Shelter Project Asset Build

Activity Description

Having created and exported your 3D object, the next step is to build the asset so that we can use it in Salesforce and in turn our virtual environment.

We will do this by using Unity to bundle our object.

Steps

1 Importing your Tinkercad creation

First you will need to download the Asset Bundle Builder (asset-bundle-builder.zip) from the Github repository:

https://github.com/pozil/salesforce-wef-vr/tree/master/workshop-material

Click to open the zip file, then click on **Download**.

Go to **Show in Finder** then **double click** on the file to extract it.

Run Unity, click **Open** then locate the Asset-Bundle-Builder project in Downloads, select and open.

Find the **Project** window (usually at the bottom in default view) then right-mouse click on the **Assets** folder and choose **Reveal in Finder.** Double click on the assets folder so that you can see the folders beneath.

Locate the downloaded Tinkercad zip file for your object then drag and drop the files from within the zip file to the **Models** folder within Assets.

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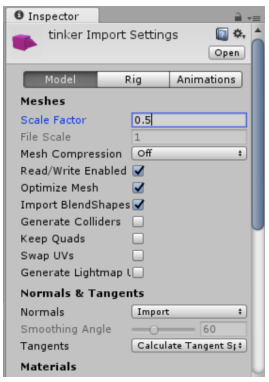
Back in Unity, if you open the Models folder within Project you should see your Tinkercad creation in the Assets section of the Project window.



Single click on the Tinkercad object, then view the **Inspector** window (usually on the right-hand side in default view).

Change the **Scale** to **0.05** to reduce the size of the object. Click away from that window, and choose **Apply** when prompted.

Place the object in the **Scene** window, by clicking, dragging and dropping.

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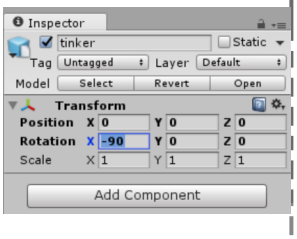
Back in the **Inspector** window, click the **Settings cog** within the **Transform** section then select **Reset**. Then change the x axis next to **rotation** to be **-90**.

This will ensure that your object is the correct orientation and level on the plane within the scene.



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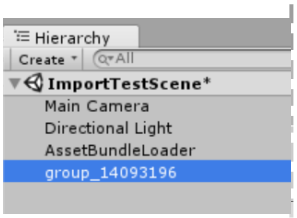
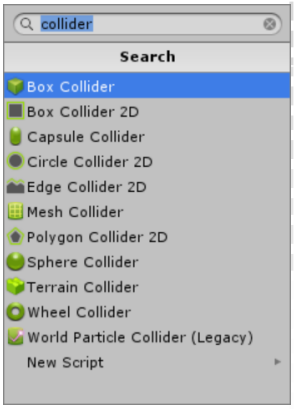
In the **Hierarchy** window, expand the object named **tinker**. Beneath you will see an object with a name that begins "group_" drag this group_ object and drop it in the top of the blank area beneath this list (a blue line should appear when you can drop) to separate them. Click **Continue**. This is called breaking the prefab.



It's important to keep things tidy, so delete the tinker object from Hierarchy.

With the group object selected in Hierarchy, go to the **Add Component** button near the bottom of the Inspector window.

Select **Box Collider** from the list. The Collider gives the object volume, allowing the object to be detected by the controller. Without this, you won't be able to pick up the object.



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Now you're ready to begin the process of Building your Asset Bundle.

First, we need to create a new prefab. A prefab is a template for a Unity object.

Within the **Projects** window, right-mouse click on the Assets folder, select **Create** > **Prefab**.

Rename the new item **tinker-prefab** (all lower case, exactly as written).

Drag and drop the group_ object, to the tinker-prefab asset that you have just created.

Once again, to keep things tidy, delete the object from the scene, by clicking on it and pressing delete.

The object should disappear from the scene window.

Next, go up to the Assets folder within the Project window and double-click on **ExportScene**. Click **Save**

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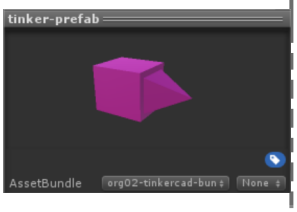

Click the tinker-prefab asset.

At the bottom of the Inspector window, you will see a dark section called **tinker-prefab**.

At the very bottom is AssetBundle, with a dropdown list next to it. Select **New** then type:

[orgname]-tinkercad-bundle-[number]

e.g. org02-tinkercad-bundle-01

> If you create more bundles you will adjust the name here by numbering them.

Nearly there now! Go to **Assets** on the menu bar, then select **Build All Asset Bundles for Android.**

> Once you have the hang of this, if you are feeling confident, you could create several objects in Tinkercad, create several prefabs ready for bundling, then build them all in one hit!

You will see a progress bar, once it has disappeared your bundle is ready for hosting online and pulling into your Salesforce App!

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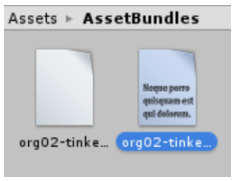

Within the **Assets** section of the **Project** window, expand **AssetBundles**.

For each bundle, there will be 2 files, one providing the manifest and the other which appears to be empty.

It is the **empty** one that we want to **keep**!

So, click to select the one **with the text** then **delete** it.

Right-mouse click on the remaining empty file, and choose **Reveal in Finder**.

Transfer this file to:
https://www.dropbox.com/request/K2HIjhwyGQBgyBTPAkxo

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Now we've sent it off, let's run a quick test. Switch to the **ImportTestScene** view within the Assets section of the Project window.

1) select the **AssetBundleLoader** object in hierarchy
2) open https://www.dropbox.com/s/dx92je774zi54up/links.txt?dl=0
3) Locate your bundle in the list and copy the URL, check the end of the URL to be sure it's your bundle
4) set the bundle path in the inspector, next to Bundle URL
5) Click the play button to play the scene
6) the object should appear in the game view
7) if the object does not appear check the console