From 3D to AR

Womp 3D and Blipp AR introduction

get ready to get *goopy!*

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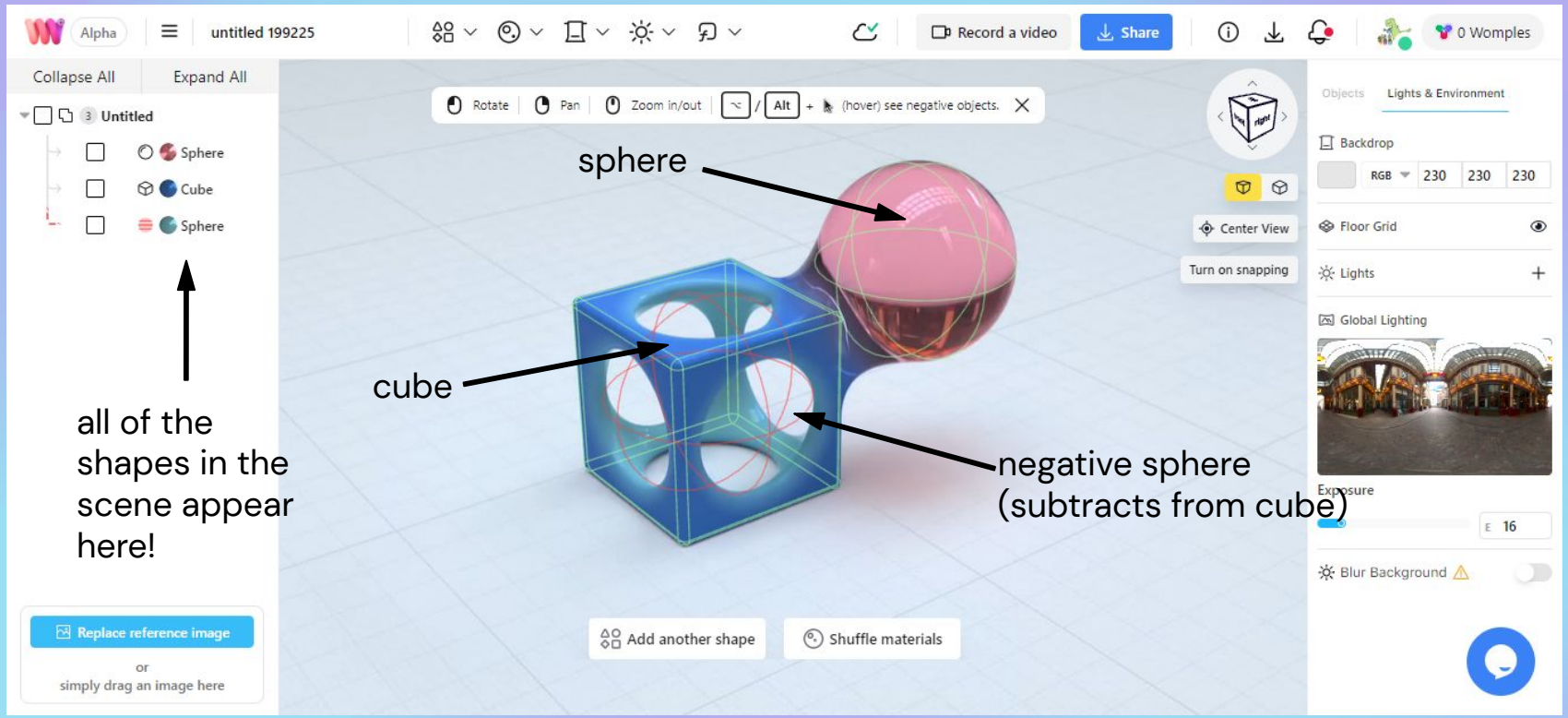


Step one: getting in

Womp is web-based, so you don't need to download anything! To get set up:

- Go to **womp.com**
- Click the button that says **OPEN WOMP**
- Click the button that says **Continue with Google**
- Log into your school or personal google account.
- Click on **New File.** Ready to go!

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Once you get in and open a new file, your screen should look something like this. Feel free play around to get a feel for the controls!

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Step two: controls

Navigating in a 3D space is different than 2D, so we need different controls!

- Right click and drag to rotate
- Left click and drag to move side to side
- Scroll wheel to zoom in or out

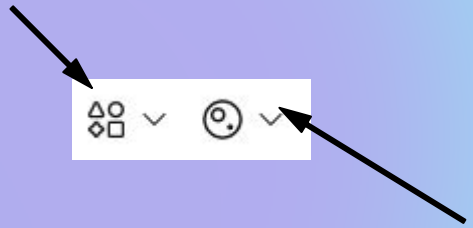
To move an object, you can click on it , then drag on the arrows that appear to move it along the X, Y, and Z axes. Watch the video on the next slide to see more about how to transform objects.

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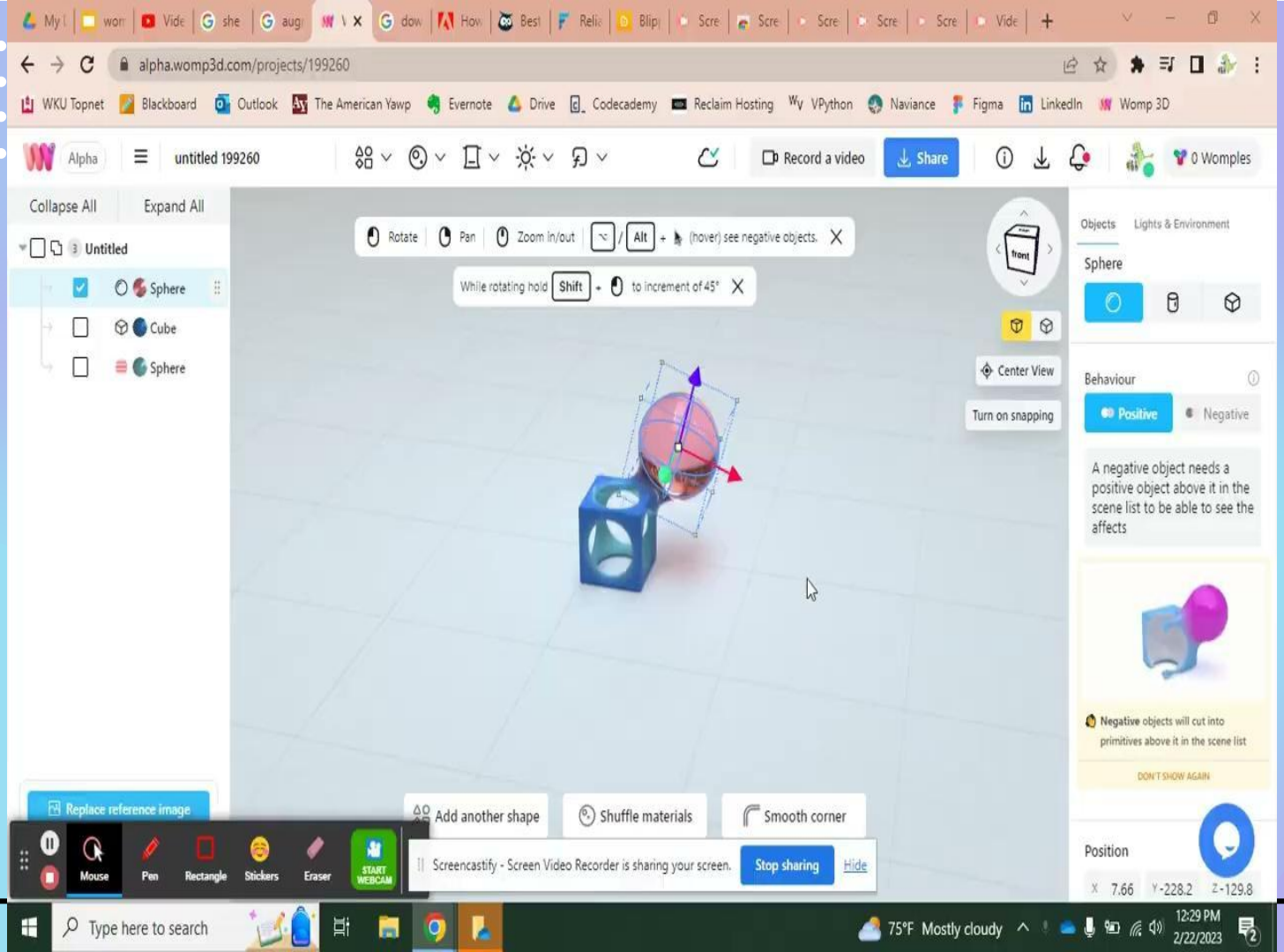
Step three: adding objects

To make your own creation, you'll need to add objects. To create a new object, click on the shapes icon, then select the shape you want.



To change the color/texture of the object, click here. This will not show up on your 3D prints, but it will when you move your object to AR.

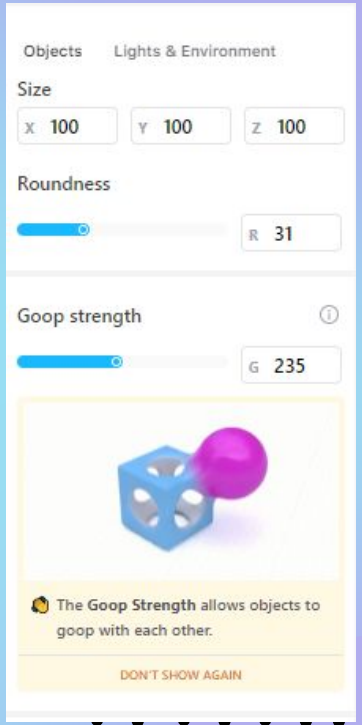
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Step four: gooping

In the right panel, you can change an object's properties. To make objects "goop" together, you can increase the **goop strength**. Higher goop strength means your objects will act more like slime. For cylinders and rectangular prisms, you can adjust the **roundess** to make the corners less sharp.



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Congratulations!

You now have a 3D model that can be moved into augmented reality! Before we can use your model in the AR development environment, though, we need to download the 3D model and convert it to a file type that is compatible with Blipp AR.



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Step five: downloading

Once you're happy with your model, we need to download it and convert it to a different file type.

- Click on the **Share** button in the top right corner
- Click on **Download 3D Model**
- Click on **Download .OBJ**
- Wait for the loading bar under the to fill completely blue
- Click on the zip file when it pops up, then **Extract All.**

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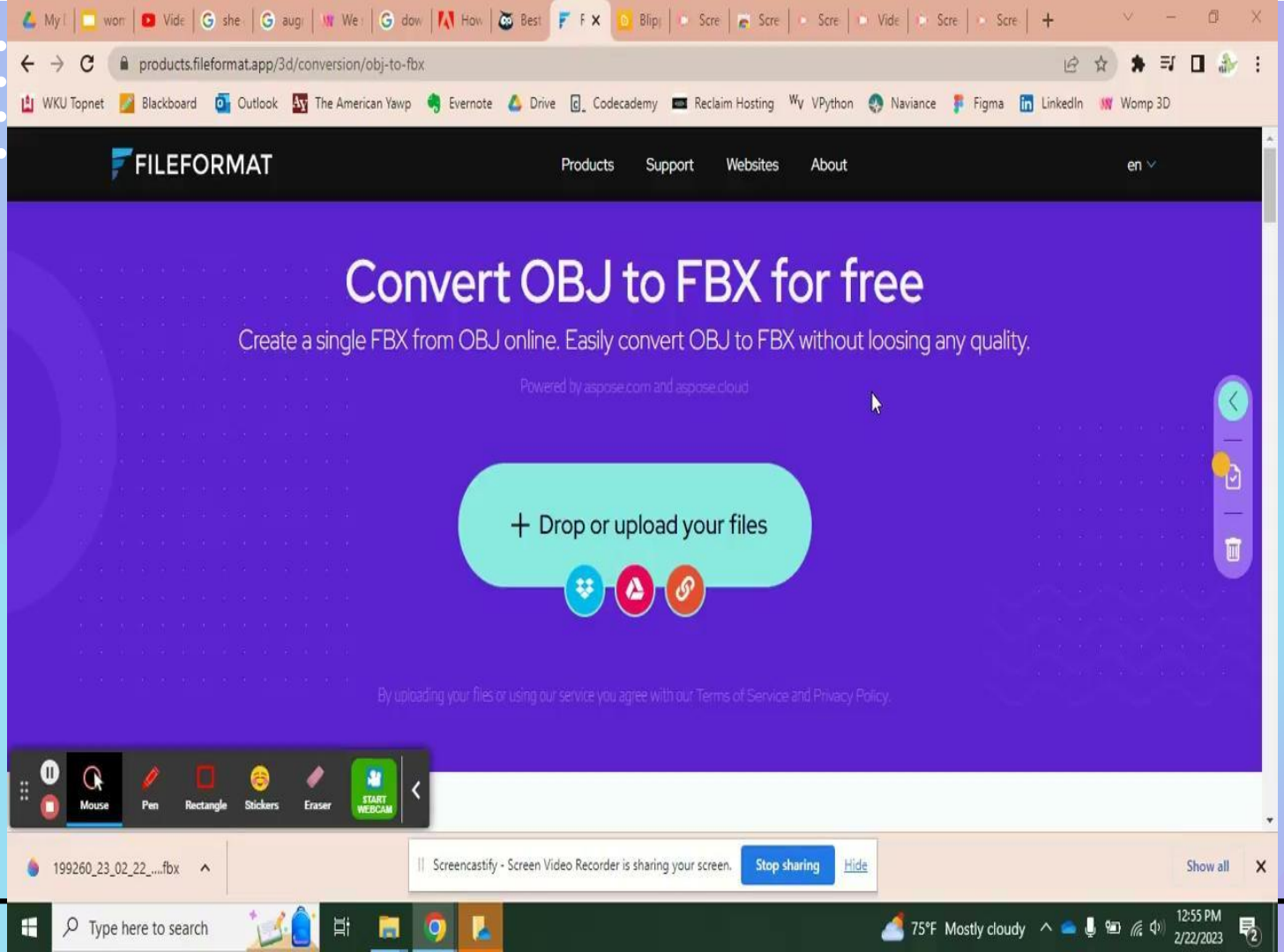
Step six: converting

Now that we have the **.OBJ** file, we need to convert it to a **.FBX** to put it into Blipp AR. We'll use an online file converter to do this.

- Navigate to **https://products.fileformat.app/3d/conversion/obj-to-fbx**
- Click on **Drop or Upload your files**
- Find your **.obj** file in the **Desktop** folder. Click on it, then click **Open.**
- Make sure the download file type is set to **.FBX**, then click **Convert.**
- Once your file is ready, click **Download.**

This new file only contains the information for the **shape** of your object and not the **colors**, so we will need to add those in later on.

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Step seven: Blipp setup

To put your model into augmented reality, we'll use Blipp AR as a development environment. Blipp is great because it's free, web-based, and generates a QR code to view your object in AR.

- Navigate to **https://blipps.blippar.com/hub/VXNlcjoyNDExNzA=/**
- Click on **Sign up with Google,** then log in to your google account
- Click on **Use BlippBuilder** on the left side.
- Go to **Create a new project,** then click **Surface.**

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Step eight: import

Once you've made a project in Blipp, it's time to put your model in!

- Click on the plus sign in the left panel, the click on **browse.**
- Find your **.FBX** file, click on it, then click **open**.
- Your model should show up at the top of the left panel. It will be white because the color hasn't been added back to it yet.
- Drag and drop your model into the scene.
- Click on the plus sign again, then find the **folder** that your **.OBJ** file saved to. There should be some **.PNG** images with pixelated colors. Import the one with the actual colors you used.

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Step nine: textures & scaling

Now that you have your model and its texture file in Blipp, all that's left to do is apply the texture to your model and scale it to the size you want!

- Click on your model, then click on **Add texture file** in the right panel.
- Click on the image you uploaded, and you should see the texture load on your model. It might not look quite like it did in Womp.
- You can move and scale your model now! Click **W** to move, **E** to rotate, and **R** to scale.

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blipps.blippar.com/hub/VXNIcjoyNDExNzA=/

WKU Topnet | Blackboard | Outlook | The American Yawp | Evernote | Drive | Codecademy | Reclaim Hosting | VPython | Naviance | Figma | LinkedIn | Womp 3D

SYSTEM WILL BE UNDER MAINTENANCE AND UNAVAILABLE ON THURSDAY, 23RD FEBRUARY 2023 BETWEEN 04:30GMT TO 05:30GMT

blippAR

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CW

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WEBAR SDK

BLIPPBUILDER

Welcome Carolina

Your projects

SORT BY

CREATE A NEW PROJECT

SCAN TO SEE

Mouse | Pen | Rectangle | Stickers | Eraser | START WEBCAM

Screencastify - Screen Video Recorder is sharing your screen. Stop sharing Hide

NEWCHURCH

Type here to search

Wind

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Optional step: add background

If you have extra time, you may want to create a background for your model in AR. You can do this by drawing your background out MS Paint, then uploading it to Blipp.

- Open MS Paint on your computer
- Use the painting tools to design a background you'd like to put behind your model
- Save the MS Paint file as a **.PNG** file and put it on your desktop
- Upload the .png file to BlippAR like you did the texture images
- Make a large sphere around your model (big enough so you could fit inside the sphere)
- Apply your png file as the sphere's texture

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Step ten: test and publish!

To make sure your model is doing what you want it to do in AR, you can test it before publishing. Once you're happy with how it looks, you can publish it to generate a QR code that will permanently house your AR creation!

- To test, click on **Preview Project** in the top right corner, then scan the QR code and view the project on your phone.
- To publish, click on **Publish** and scan the QR code with your phone. It's also a good idea to take a snip (windows + shift + s) to save your QR code for later.

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