AvatARs
PNCA
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Syllabus

i. What Is WebAR?

WebAR enables Augmented Reality in the browser, meaning that our scenes can be written in HTML and shared via a simple link. For our purposes we will be using the AR.js library (based on ARtoolkit) in addition to A-Frame.

I. A-Frame

A-Frame is currently the most intuitive webVR/AR development library so naturally I encourage becoming familiar with it first before moving on to more flexible builds like Three.js

To add A-Frame to your project, simply navigate to the introduction page on A-Frame's Docs, there you will be provided with a script link to the latest version. Copy and paste this code into the head of your HTML file

II. HTML

A-Frame abstracts THREE.js javascript, therefore allowing us to create complex 3D webapps with simple markdown, much like the 2D web. Therefore it is important that we grasp the most basic concepts of HTML before moving forward.

III. Navigating 3D Space - Blender

Blender is a very useful tool for creating, editing, and converting 3D files for use in VR. The basic interface and navigation of all 3D tools generally tend to act in a similar fashion, which comes in handy when switching between Blender and A-frame's 3D Editor.

IV. Hello AR

We will be writing our first AR script using the Hiro and Kanji Fiduciary markers. Code can be found on the class github page listed below.

V. Using markers as masks

After developing our first AR scene, we will add custom 3D models and learn how to animate them in the real world.

Resources:
https://github.com/sam-liooil/MakeThinkCode-WebVR