

INTRODUCTION TO WEB VR



What is our GOAL for this MODULE?

The goal of this module is to create basic 3D shapes using A-Frame Web VR.

What did we ACHIEVE in the class TODAY?

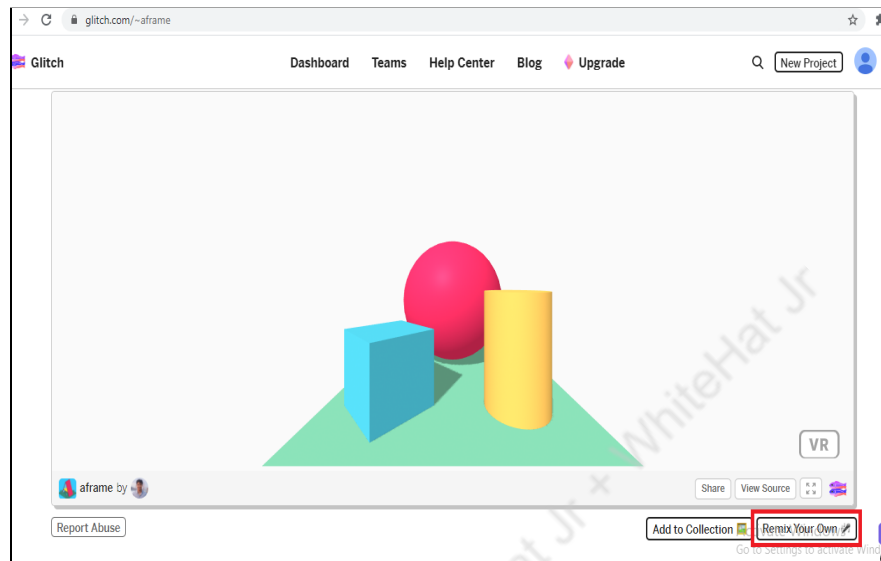
We learned how to add basic 3-D shapes over the web using the A-Frame framework.

Which CONCEPTS/CODING BLOCKS did we cover today?

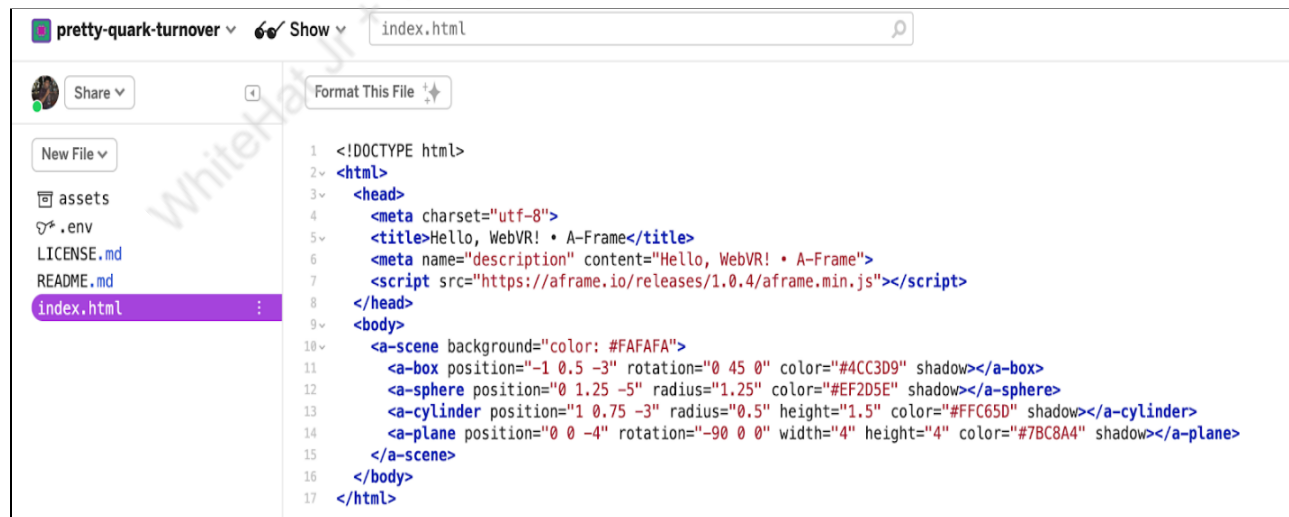
- A-Frame framework which is built on the three.js library. Three.js library is a javascript library for 3D on the Web.
- We used Aframe.io which is used to create web-based 3D, VR, and AR applications.
- A-Frame <a-scene> element
- A-Frame primitives such as <a-sphere> , <a-box> and <a-cylinder>
- Attributes such as rotation and position.

How to do the activities?

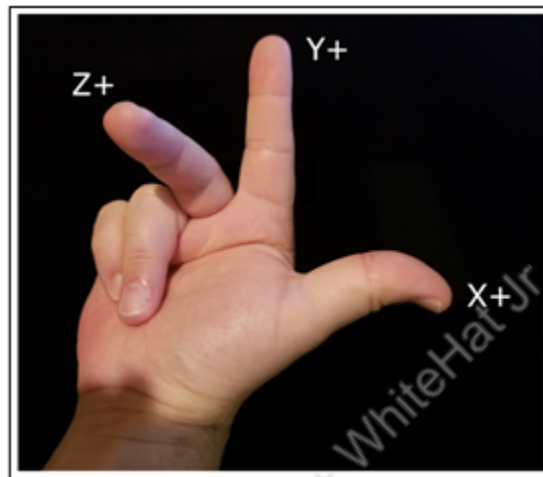
1. We explored the “Hello WebVR” example aframe.io by “remixing” the project on Glitch.



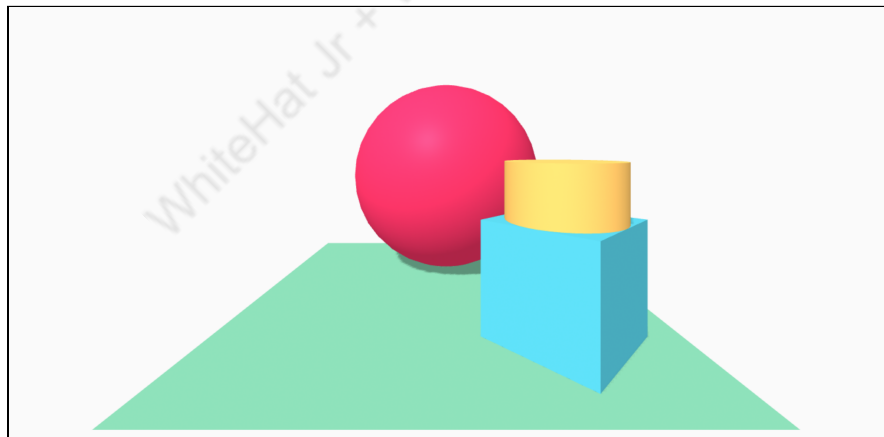
2. We learned how writing an A-Frame program is similar to HTML.



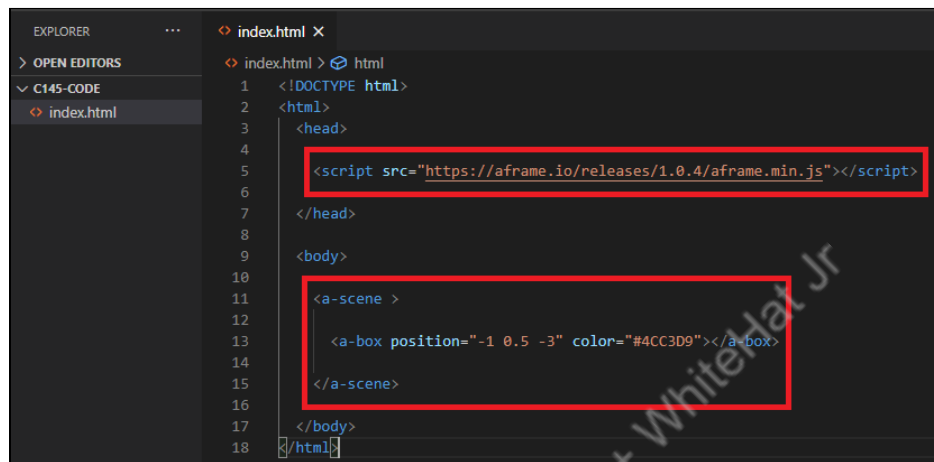
3. We learned about 3 dimensions x, y, and z, and also how to visualize them using the “Right Hand Thumb” rule.



4. We learned about different primitives and their attributes in A-Frame.
- On changing the position attribute of the a-box to 1 0.5 -3.

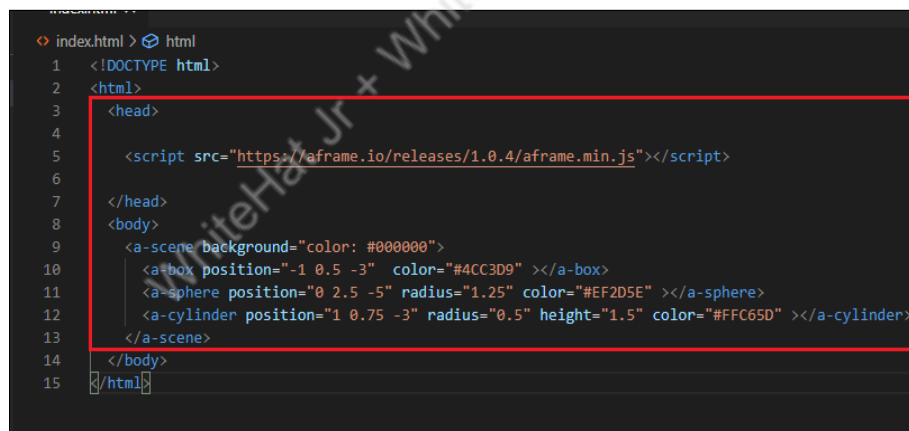


5. We learned how to create 3D object using VS code editor.
- Included aframe.io library and <a-scene>tag.

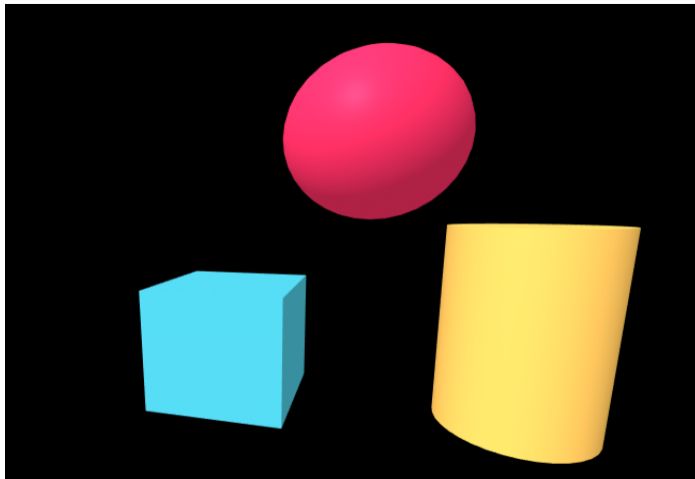


```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <script src="https://aframe.io/releases/1.0.4/aframe.min.js"></script>
5   </head>
6   <body>
7     <a-scene>
8       <a-box position="-1 0.5 -3" color="#4CC3D9"></a-box>
9     </a-scene>
10  </body>
11 </html>
```

- Added various primitives and attributes.



```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <script src="https://aframe.io/releases/1.0.4/aframe.min.js"></script>
5   </head>
6   <body>
7     <a-scene background="color: #000000">
8       <a-box position="-1 0.5 -3" color="#4CC3D9"></a-box>
9       <a-sphere position="0 2.5 -5" radius="1.25" color="#EF2D5E"></a-sphere>
10      <a-cylinder position="1 0.75 -3" radius="0.5" height="1.5" color="#FFC65D"></a-cylinder>
11    </a-scene>
12  </body>
13 </html>
```



We were able to create 3D dimensional shapes using the A-Frame Web VR framework.

What's NEXT?

In the next class, we will be creating the Sun and the planets. We will learn how to animate planets to revolve around the Sun.

EXTEND YOUR KNOWLEDGE:

You can refer to the below link for more information

<https://aframe.io/docs/1.1.0/introduction/>.