**AudioManager**

**Overview**

The **AudioManager** is a Unity prefab for managing audio sources and playing sound effects (SFX) and background music in your game. It follows the Singleton design pattern to ensure there is only one instance of the AudioManager in each scene.

**Features**

* Manages audio sources for background music and sound effects.
* Provides a simple interface to play sound effects.
* Supports switching between different background music tracks.
* Pauses background music during specific SFX playback.
* Can be used as a global audio manager for your Unity project.

**How to Use**

1. Move the **AudioManager** prefab into the hierarchy window. (It may also be a good idea to assign it the tag “Audio”)
2. Configure the AudioManager script’s music and sfx AudioClip variables. For each sound and music track, include an AudioClip variable in AudioManager.

( ex. public AudioClip myMusic; or public AudioClip mySFX; )

1. Assign sounds and music to the AudioManager using the Inspector:
   * Set audio clips for various actions in your game, such as button clicks, menu selections, or background music. Accepted formats for audio files are mp3 and wav
2. Make sure to set your desired default music clip for the **startMusic** field. This music will play when the game starts. Additionally, if you want the music to loop, also set it as the **loopMusic** field
3. Use the AudioManager's public functions in your game scripts to control audio playback. For example, use **PlaySFX** to play sound effects when certain events occur.

(ex. Play a sound effect: AudioManager.Instance.PlaySFX(AudioManager.Instance.mySFX); )

(ex. Play a music effect: AudioManager.Instance.PlayMusic(AudioManager.Instance.myMusic); )

1. Enjoy seamless audio management in your Unity project!

**Example Usage**

// Play a sound effect (e.g., when a button is clicked) public void OnButtonClick() { AudioManager.Instance.PlaySFX(AudioManager.Instance.click); }

**Notes**

* The AudioManager ensures that only one instance exists per scene.
* AudioManager does not support playing more than one SFX at a time.
* It pauses the background music while playing the **death** sound effect. This behavior can be customized or expanded upon as needed.
* You can easily extend the AudioManager by adding more audio clips and functions for different audio events in your game. Feel free to change it however you see fit.

**FAQ**

*What is the purpose of the AudioManager prefab?*

The AudioManager prefab is designed to be a “plug and play” was to handle audio in you game. Simple add the AudioManager prefab into your scene, assign it’s music and sfx AudioClips and you audio should work

*How do I add the AudioManager to my Unity project?*

Simply download the AudioManager prefab from the Unity Store, and drag and drop the prefab into your unity scene’s hierarchy bar.

*Can I customize the background music and sound effects?*

Yes! See steps 2 and 3 for a detailed outline of how to add your own music and sfx to AudioManager.

*What happens when multiple AudioManager instances are present in one scene?*

Since AudioManager is a Singleton pattern, if there are more than one instances of it present in one scene, only the highest instance in the hierarchy for the scene will remain, all other objects with AudioManager will be deleted.

*How do I manage audio transitions between scenes?*

It’s recommended that each scene has their own AudioManager to handle music.

*How can I have multiple SFX play at once?*

AudioManager does not support playing more than one SFX at a one time.

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