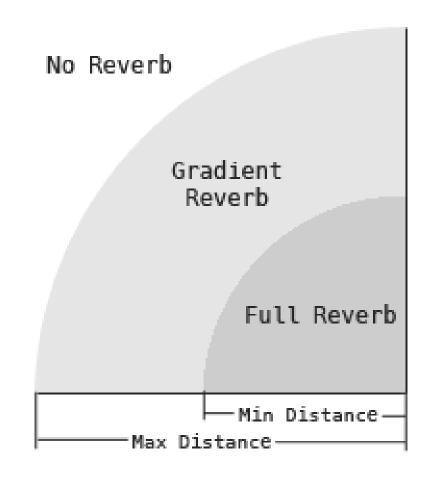
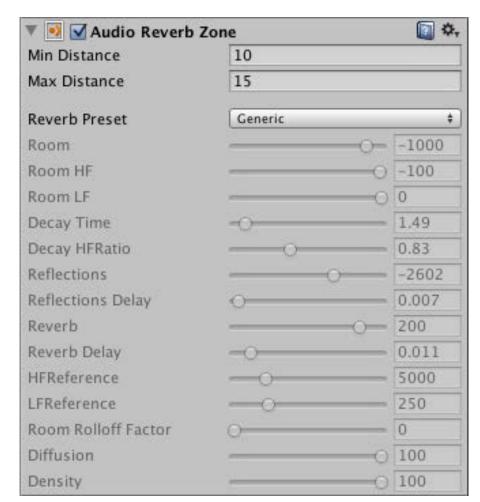
# Audio Effects



## Reverb Zone



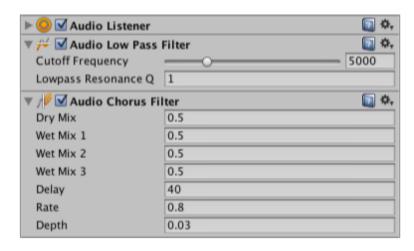




#### **Audio Filters**

You can modify the output of <u>Audio Source</u> and <u>Audio Listener</u> components by applying **Audio Effects**. These can filter the frequency ranges of the sound or apply reverb and other effects.

The effects are applied by adding effect components to the object with the Audio Source or Audio Listener. The ordering of the components is important, since it reflects the order in which the effects will be applied to the source audio. For example, in the image below, an Audio Listener is modified first by an Audio Low Pass Filter and then an Audio Chorus Filter.



#### **Audio Low Pass Filter**

#### SWITCH TO SCRIPTING

The **Audio Low Pass Filter** passes low frequencies of an <u>AudioSource</u> or all sound reaching an <u>AudioListener</u> while removing frequencies higher than the **Cutoff Frequency**.

#### **Properties**



Property:	Function:
Cutoff Frequency	Lowpass cutoff frequency in Hertz (range 10.0 to 22000.0, default = 5000.0).
Lowpass Resonance Q	Lowpass resonance quality value (range 1.0 to 10.0, default = 1.0).

## **Audio High Pass Filter**

#### SWITCH TO SCRIPTING

The **Audio High Pass Filter** passes high frequencies of an AudioSource and cuts off signals with frequencies lower than the **Cutoff Frequency**.

#### **Properties**



Property:	Function:
<b>Cutoff Frequency</b>	Highpass cutoff frequency in Hertz (range 10.0 to 22000.0, default = 5000.0).
Highpass Resonance Q	Highpass resonance quality value (range 1.0 to 10.0, default = 1.0).

### **Audio Distortion Filter**

SWITCH TO SCRIPTING

The Audio Distortion Filter distorts the sound from an AudioSource or sounds reaching the AudioListener.

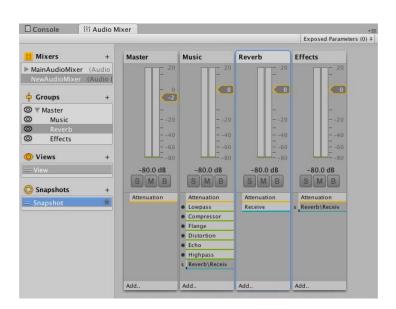
#### **Properties**



Property: Function:
Distortion Distortion value. 0.0 to 1.0. Default = 0.5.

## Filters and Effects

- For more filters: see <u>filter manual</u>
- Effects are a more powerful way to manipulate sound
  - Effects Manual
  - Audio Mixer tutorial





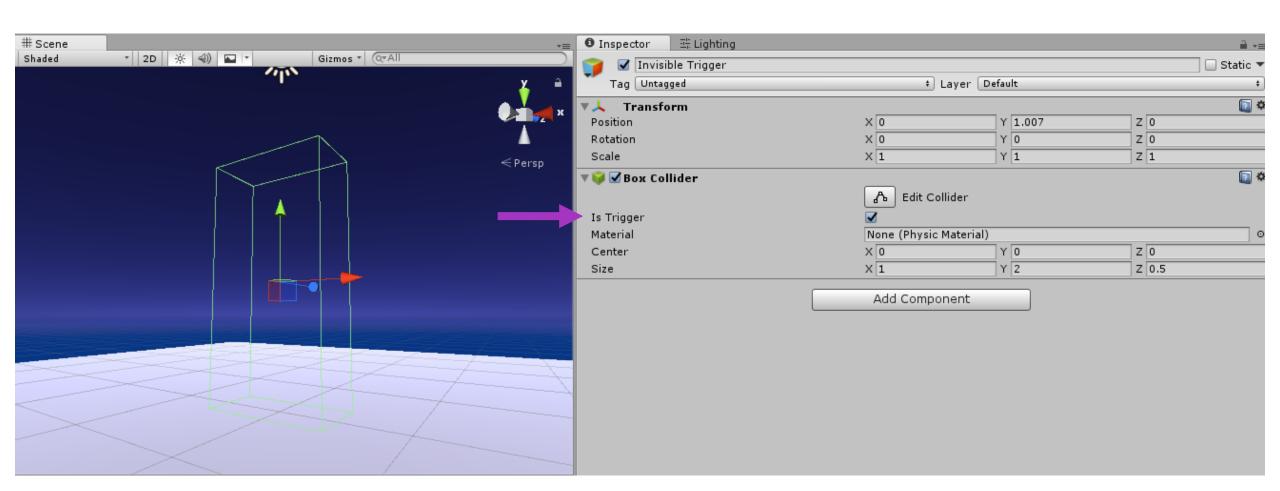
# Triggers

- Video tutorial
- Triggers are colliders that act as invisible detectors
- Triggers don't physically collide with other objects
- If a rigidbody interacts with a trigger:
  - OnTriggerEnter
  - OnTriggerStay
  - OnTriggerExit



# Triggers

Any collider can be set to be a trigger



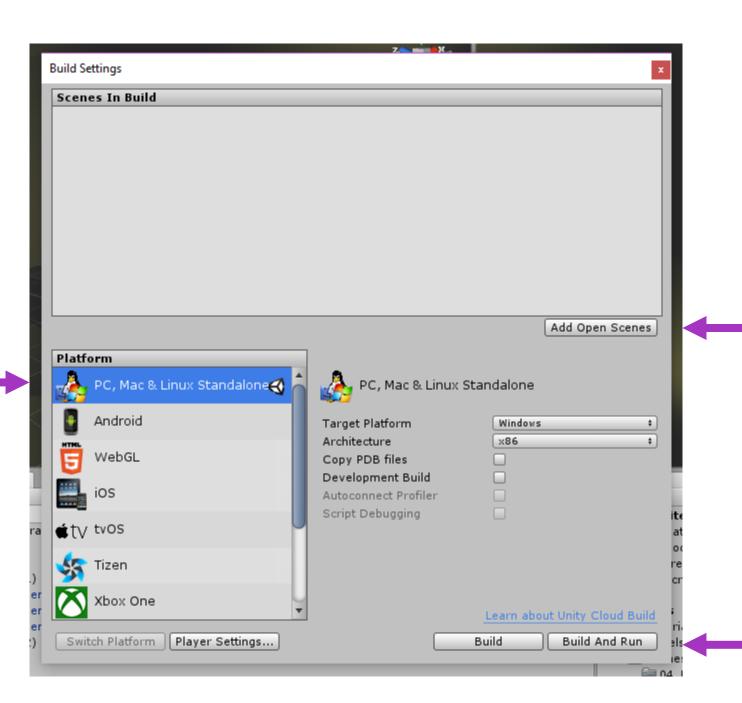
# Building for Windows & Mac



## A Build

- A build is a published version of your project that you can distribute and share
- Options:
  - PC/OSX/Linux desktop application (exe or .app)
  - WebGL (browser, .html)
  - iOS app
  - Android app
  - Xbox One
  - PS4
  - •

Unity 5.5.1f1 Personal (64bit) - 05\_Orbit.unity - Day13\_Introduction\_Solu File Edit Assets GameObject Component Mobile Input Windo New Scene Ctrl+N er 🚇 Global Open Scene Ctrl+O Gizmos + Q+All Ctrl+S Save Scenes Save Scene as... Ctrl+Shift+S New Project... Open Project... Open up the build settings Save Project Build Settings... Ctrl+Shift+B Build & Run Ctrl+B Exit



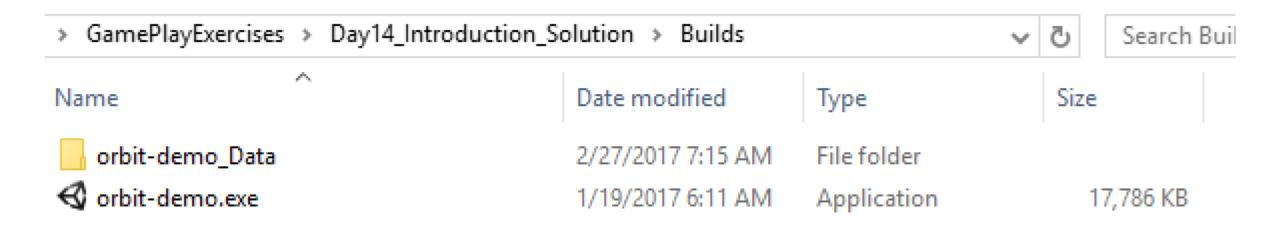
Select your platform

Add your scene

Build!

# Sharing a Windows Build

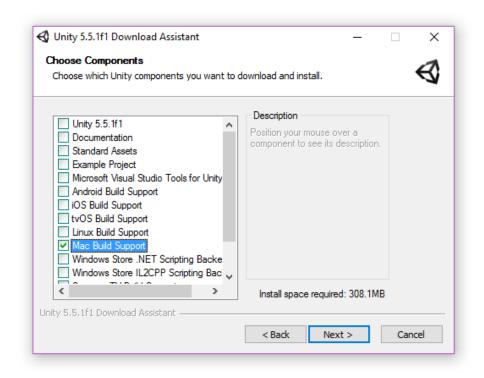
- You need to zip up a folder that contains both:
  - The .exe
  - The \_Data folder

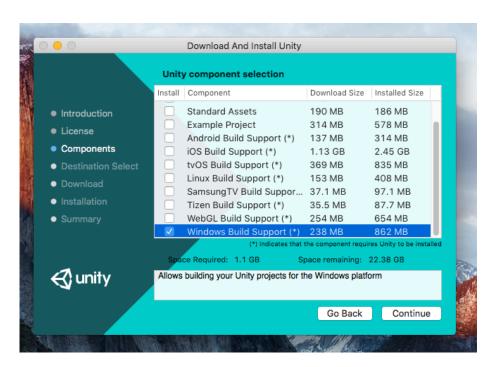




# **Build Support**

- Each platform requires a module
- You may not have support for both Windows and Mac:
  - Rerun the installer (find older versions <u>here</u>)
  - Uncheck everything except for the missing component





# Building References

- See <u>Unity tutorial video</u>
- See <u>Unity manual</u>

# Itch.io Hosting

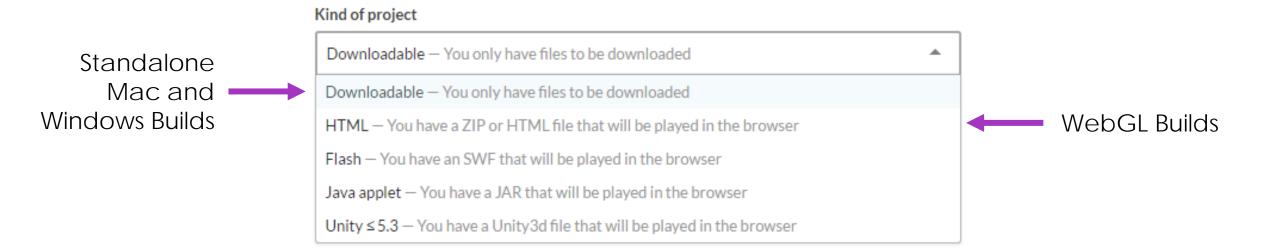
## Itch.io

- Marketplace for independent digital projects
- Hub for independent game makers
- Free for creators
- Open revenue sharing model
- Track downloads, get feedback, etc.



# Hosting on Itch.io

- 1. Sign up for an account
- 2. Go to your dashboard
- 3. Create a new project
- 4. Upload your build files and publish
- 5. Become famous





## **Build Files**

- Upload a zipped folder with the windows build
  - .exe and \_Data folder must BOTH be in this zipped folder!
- Upload a zipped folder with the mac build
  - Put the .app into this zipped folder
- (Optional) Add a readme.txt file to each folder

# Uploads Use butler to upload game files: it only uploads what's changed, generates patches for the itch.io app, and you can automate it. Get started! Upload files or Choose from Dropbox Add External file ?











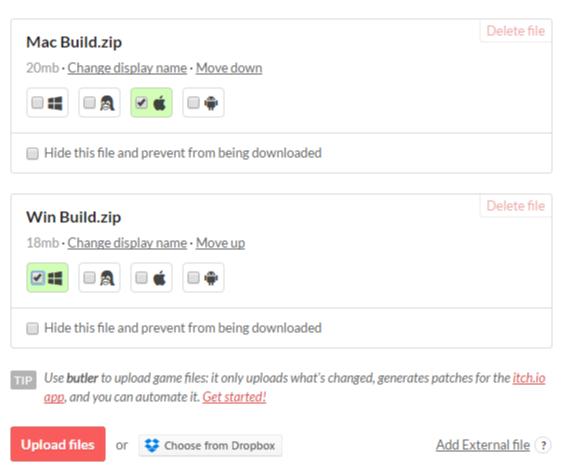




Art.app readme.txt



#### Uploads



# Visibility

Publish as draft or make it public

#### Community

Let anyone with an itch.io account interact with you and other players.

- Disabled
- Comments Comments on the bottom of project page
- Discussion board A dedicated page for threads and replies

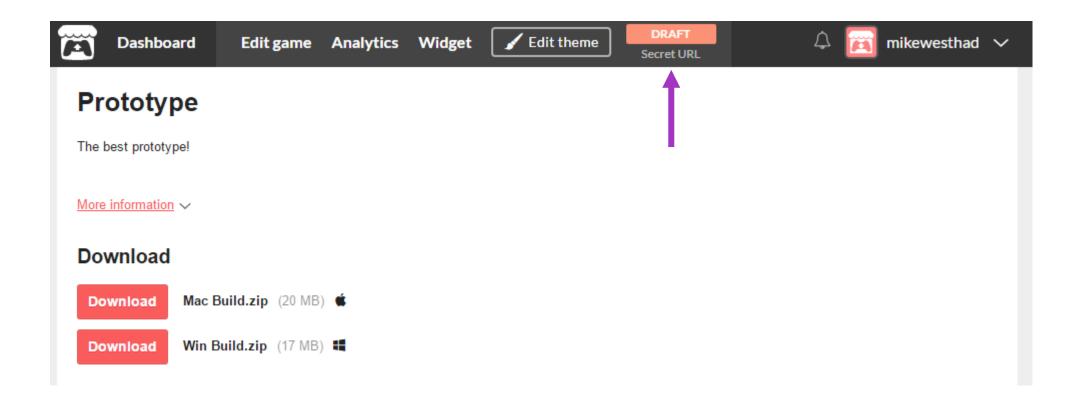
#### Visibility & access

Use Draft to finalize your page's design before making it public. Learn more

- Draft Only those who can edit the game or have secret link can view the page
- Restricted Only authorized people can view the page
- Public Anyone can view the page, you can enable this after you've saved

## Secret URL for Drafts

- Share the secret link. It will look something like:
  - https://mikewesthad.itch.io/prototype?secret=8P2dfzZT3xFpa54



## Extras: Theme

