. Able to adjust the values of the components here.



▼

GameObject Details

Animation Controller

▼ Parameters

Add Parameter

Parameter Name

INT

▼ Type

Confirm

Existing Parameters:

HeldEnemy

Remove

IsDamaged

Remove

ThrowEnemy

Remove

▼ States

Add New State

Moving

State Name

State: Moving

Texture:



Animation Settings

4.000

Frames X

1.000

Frames Y

4.000

Frames Total

1.000000

-

+

FPS

Reset Animation


Remove State

Held

State Name

State: Held

Texture:



Remove State

Throw

State Name

State: Throw

Texture:



Remove State

▼ Transitions

▼ From State

▼ To State

Transitions:

Scene1

Save

Save Controller

BombEnemy

▼ Load

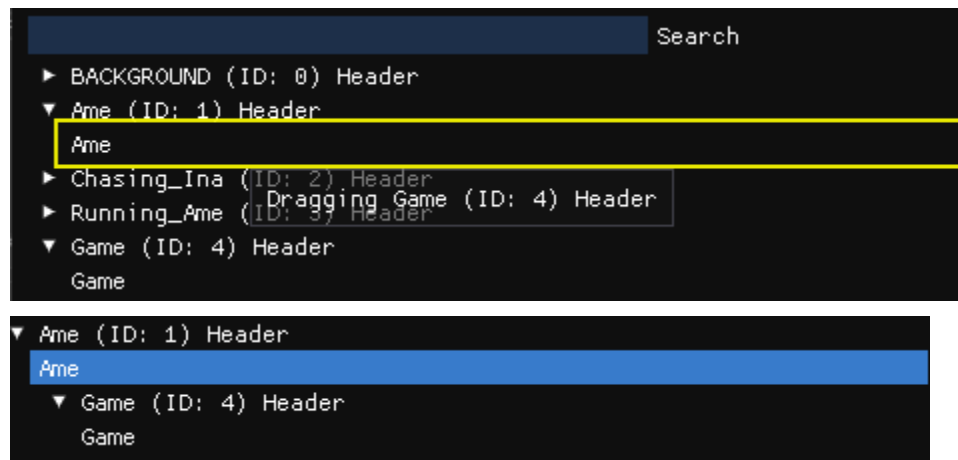
Load AnimationCo

### Animation Controller:

Users can easily add different states onto an entity and place expected texture/spritesheet change according to parameters given.

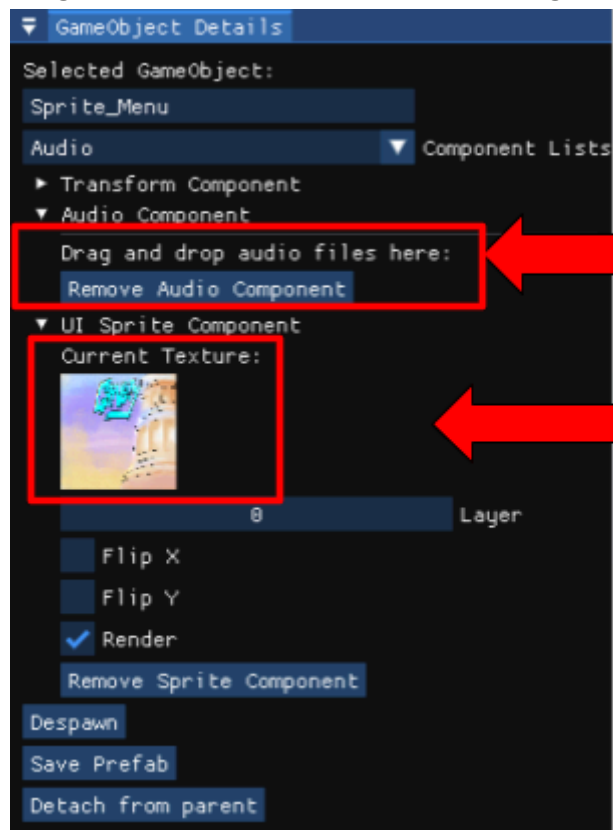
### GameObject (Parent & Child):

You could also drag a game object into another game object such that the dragged game object becomes the child of another game object.



(Child will be attached below)

### Drag and drop audio / texture onto the gameobject component



Drag audio from the content browser and drop it at the highlighted box

Drag textures from the content browser and drop it at the highlighted box



**Save and Load Scene buttons:** The text box is for users to specify which Lua file to save and load scene to.

Currently the scene files can be found at: **Assets/Lua/Scenes**

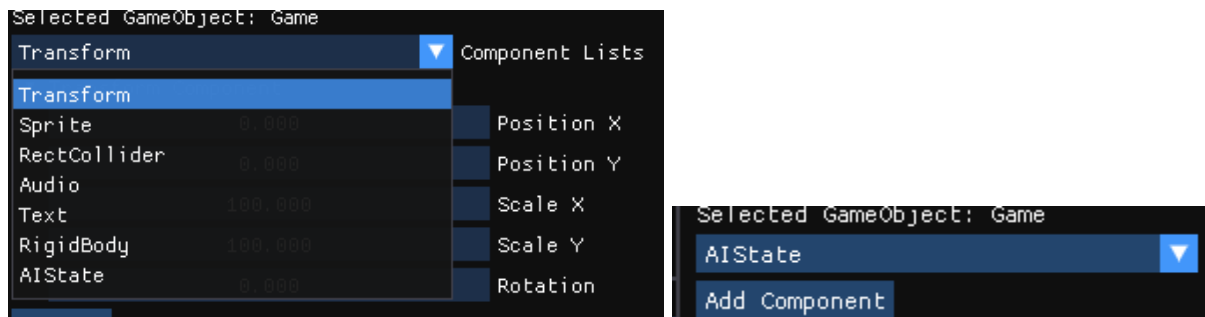
**TIP!!!** When saving if the file does not exist in **Assets/Lua/Scenes**, a new scene file will be created there.

### Quick Spawn Buttons

**Spawn Light Enemy:** Spawn light enemy from prefab

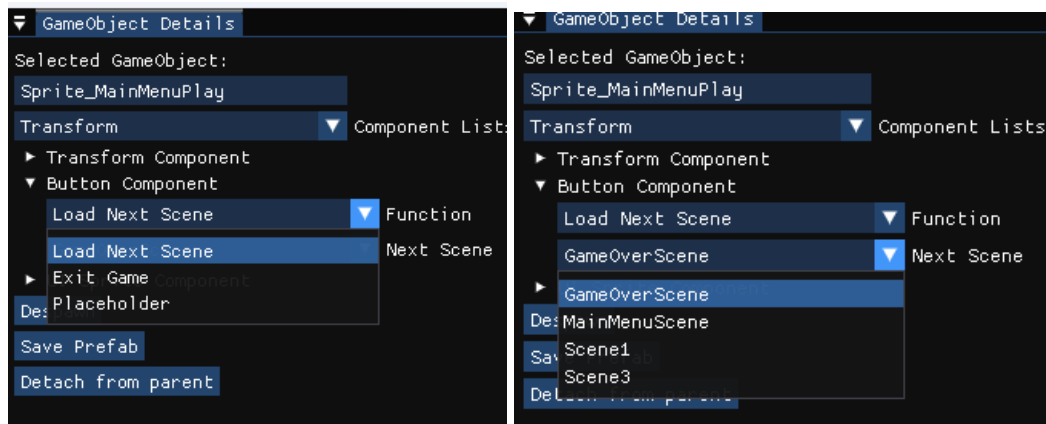
**Spawn Heavy Enemy:** Spawn heavy enemy from prefab

**Spawn Bomb Enemy:** Spawn bomb enemy from prefab



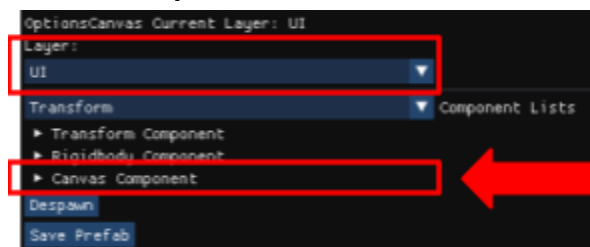
Adding components can be done by selecting this drop down button and selecting the specific component you want to add. An add component would appear if the game object does not have that component yet.

## ButtonComponent



If a ButtonComponent is added to a game object, Its function type parameter can be selected from a dropdown menu. If Load Next Scene is selected, then the next scene to load from the user clicking on the object can be selected from a dropdown menu. The Exit Game function type exits the game window. Placeholder does nothing when clicked or hovered on. Buttons are only rendered and updated when the game is paused.

## CanvasComponent



Ensure that "UI" layer is being assigned to the canvas game object to render out the UI

## Middle



Able to use the mouse to move the gameobjects' positions around the scene. Can only be done when the scene is paused.

The user is able to move the editor camera's position by using W, A, S, D or the mouse scroll button pressed and drag around.

## **Upon Selecting a Game Object**



It will display the current transformation mode with translate mode being the default and to change to rotate or scale mode he key in the following number.

Number 8: Translate Mode

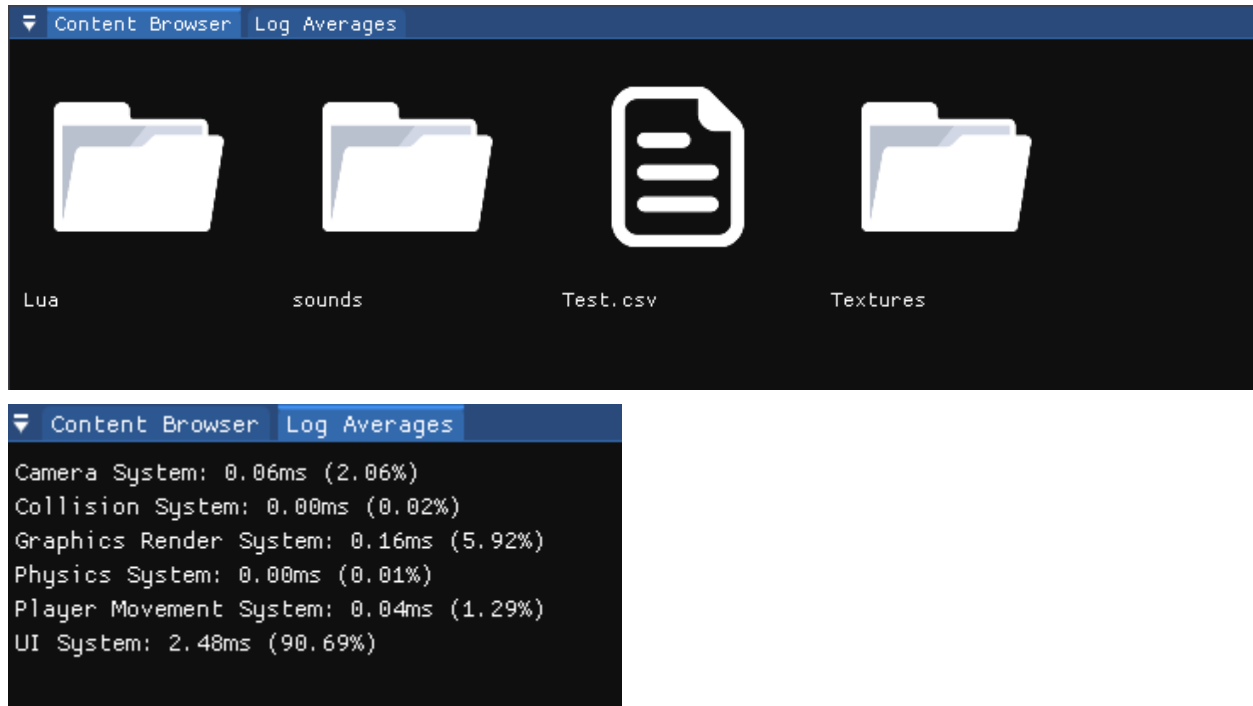
Number 9: Rotate Mode

Number 0: Scale Mode



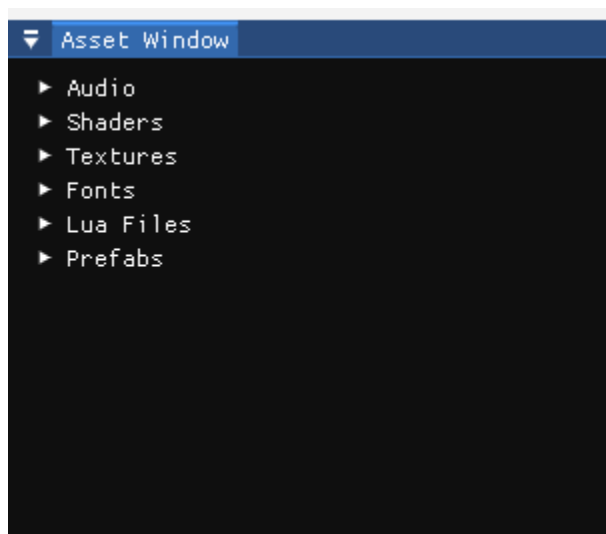
## Middle-Bottom

### Content Browser and Log Console

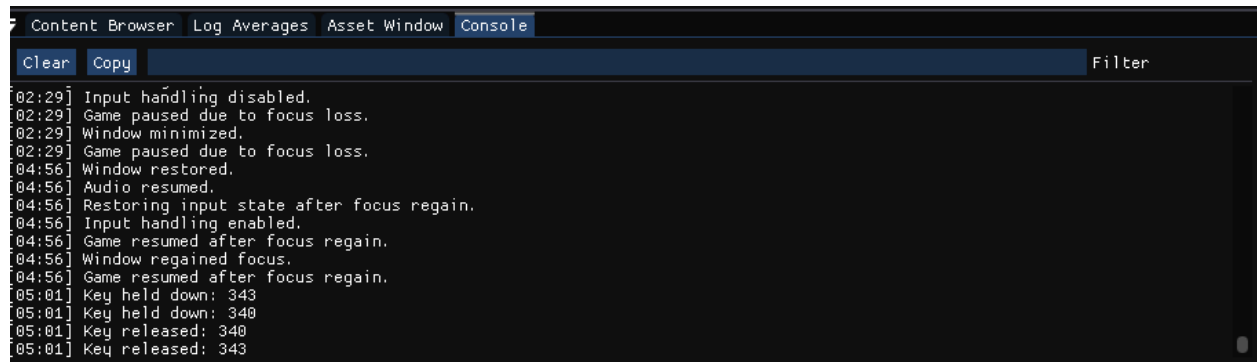


**Content Browser:** The content browser shows the Assets folder directory and users can navigate around it, it also has a drag-and-drop function for Textures, Prefabs, and Scenes. Those assets can be added to the scene using the drag-and-drop function.

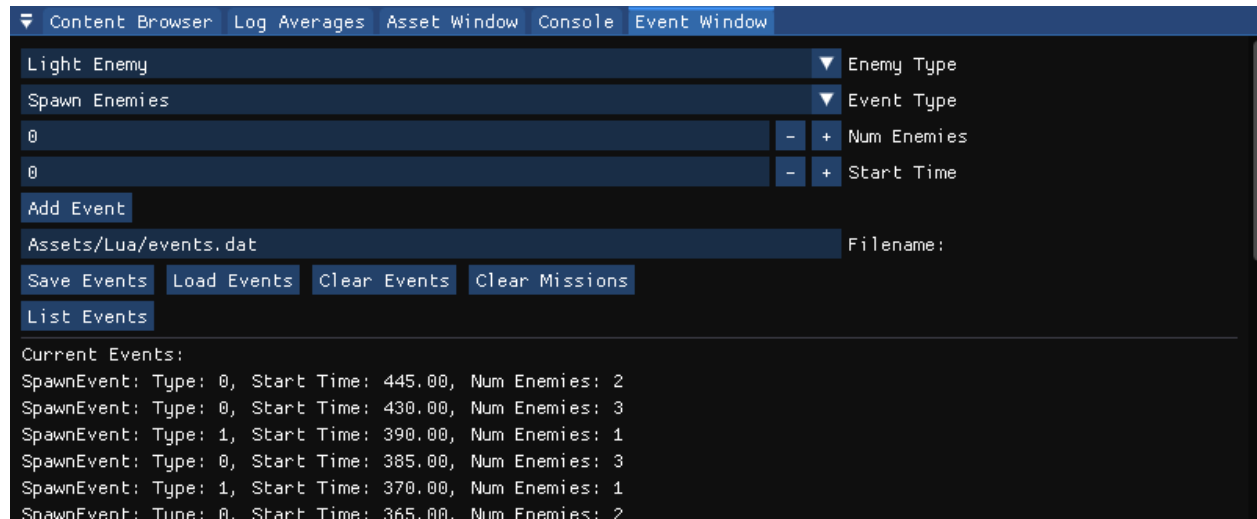
**Log Console:** Able to view the different systems usage



**Asset Window:** This tab displays the content and details of the preloaded assets



**Console:** User could display any `ImGui::Cout` events within the console, errors as well



**Event Window:** Used to create events within the game, users could choose the event type to be conducted such as spawning enemies or creating missions. Enemy type could be chosen based on what type of event (Like if the user wants to spawn 5 light enemies, put light enemy and enter number of enemies. Start time would be when the event would trigger in seconds. (120 stands for the 2 minute mark for example). Then add an event and save the event after it is done. Events currently loaded can be listed below under Current Events.