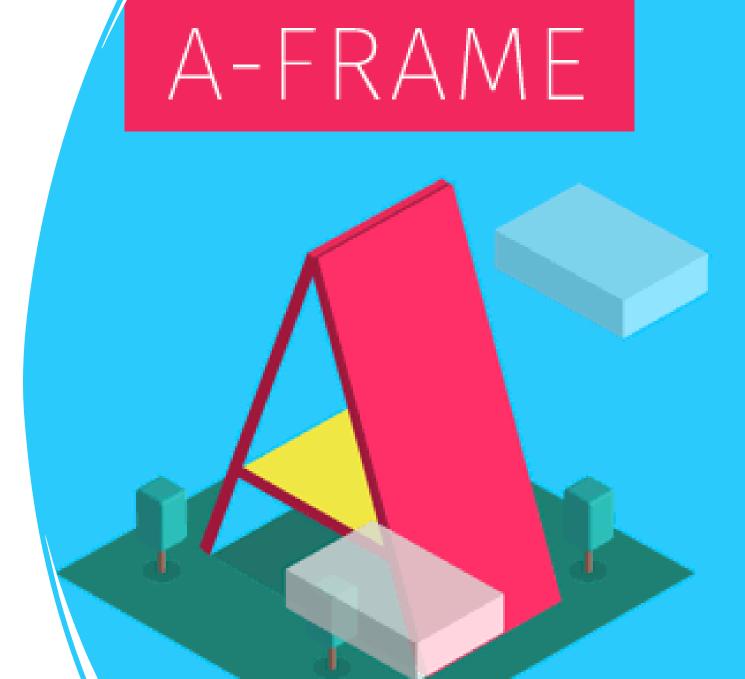


A-FRAME

- Web framework for building virtual reality (VR) experiences.
- A-Frame is based on top of HTML and WebGL
- Is an independent open source project.
- Originally conceived within Mozilla and now maintained by the co-creators of A-Frame within Supermedium.



Why A-FRAME?

- VR Made Simple
- Declarative HTML
- Entity-Component Architecture
- Cross-Platform VR
- Performance
- Visual Inspector
- Components
- Proven and Scalable

WebXR

- WebXR is a JavaScript API for creating immersive 3D, virtual reality (and augmented reality) experiences in your browser.
- A-Frame uses the WebXR API to gain access to VR headset sensor data (position, orientation) to transform the camera and to render content directly to VR headsets.



What Browsers Support A-FRAME?

- Safari for iOS
- Firefox for iOS
- Chrome for Android
- Samsung Internet
- UC Browser

Which VR Headsets Does A-Frame Support?

- HTC Vive
- Oculus Rift
- Oculus Quest
- Oculus Go
- Google Daydream
- Samsung GearVR
- Vive Focus

What are we making?

FPS Zombie slayer game for mobile.

What do we need?

- Laptop/Tablet
- Mobile device
- Glitch account



Basic Template

HTML BASIC TEMPLATE

• CDN

<script
src="https://aframe.io/releases/1.4.0/aframe.min.js"></scri
pt>

Initialize the scene

<a-scene>

</a-scene>

Primitive Elements

<a-box position="-1 0.5 -3" rotation="0 45 0" color="#4CC3D9"></a-box>

<a-sky radius="10" color="#F00"></a-sky>

Changing Properties

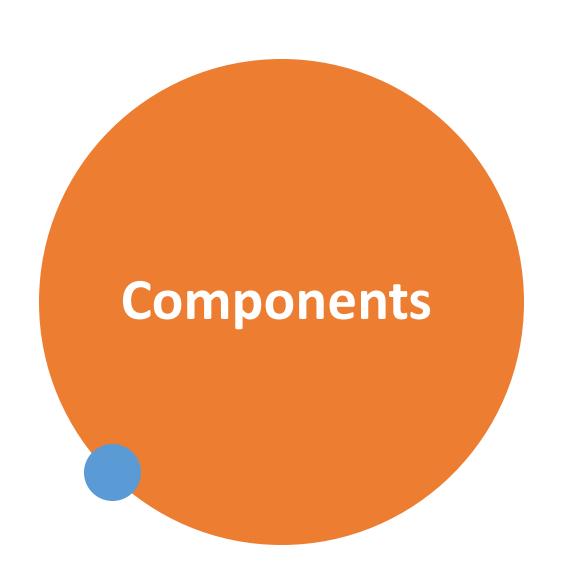
<a-box position="-1 0.5 -3" rotation="0 45 0" color="#4CC3D9"></a-box>

<a-sky radius="10" color="#F00"></a-sky>

Visual Inspector

Windows: <ctrl> + <alt> + i

MAC: <ctrl>+ <option> + i



- Components of A-Frame's entitycomponent framework are JavaScript modules that can be mixed, matched, and composed onto entities to build appearance, behavior, and functionality.
- Components are configurable, reusable, and shareable.
- Most code in an A-Frame application should live within components.

Interactions

- 2D Browser Events
- Gaze Events
- Controller

(click, mouseenter, mouseleave, touchstart, touchend)



Sound

The sound component is positional.

<a-sound src="src: url(click.mp3)" autoplay="true" position="025"></a-sound>

Asset Management System

Preload and Cache assets for better performance.

```
<!-- Asset management system. -->
  <a-assets>
  <a-asset-item id="horse-obj" src="horse.obj"></a-asset-item>
  <a-asset-item id="horse-mtl" src="horse.mtl"></a-asset-item>
  </a-assets>
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```
a-scene {
height: 300px;
width: 600px;
<body>
<div id="myEmbeddedScene">
 <a-scene embedded>
  <!-- ... -->
 </a-scene>
</div>
https://aframe.io/docs/1.4.0/components/em
bedded.html
```

Showcase

- https://github.com/bryik/aframe-ball-throw
 - https://accessmars.withgoogle.com
- https://d1vlj71acq3rf7.cloudfront.net/index.html



Thanks!

Join the NuXR Discord group - https://discord.gg/7EZUkese