

# Scene Toolkit v 1.0

## AudioSourceFadeEventHandler

class in CG.SceneToolkit / Inherits from: MonoBehaviour

### Description

This Component is used to fade In/Out a single AudioSource during a scene load / Change.

## LoadingSceneHandler

class in CG.SceneToolkit / Inherits from: MonoBehaviour

### Description

This Component is used to customize the look and feel of the loading scene graphics. Which includes a background image and some text that can be shown during the loading process, a progress bar and a percentage of the progress can also be shown and customized here. Go to the 'loading Scene' to do so.

## ISceneActivationKey

interface in CG.SceneToolkit

### Description

This interface enables manual activation of the loaded scene based on a key press.

### Properties

|  |                                   |
|--|-----------------------------------|
| Name                                     | <code>string Name { get; }</code> |
| Name of The Key that activates the scene |                                   |

|   |                                      |
|---|--------------------------------------|
| IsPressed                               | <code>bool IsPressed { get; }</code> |
| Whether the key is being pressed or not |                                      |

## ISceneChangeTrigger

interface in CG.SceneToolkit

### Description

This interface enables Used as a manual trigger for changing the scene.

### Properties

|   |  |
|---|--|
| <b>CanTrigger</b>                           | <code>public bool CanTrigger { get; }</code> |
| Whether or not to trigger the scene change. |  |

## SceneLoadManager

class in CG.SceneToolkit / Inherits from: MonoBehaviour

### Description

This is Main Singleton Component that Handles The Actual scene loading. This is automatically loaded from the resources folder. no need to attach this to a gameobject

### Static Variables

|   |   |
|---|---|
| <b>ActiveSceneSettings</b>  | <code>public SceneSettings ActiveSceneSettings</code> |
| It is automatically set when the load method is called.<br>A 'SceneSetings' object is passed. |   |

|                                       |   |
|---------------------------------------|---|
| SceneToLoad                           | public static <b>string</b> SceneToLoad |
| The final scene that is to be loaded. |   |

|  |  |
|--|--|
| OnAudioFadeEvent   | public static <b>event</b> System. <b>Action&lt;bool&gt;</b> |
| <p>This Event is called when The Current scene is Fading In/Out<br/>The bool parameter passed here determines a fade in or out.</p> <p>false = Fade Out<br/>true = Fade In</p> |  |

|   |  |
|---|--|
| SceneActivationKey  | public static <b>ISceneActivationKey</b><br>SceneActivationKey |
| Used for manually activating the loaded scene based on a key press. |  |

## Static Methods

|  |   |
|--|---|
| Load   | public static void Load( <b>string</b> sceneToLoad, <b>SceneSettings</b> settings, <b>ISceneActivationKey</b> activationKey = <b>null</b> ) |
| <p>Loads The scene given as a string value, Scene Setting object is used to customize the scene transition and loading scene customization.</p> <p>"sceneToLoad" =&gt; The name of the Scene That is to be loaded, must already be added to build settings.</p> <p>settings" =&gt; A Scene Settings Scriptable object asset to handle the configuraion of scene load and transition.</p> |   |

## TriggerBase

class in CG.SceneToolkit / Inherits from: MonoBehaviour

### Description

Base class that handles triggering of scene changes. This is an abstract class, which is used by both 'SceneSwitchTrigger2D' and 'SceneSwitchTrigger3D'.

Inheriting from this class is Not Recommended.

### Properties

|  |  |
|--|--|
| <b>TriggerSettings</b>   | public <b>SceneChangeTriggerSettings</b> TriggerSettings |
| Contains the settings that handle a scene change trigger. Modified in the inspector. |  |

## SceneChangeTriggerSettings

class in CG.SceneToolkit

### Description

A serializable Class that holds all the configuration values for Scene transition and audio fade settings.

### Properties

|  |                                  |
|--|----------------------------------|
| <b>SceneToLoad</b>   | public <b>string</b> SceneToLoad |
| Name of the scene this trigger will load, scene must already be added to build settings. |                                  |
| <b>Mode</b>  | public <b>DetectionMode</b> Mode |
| Determines whether to use a collider based approach or simple physics overlap.           |                                  |

|   |                                    |
|---|------------------------------------|
| <b>SwitchingDelay</b>                           | public <b>float</b> SwitchingDelay |
| The delay/wait time before switching the scene. |                                    |

|   |                                       |
|---|---------------------------------------|
| <b>TriggerMode</b>  | public <b>TriggerType</b> TriggerMode |
| Determies what type of trigger is used.<br>Enter = OnTriggerEnter,<br>Stay = OnTriggerStay,<br>OnKeyPress = Manually Triggered when a key is pressed, uses<br>ISceneChangeTrigger interface |                                       |

|  |  |
|--|--|
| <b>LayersToDetect</b>                      | public <b>LayerMask</b> LayersToDetect |
| Layer/Layers that this trigger will detect |  |

|   |                                      |
|---|--------------------------------------|
| <b>AutoActivateScene</b>                                  | public <b>bool</b> AutoActivateScene |
| Automatically activate the scene when loading is complete |                                      |

|   |   |
|---|---|
| <b>SceneChangeTriggerEvent</b>  | public <b>SceneChangeEvent</b><br>SceneChangeTriggerEvent |
| In case of manual scene activation this unity event is used to load and activate the required scene |   |

## SceneSwitchTrigger2D

class in CG.SceneToolkit / Inherits from: TriggerBase

### Description

This Component is used to create a trigger zone/area, which upon activating/interacted can be. Used to trigger a scene change. This is used for 2D objects and collider

## SceneSwitchTrigger3D

class in CG.SceneToolkit / Inherits from: TriggerBase

### Description

This Component is used to create a trigger zone/area, which upon activating/interacted can be used to trigger a scene change. This is used for 3D objects and collider.

## SceneSettings

class in CG.SceneToolkit / Inherits from: ScriptableObject

### Description

Used as a Scriptable Object Data Container. It contains all the settings needed to configure, Scene Transition, Audio Fade and Loading Scene Customization.

### Properties

|   |                                      |
|---|--------------------------------------|
| <b>InfoMessages</b>   | public <b>string</b> [] InfoMessages |
| An array of messages to be used as the loading scene info message, when added multiples a random one is selected at each load |                                      |

|   |  |
|---|--|
| <b>InfoMessageDelay</b>                             | <code>public float InfoMessageDelay</code> |
| Time delay while cycling between each info messages |  |

|   |   |
|---|---|
| <b>BackgroundImages</b>   | <code>public Sprite[] BackgroundImages</code> |
| An array of images to be used as the loading scene background, when added multiple image a random one is selected at each load. |   |

|   |  |
|---|--|
| <b>ShowLoadingProgress</b>  | <code>public bool ShowLoadingProgress</code> |
| Show/Hide a Loading progress bar on the loading screen during a scene load. |  |

|  |  |
|--|--|
| <b>ShowLoadingPercentage</b>   | <code>public bool ShowLoadingPercentage</code> |
| Show/Hide Loading completion percentage value on the loading screen during a scene load. |  |

|   |  |
|---|--|
| <b>TransitionSettings</b>   | <code>public SceneTransitionSettings<br/>TransitionSettings</code> |
| A serializable class containing the settings related to the transitions from one scene to another |  |

|   |   |
|---|---|
| <b>RandomInfoMessage</b>  | <code>public <b>string</b> RandomInfoMessage</code> |
| Get a random Info message if more than one message is available, otherwise get the first one. |   |

|   |   |
|---|---|
| <b>RandomBackgroundImage</b>  | <code>public <b>Sprite</b> RandomBackgroundImage</code> |
| Get a random image. if more than one message is available, otherwise get the first one. |   |

## SceneTransitionSettings

class in CG.SceneToolkit

### Description

This serializable Class contains all the values releated to Transition FX and Audio Fading, When Changing Scene

### Properties

|                                   |  |
|-----------------------------------|--|
| <b>TransitionSpeed</b>            | <code>public <b>float</b> TransitionSpeed</code> |
| The Speed of the Scene transition |  |

|                                    |  |
|------------------------------------|--|
| <b>EnableTransition</b>            | <code>public <b>bool</b> EnableTransition</code> |
| Enable or Disable Scene Transition |  |



|   |  |
|---|--|
| <b>TransitionMaterial</b>   | <code>public <b>Material</b> TransitionMaterial</code> |
| The Transition Material, Added as a renderer feature. It is Loaded automatically from the 'Resources' folder. |  |

|                               |  |
|-------------------------------|--|
| <b>TransitionType</b>         | <code>public <b>TransitionType</b> TransitionType</code> |
| Fade or a pattern to be used. |  |

|  |  |
|--|--|
| <b>Pattern</b>                                 | <code>public <b>Texture2D</b> Pattern</code> |
| A Grayscale Image, used as transition pattern. |  |

|                             |  |
|-----------------------------|--|
| <b>AudioMixer</b>           | <code>public <b>AudioMixer</b> AudioMixer</code> |
| The main Audio mixer in use |  |

|   |   |
|---|---|
| <b>EnableAudioFade</b>                          | <code>public <b>bool</b> EnableAudioFade</code> |
| Enable or Disable Audio Fade during Transition. |   |

|   |   |
|---|---|
| <b>ExposedParameter</b>   | <code>public string ExposedParameter</code> |
| Name of the exposed parameter set inside the audio mixer, Must Match Exactly. |   |

## Public Methods

|   |   |
|---|---|
| <b>StartFade</b>  | <code>public IEnumerator StartFade(float targetVolume)</code> |
| Handles the fading In/Out of audio volume, based on the targetVolume passed.<br>"targetVolume" The volume in decible unit |   |