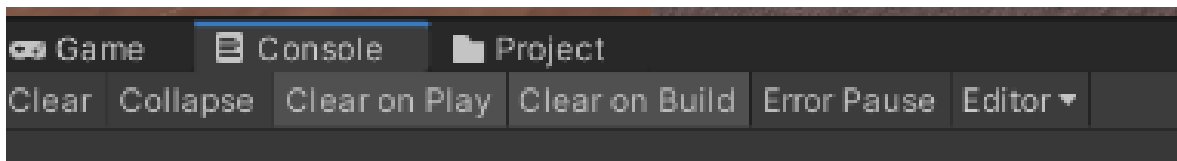# How to Reduce Game Size in Unity
Tips and Tricks

Oh no! Your Unity project is too large to be loaded into GitHub and cannot be opened by the Education team. Try the tips below to reduce the size of your Unity project then rebuild the project and upload the new build files to GitHub. The Education team needs a working **WebGL link from GitHub** to be able to review all Black Belt projects.

Note: GitHub allows file uploading up to 25MB only. If you try uploading files larger than 25 MB, you will see the error message, *'Yowza, that's a big file. Try again with a file smaller than 25MB'*.

First, you will want to determine which Assets in your project take up the most space in the build. This information can be found in the **Editor Log** after you have performed the build.

Go to the **Console window**:

Then click the small drop-down panel in the top right and select **Open Editor Log.**
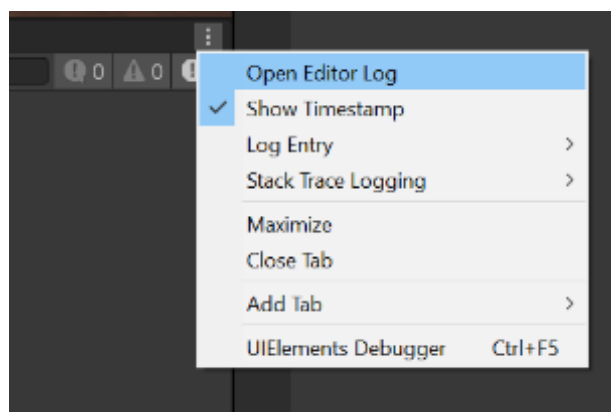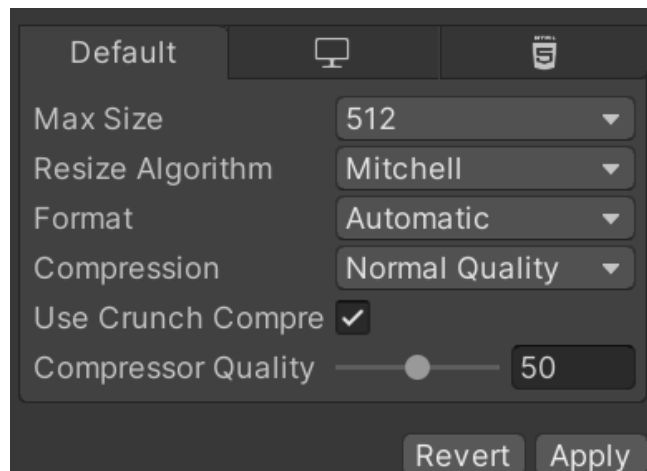
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The **Editor Log** provides a summary of Assets broken down by type and lists them in order of size contribution.

```
--------------------------------------------------------------------------
Build Report
Uncompressed usage by category (Percentages based on user generated assets only):
Textures              67.1 mb   53.9%
Meshes                25.6 mb   20.6%
Animations            3.4 kb    0.0%
Sounds                3.1 mb    2.5%
Shaders               4.9 mb    4.0%
Other Assets          1.1 mb    0.9%
Levels                8.2 mb    6.6% |
Scripts               1.0 mb    0.8%
Included DLLs         13.3 mb   10.7%
File headers          52.5 kb   0.0%
Total User Assets     124.3 mb  100.0%
Complete build size   189.2 mb
Used Assets and files from the Resources folder, sorted by uncompressed size:
 18.9 mb        10.0% Assets/Resources/Assets/MMSEV/MMSEV.obj
  8.0 mb   4.2% Assets/Resources/Samples/Terrain Tools/0.1.0-preview/Terrain Assets/BrushTextures/errosion02.tif
  8.0 mb   4.2% Assets/Resources/Samples/Terrain Tools/0.1.0-preview/Terrain Assets/BrushTextures/errosion01.tif
  5.0 mb   2.6% Resources/unity_builtin_extra
  2.7 mb   1.4% Assets/Resources/Fonts/Controls.png
  2.5 mb   1.3% Assets/Resources/Assets/viking_carbajal/viking_carbajal.obj
```

Textures usually take up the most space. Use **Compressed Texture formats** and **reduce the physical size** (in pixels) of Texture images. To do this, select the Texture, then in the Inspector window **decrease the Max Size** and choose to **Use Crunch Compre.** Then click **Apply** to see how it impacts the project. Return to the Inspector window to adjust the Max Size value as needed.

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Meshes also take up a lot of file space. Enable **Mesh Compression** so that meshes and imported animation clips take up less space in your game file. To do this, select the mesh, then in the Inspector window set the **Mesh Compression** to **Low, Medium, or High**. See how it impacts the project, then return to the Inspector window to adjust the Mesh Compression value as needed.
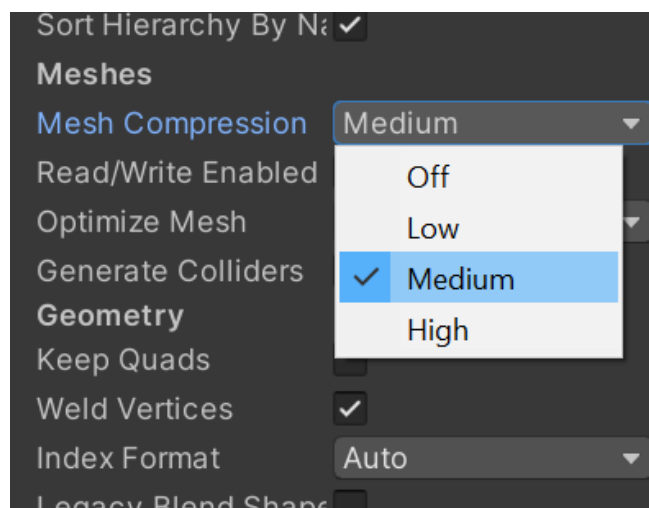
For an in-depth walkthrough on how to do the steps listed above, follow along with this YouTube video: https://youtu.be/7O21c8BzEzM

Note: Unity strips most unused Assets during the build, so you don't gain anything by manually removing Assets from the Project. The only Assets that are not removed are scripts (which are generally very small anyway) and Assets in the Resources folder (because Unity can't determine which of these are needed and which are not). You should make sure that the only Assets in the Resources folder are the ones you need for the game.

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Other ways to reduce game size in Unity include:

Removing Unused Built-in Packages

When you create your project in Unity, the engine might import extra packages that might be of no use to you. Removing the packages might lessen your build size. To remove them, open the package manager from **Window > Package Manager > Built-In**
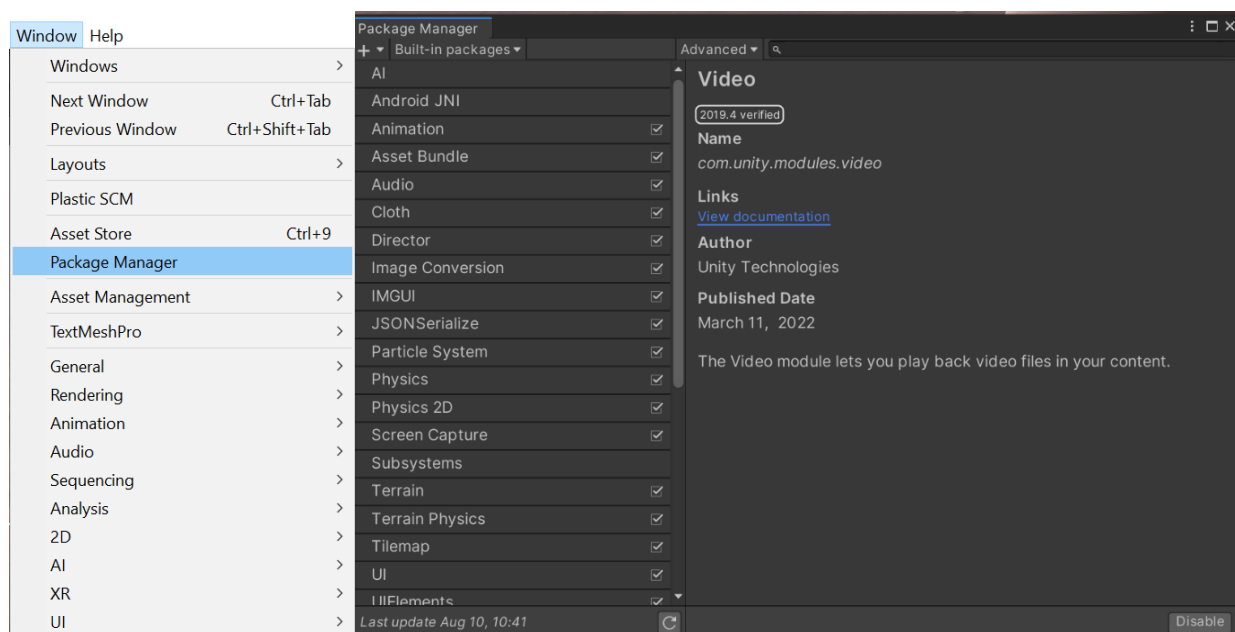
Remove Unused Scenes from Build Settings

Make sure you are building your project with only the necessary scenes.