Adding Toggles and Sliders in Unity

In this tutorial, you will learn how to add a toggle to turn music on and off and a slider to control the volume in your Unity project. These UI elements will enhance user interaction and improve the overall experience.

By the end of this tutorial, you will be able to:

- Understand how toggles and sliders work in UI design.
- Implement a toggle using Unity's Event System.
- Implement a slider using Unity's Event System.

Step 1: Setting Up the UI

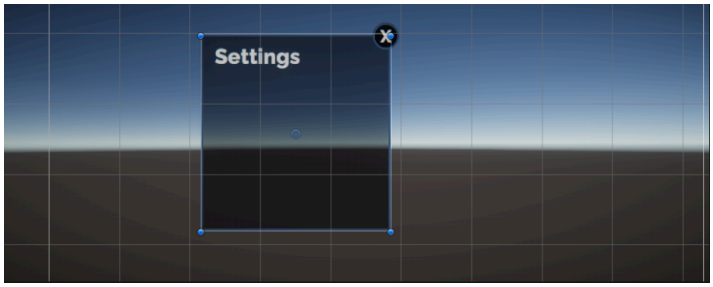
Your settings menu is currently empty. Let's start adding interactive elements!

1. **Open your Settings Menu** in Unity.
2. **Ensure you're in 2D mode** for easier editing.
3. **Hide other UI elements** so you can focus on your settings menu.

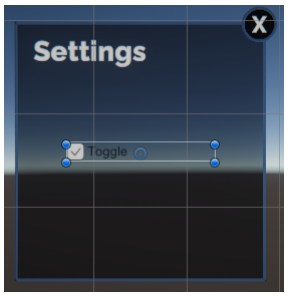
Step 2: Adding a Music Toggle

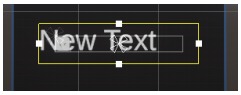
A toggle allows users to switch something on or off. We'll create a toggle to turn music on and off.

1. **Right-click on the Settings Menu object** in the Hierarchy.

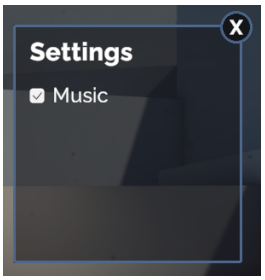


2. Select **UI > Toggle** to add a new toggle.



3. **Rename it** to “Music Toggle” in the Hierarchy. 

4. **Replace the default label** with TextMeshPro for better text rendering:
    - Expand the **Music Toggle GameObject**.
    - Delete the **Label object**.
    - Right-click on **Music Toggle** > **UI > Text - TextMeshPro**.
    - Edit the text to say “Music” and place it next to the toggle.

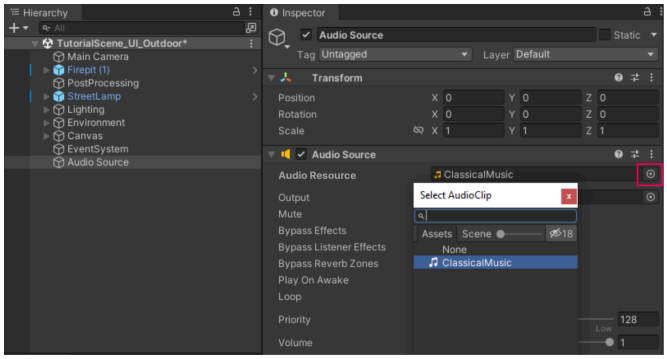


Your toggle is now added but not yet functional. Let’s fix that next.

Step 3: Adding Music to the Scene

Before we can toggle the music, we need to add an audio source.

1. **Right-click in the Hierarchy** > **Audio > Audio Source**.
2. In the **Inspector**, locate the **Audio Source** component.



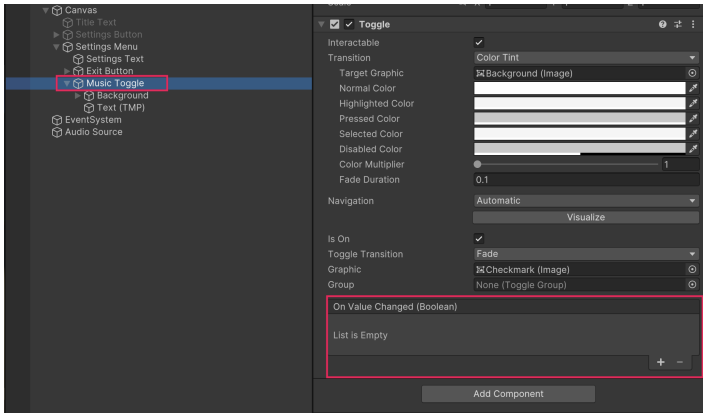
3. **Select an audio clip** from your project using the object picker.
4. Set the **Volume** to **0.25 - 0.50** so it's not too loud.

Now your scene has background music!

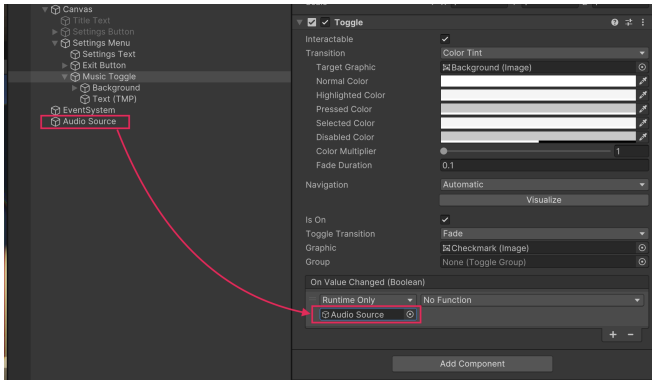
Step 4: Making the Music Toggle Functional

Now, we will link the toggle to the audio source.

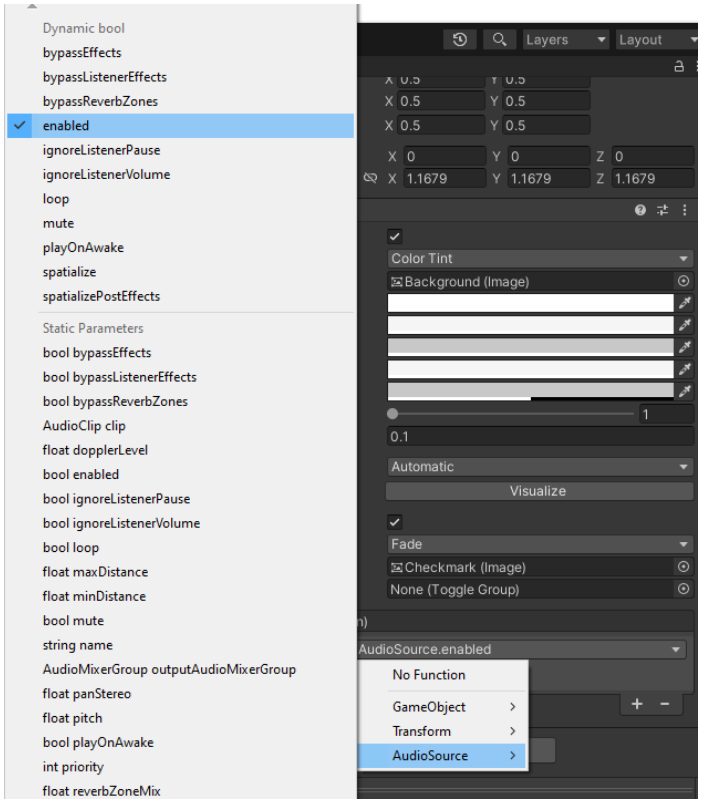
1. **Select the Music Toggle object** in the Hierarchy



2. In the **Inspector**, locate the **Toggle component**.
3. Find the **On Value Changed (Boolean) Event**.
4. Click the **+ button** to add a new action.
5. **Drag the Audio Source object** into the action field.



6. Open the dropdown menu and select **AudioSource > enabled**.

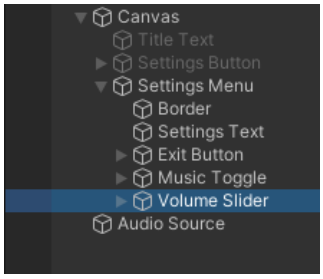


Now, when you check or uncheck the toggle, the music will turn on and off!

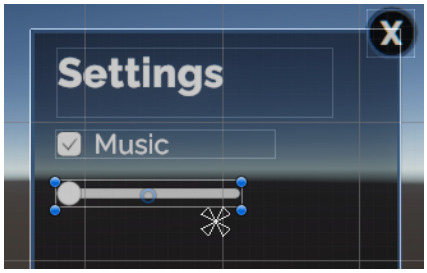
Step 5: Adding a Volume Slider

A slider allows users to adjust settings like volume.

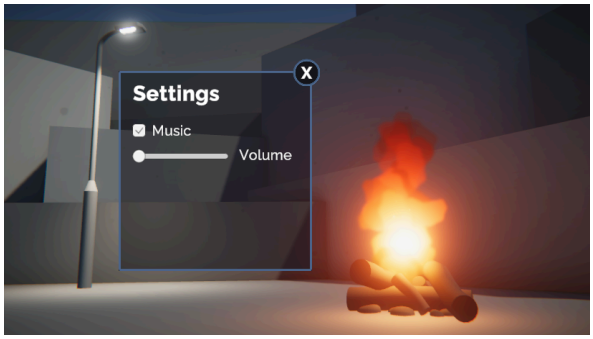
1. **Right-click on the Settings Menu object > UI > Slider**.



2. **Rename it** to “Volume Slider” in the Hierarchy.
3. Use the **Rect Transform** tool to position and resize the slider.



4. **Add a label:**
    - Right-click on **Volume Slider** > **UI > Text - TextMeshPro**.
    - Edit the text to say “Volume” and place it next to the slider.

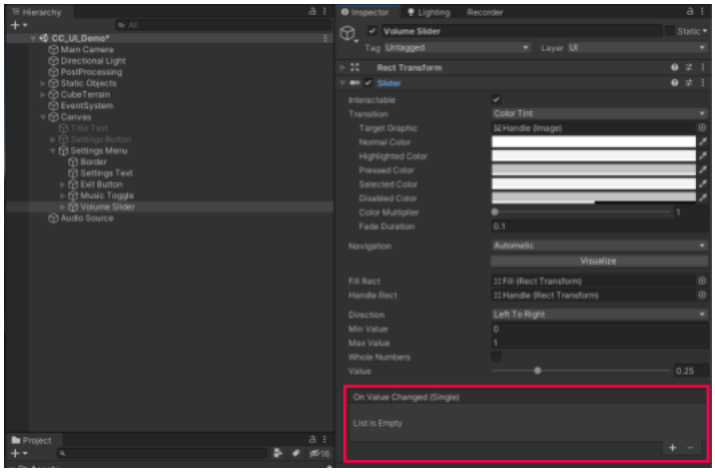


Your slider is now in place. Let’s make it functional.

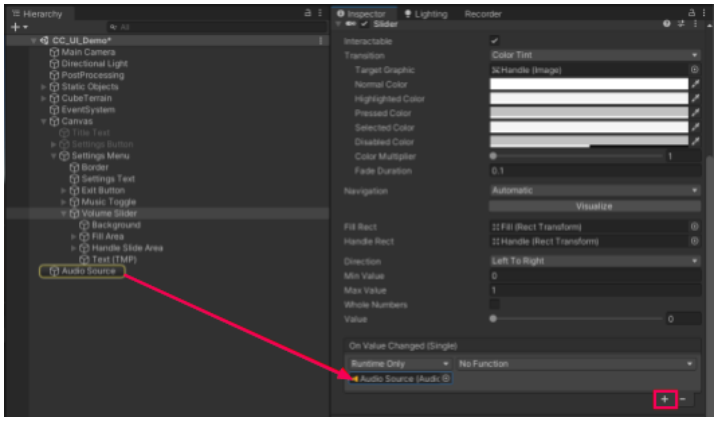
Step 6: Making the Volume Slider Functional

Now, we will link the slider to the audio source.

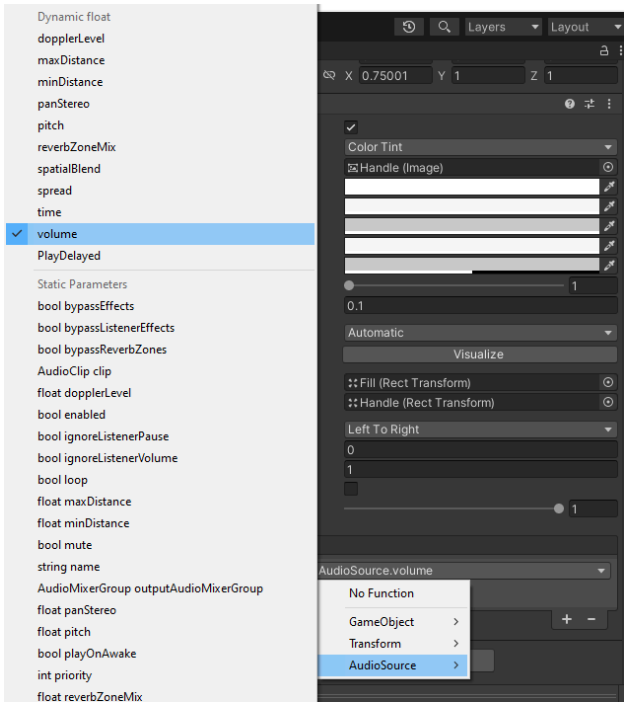
1. **Select the Volume Slider object** in the Hierarchy.



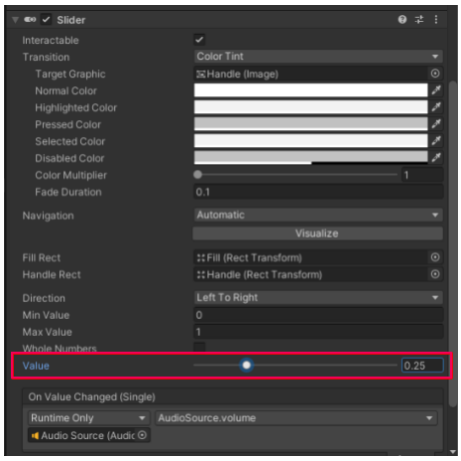
2. In the **Inspector**, find the **On Value Changed (Single) Event**



3. Click the **+ button** to add a new action.
4. **Drag the Audio Source object** into the action field.
5. Open the dropdown menu and select **AudioSource > volume**.



6. Set the **slider's default value** to match the starting volume (e.g., 0.25 - 0.50)



Now, as you move the slider, the volume will change in real-time!

Step 7: Experiment with Additional UI Elements

Now that you know how to create UI elements, try adding more features! Some ideas:

- **Add a toggle** to show/hide objects.
- **Add a brightness slider** to control lighting.

- **Add buttons** to switch between day and night.

Step 8: Final Touches

1. **Reactivate the title screen elements.**
2. **Hide the settings menu by default** so it only appears when needed.

Your settings menu is now complete! In the next tutorial, you'll explore a new Canvas mode to integrate UI into a 3D world. Happy coding! 🎮