

## Unity tutorial

### WebGL

- Make sure you have the WebGL install of Unity. To build, **File > Build Settings > Platform: WebGL > Build and Run**. This should open automatically in a browser with a localhost IP.
- It should work well with the 'standard' browsers without any extensions, although limitations apply, see [1]. Mobile devices are not supported.
- You can export it as a Development build, which is good for debugging, though it is much larger so won't be good for sharing. For more debugging info see [2].
- If you are developing a multiplayer game, you will need a server. This can be a standalone (Mac/Linux/Windows) build of your game, or you can set up your own server, and will need to use websockets. The WebGL instances are clients, and will need to interact with the server, not client-to-client. Good start here [3].
- Some audio features do not work in WebGL, so be careful about picking those that do, see [4]. Graphics also have some limitations, see [5].

[1] <https://docs.unity3d.com/Manual/webgl-browsercompatibility.html>

[2] <https://docs.unity3d.com/Manual/webgl-debugging.html>

[3] <https://medium.com/@hacj/unity-webgl-and-websockets-a-guide-42f3e8f0db34>

[4] <https://docs.unity3d.com/Manual/webgl-audio.html>

[5] <https://docs.unity3d.com/Manual/webgl-graphics.html>

### Audio

- Audio in unity can be a bit difficult to manage, so I recommend creating your own audio manager, see my example code [6].
- You can edit the Sound class to include any options you need.
- The Audio manager script can be interacted with from within other scripts, and you can also set up 'standard' audio, such as music, through this.
- Be careful when changing scenes not to restart the Audio Manager, you'll need an instance that does not restart.
- AudioMixers can be used to make changes to a selection of sounds, and are very useful, see [7]. These can easily be incorporated into [6].

[6] [https://github.com/joshlvmh/unity\\_audio](https://github.com/joshlvmh/unity_audio)

[7] <https://www.raywenderlich.com/532-audio-tutorial-for-unity-the-audio-mixer>