



# Immersion into VR with A-Frame

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Fernando Ramos

# Fernando Ramos



- Software engineer
- Frontend 4+ years
- Cognizant 2+ years
- Angular & React <3

*“If I work hard, I can eat delicious things”*

# Agenda

1. Introduction
2. A-Frame
3. Demo streaming

# Agenda

**1. Introduction**

2. A-Frame

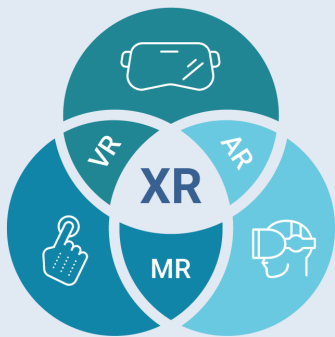
3. Demo streaming

# What is VR?



- Sensorial immersion
- 60FPS
- Delay < 20ms
- Vision range > 110°
- 3D audio

# WebXR



- Find compatible VR or AR output devices
- Render a 3D scene to the device at an appropriate frame rate
- Mirror the output to a 2D display
- Represent the movements of input controls

[https://developer.mozilla.org/en-US/docs/Web/API/WebXR\\_Device\\_API](https://developer.mozilla.org/en-US/docs/Web/API/WebXR_Device_API)

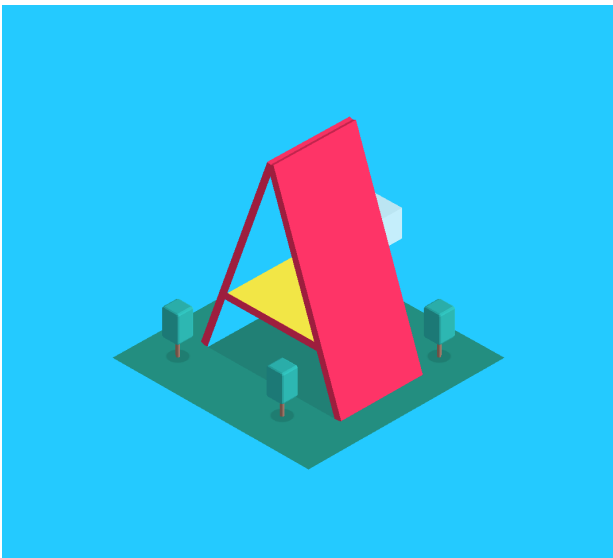
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# A-Frame



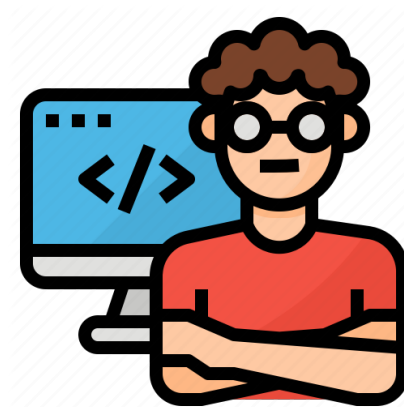
- >> TreeJS >> WebGL
- Declarative HTML
- ECS architecture
- Cross-Platform VR
- Visual inspector

<https://aframe.io/>



# Getting Started

1. Primitives
2. Textures
3. Inspector
4. Animations
5. Entity component system



# ECS in A-Frame

```
<a-entity  
  ${componentName}="${propertyName1}: ${propertyValue1};  
    ${propertyName2}: ${propertyValue2}"  
></a-entity>
```

```
<a-entity  
  geometry="primitive: sphere; radius: 1.5"  
  light="type: point; color: white; intensity: 2"  
  material="color: white; shader: flat; src: glow.jpg"  
  position="0 0 -5"  
></a-entity>
```

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# Any Questions or comments?

# Links of interest

- ❑ Documentation: <https://aframe.io/docs/1.1.0/introduction/>
- ❑ Guides and playground:
  - <https://www.youtube.com/channel/UCK2U85UiKw45EBAUS1YU85Q>
  - <https://aframe.io/aframe-school>
- ❑ For more content:
  - <https://aframe.io/blog/>
  - <https://www.npmjs.com/search?q=aframe-component&page=1&ranking=optimal>
- ❑ ES6: <https://github.com/stlewis/aframe-es6-boilerplate>
- ❑ Best practices: <https://aframe.io/docs/1.1.0/introduction/best-practices.html>



Thank you!

