

EXPORTING 3D MODELS TO A-FRAME



What is our GOAL for this MODULE?

The goal of this module is to export 3D models created on Tinkercad into A-Frame.

What did we ACHIEVE in the class TODAY?

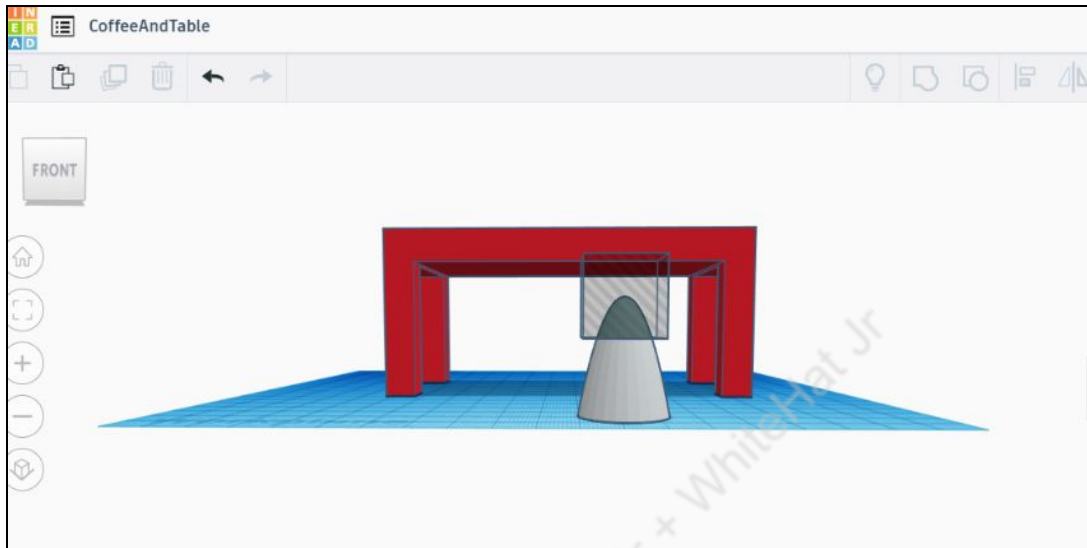
- Explored the different tools on Tinkercad.
- Created a 3D model using Tinkercad.
- Learned how to export 3D models in A-Frame.

Which CONCEPTS/CODING BLOCKS did we cover today?

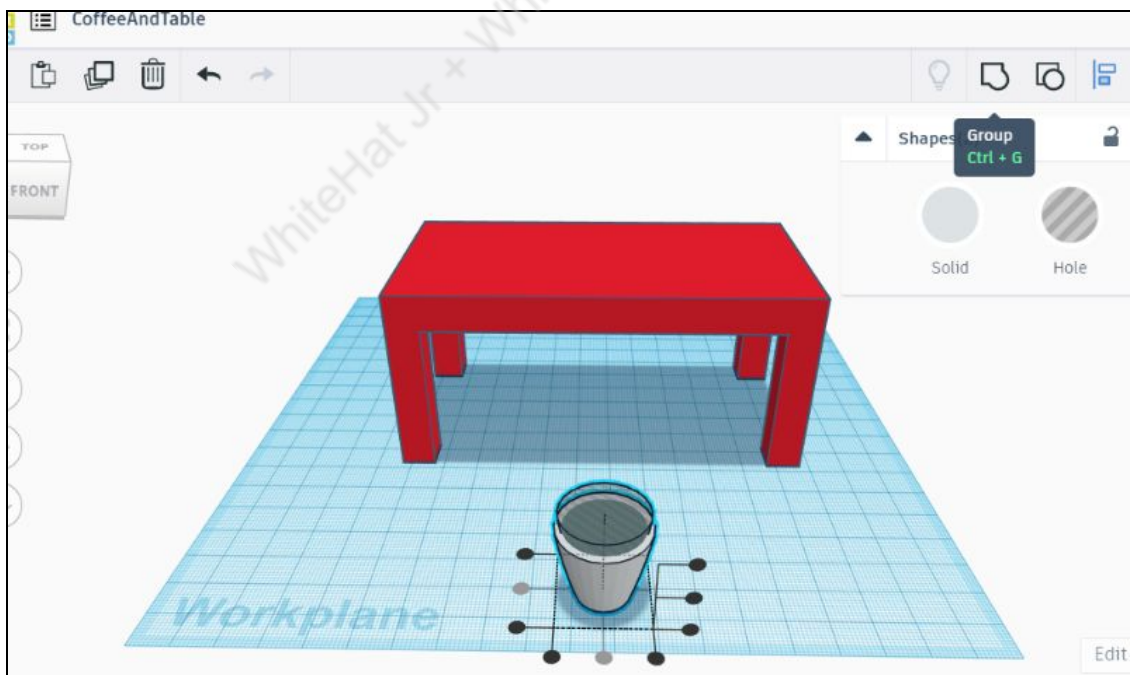
- Tinkercad tools for creating basic shapes, alignment, rotation, and grouping.
- <a-assets> and <a-entity> tags.

How did we DO the activities?

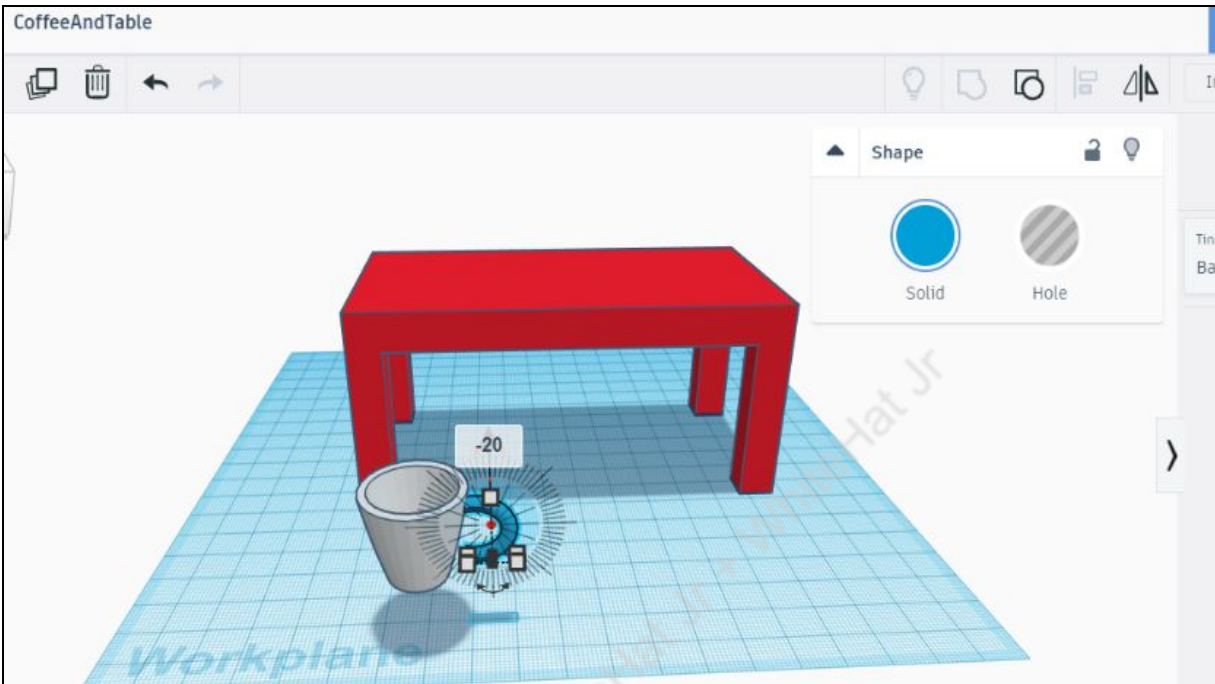
1. We learned how to create a coffee cup using a paraboloid shape.



2. We learned how to rotate the shape and made a hole in it



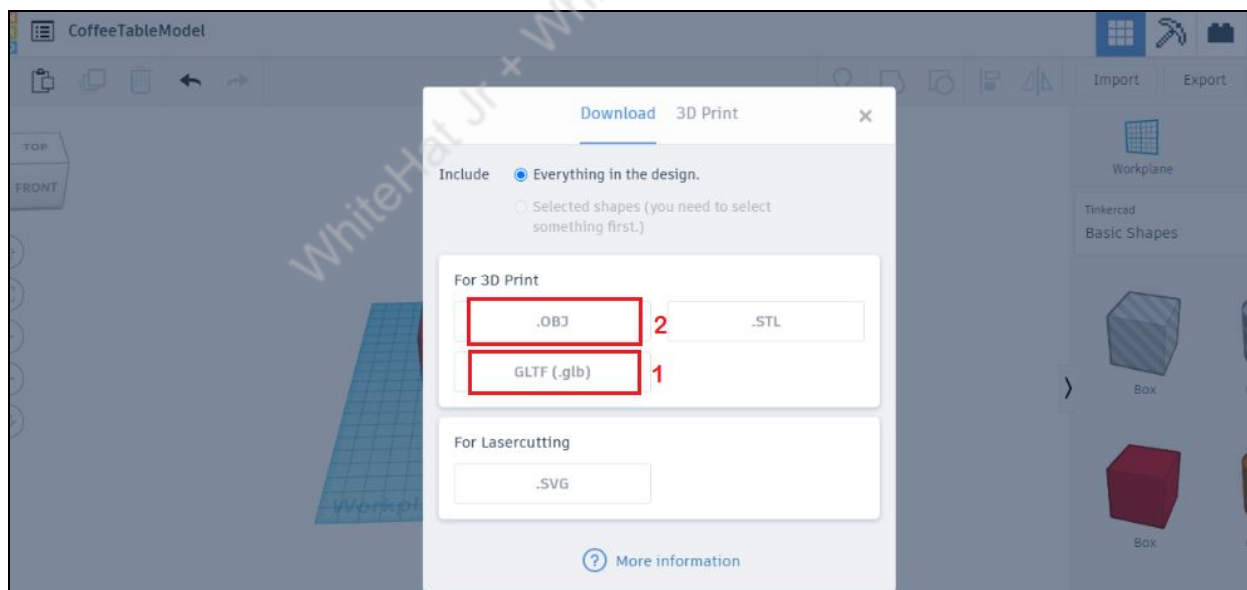
3. We learned how to make a handle for the cup using torus shape after rotating it.



4. We have learned how to create a 3D-model of cup and table to be used on A-frame.



5. We have learned how to export/download the .OBJ model from Tinkercad



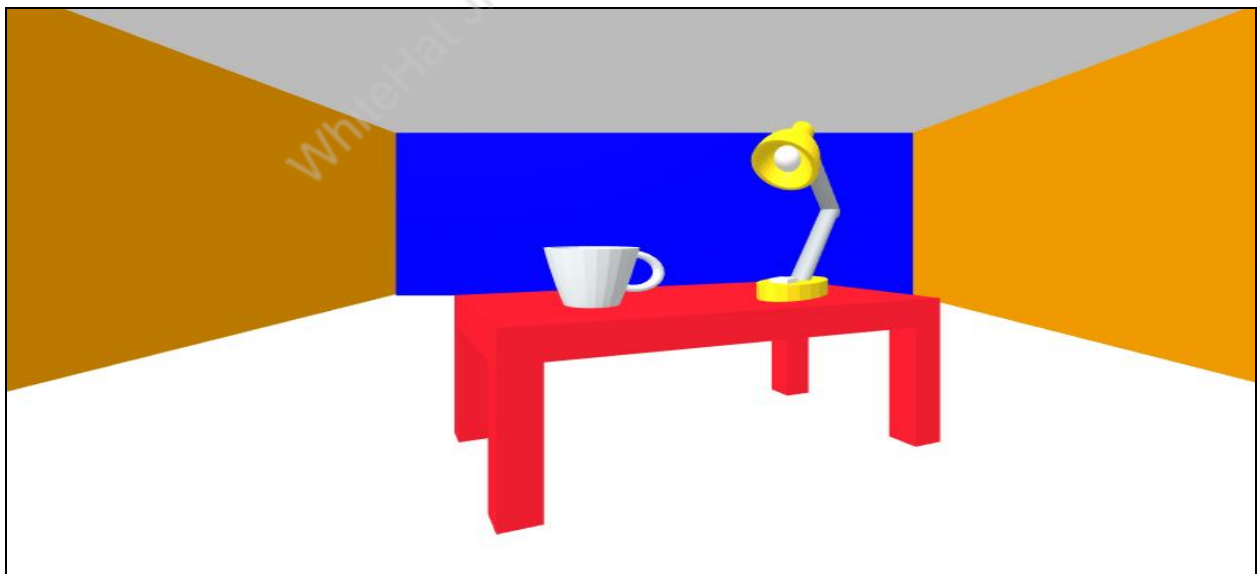
6. We have learned how to add them to assets

```
<!-------Asset Management----->
<a-assets>
  <a-asset-item id="table-obj" src="./models/obj/CoffeeTableModel/tinker.obj"></a-asset-item>
  <a-asset-item id="table-mtl" src="./models/obj/CoffeeTableModel/obj.mtl"></a-asset-item>
</a-assets>
```

7. We learned how to render obj models in A-Frame.

```
<!-------OBJ Models----->
<a-entity obj-model="obj: #table-obj; mtl: #table-mtl" position="5 0 0" rotation="-90 0 0" scale="0.1 0.1 0.1 "
></a-entity>
```

8. We learned to create a 3D model of the night-lamp along with a table and cup and used it in an A-frame scene.



We successfully created a 3D Table with a cup and a nightstand using Tinkercad and used

it in the A-Frame scene.

What's NEXT?

In the next class, we will be learning more about A-Frame components and how to write our own custom components.

EXTEND YOUR KNOWLEDGE:

1. You can refer to the below link to explore more about Tinkercad and A-Frame:
 - <https://www.tinkercad.com/learn/designs/lessons>
 - <https://aframe.io/docs/1.1.0/introduction/>

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