**Coding Assignment**

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What is an audiosource?

An audiosource is a component in Unity that allows you to play back audio within your digital space. It’s essentially a controller for starting and stopping the playback of audio, and is able to modify other properties of your audio through effects.

Functionalities:

Audio is just as important as any other component. It can help an experience be more immersive and can reinforce placement and urgency of tasks and objects.

With audiosources, you can use many different audios to create layers of sound, such as background music, ambience, dialogue, and sound effects. You can assign different audio sources to different game objects to create a more immersive experience. You can also have a single game object with multiple sounds on it. Having multiple audio sources placed around the world provides a realistic and interactive experience for the player.

Audio Source can also have effects applied to it. You can modify the output of [Audio Mixer](https://docs.unity3d.com/Manual/class-AudioMixer.html) components by applying these Audio Effects. These can filter the frequency ranges of the sound or apply reverb and other effects to help make the audio work better in the environments you are placing it in.

How to set up an audio source:

Unity imports audio files as Audio Clips. In order to integrate audio into your scene, you need to attach the Audio Clip to a GameObject. When a GameObject has an Audio Clip attached to it, it becomes an Audio Source. To be able to hear the audio you will need an audio listener, which is typically attached to the camera.

To begin setting up the audiosource, you will need to ensure that you have the proper audio files imported into Unity, making sure they are in the format of WAV, AIFF, MP3 or Ogg. To add your audio listener component, the first step is creating your GameObject, whether it be a camera or a character controller. Next, click on Add Component in the inspector panel, and select Audio, Audio Listener. This will attach an audio listener component to your GameObject.

Important/fun properties and methods

* Loop : Loops single audio.
* Pitch : Changes the pitch of single audio.
* Play: Plays single audio.
* Pause: Pauses single audio.
* Stop: Stops single audio.
* AudioSource : tells the computer where to pull the audio source from.
* Volume: adjusts audio volume
* AudioClip.
* PlayClipAtPoint: Plays the audio at a specific position in the world.
* Time: playback position on audio.
* PlayDelayed: Delays an audio clip.
* PlayScheduled: Plays an audio clip at a scheduled point in the future.

Codes we used

* **Void:** You use void as the return type of a method to specify that the method doesn't return a value.
* **SerializeField**: Unity serializes all your script components, reloads the new assemblies, and recreates your script components from the serialized versions.
* **AudioSource**: An audiosource is a component in Unity that allows you to play back audio within your digital space. When a GameObject has an Audio Clip attached to it, it becomes an Audio Source. To be able to hear the audio you will need an audio listener, which is typically attached to the camera.
* **musicSource**: A music player made in visual studio code.
* **SFXSource**: A SFX player made in visual studio code.
* **AudioClip**: Audio clips contain the imported audio data used by Audio Sources. Unity supports MP3, WAV, AIFF, and OGG audio formats.
* **Background + Yell**: Name of the audios.
* **musicSource.clip**: Determines the audio that will be played next.
* **play()**: Tells the computer to play the sound.
* **PlaySFX**: Name of the action.
* **.PlayOneSho**t: Tell the code to play it once.
* **(clip)**: The clip being played.