Scene

A scene consists of everything about a certain environment. It contains a list of entities which define characters about an object. See the entity document for more information on them.

A scene contains a layer manager which has a list of layers which can be used to group entities together. The layers are insertion ordered and offers a way to manage entities as a group in response to event updates.

Scenes also contain a list of render passes which are also insertion ordered.

Scenes also have a clear colour which is the colour the colour buffer is cleared to by OpenGL.

Scenes have a **main camera** which is the camera typically used by the renderer as the source of the view matrix and projection matrix.

**Scenes and Resources**

Resources that are identical and present in other scenes **should** be defined in the different scenes in case they are never loaded, and those other scenes are deleted but they will **not** be reloaded twice thus there will not be a waste of resources. However, this assumes you don’t change the resource names, so make sure they are identical.

**Creating a new scene**

1. Add the new scene folder to the assets/scenes/ folder and add the config json file and all the appropriate resource files. A fresh empty folder with all the files can be copied from the default scene folder.
2. Edit the config file, resource files and entities file as you see fit
3. The scene loader class (sandbox) can then load the scene by providing a scene name and the folder path to the scene root folder
4. Set the scene as the active scene for the engine to render and process the scene