ROAD MAP TO START AR/VR



Introduction to AR/VR Concepts

- Objective: Understand the fundamentals of Augmented Reality (AR) and Virtual Reality (VR).
- Resources:
- AR vs VR: What's the Difference?
- Introduction to Augmented Reality and Virtual Reality by Coursera

Basics of Web Development (HTML, CSS, JavaScript)

- Objective: Learn the foundational skills needed for creating web-based AR/VR experiences.
- Resources:
- HTML & CSS for Beginners
- JavaScript Basics by Mozilla
- JavaScript 30 by Wes Bos

Introduction to A-Frame

- Objective: Get familiar with A-Frame, a web framework for building VR experiences.
- Resources:
- A-Frame Official Documentation
- Introduction to A-frame
- Building VR Websites with A-Frame

Setting Up Your Development Environment

- **Objective:** Set up the tools needed to start developing AR/VR applications using A-Frame.
- Resources:
- A-Frame Installation Guide
- Visual Studio Code (Recommended IDE)
- Live Server Extension for Visual Studio Code (For local development)

Building Your First VR Scene

- Objective: Create a basic VR scene using A-Frame.
- Tasks:
- Create a simple VR scene with a sky, ground, and basic 3D objects.
- Learn how to position and rotate objects.
- Resources:
- Hello World Example by A-Frame
- 3D Models in A-Frame
- · experiences.
- Resources:
- HTML & CSS for Beginners

- JavaScript Basics by Mozilla
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- 3D Models in A-Frame
- WebVR Rocks

Some Youtube channels

For Blender

Blender Guru

<u>Blender Guru</u> - Known for beginner-friendly tutorials, including the famous "Blender Donut" series.

CG Geek

<u>CG Geek</u> - Offers tutorials on creating realistic scenes and objects in Blender.

Ducky 3D

<u>Ducky 3D</u> - Focuses on abstract and motion design tutorials using Blender.

Blender Secrets

Blender Secrets - Provides quick tips and tricks for more advanced Blender users.

Grant Abbitt

<u>Grant Abbitt</u> - Great for beginners, with lots of character modeling and animation tutorials.

Blender Nesho

<u>Blender Nesho</u> - Covers a wide range of Blender topics, including modeling, texturing, and animation.

SouthernShotty

<u>SouthernShotty</u> - Offers tutorials on stylized 3D art and how to use Blender in creative ways.

-For Unity

Brackeys

<u>Brackeys</u> - One of the most popular Unity channels, offering a wide range of tutorials from beginner to advanced levels, covering scripting, game design, and more.

Unity

<u>Unity</u> - The official Unity channel, featuring tutorials, talks, and showcases of what's possible with Unity.

Code Monkey

<u>Code Monkey</u> - Focuses on Unity tutorials, game mechanics, and programming, with a practical approach to game development.

Blackthornprod

<u>Blackthornprod</u> - Offers tutorials on creating 2D and 3D games in Unity, along with game dev tips and tricks.

GameGrind

<u>GameGrind</u> - Provides Unity tutorials for beginners, focusing on creating simple games and understanding Unity's tools.

Sykoo

<u>Sykoo</u> - Covers Unity tutorials with a focus on indie game development and how to create beautiful game environments.

Mix and Jam

<u>Mix and Jam</u> - Recreates popular game mechanics from well-known games using Unity, great for learning through practical examples.

GameDevHQ

<u>GameDevHQ</u> - Offers Unity tutorials, courses, and tips on game development, with a strong focus on coding and best practices.

DRIVE LINK FOR A-FRAME

A- FRAME

Roadmap to WebVR



<u>Introduction</u>		Part 2	
<u>Documentations</u>		Mixins	6 mins 21 secs
		Sky And 360° Image	8 mins 59 secs
		Camera Primitive	11 mins 27 secs
HTML	Duration	Loading And Displaying 3D Models	13 mins 44 secs
Basic Structure of a Website	11 mins 46 secs	Animating Objects	15 mins 23 secs
Title, Script, Link & Meta Tags	8 mins 49 secs	Adding Lights And Shadows	16 mins 59 secs
Headings & Paragraphs	13 mins 42 secs	The A-Frame Inspector	16 mins 11 secs
Img and Anchor tags	14 mins 39 secs	Cursor Primitive And Cursor Component	7 mins 52 secs
		Event-Set Component	9 mins 9 secs
		Gaze-Based Interactions	7 mins 53 secs
		Hand Controls	11 mins 44 secs
A-Frame	Duration	Selective Intersections	9 mins 27 secs
Part 1		Controller-Based Interactions	18 mins 14 secs
Transformations, Primitives & Textures	17 mins 30 sec	Interaction Gestures	8 mins 38 secs
Basic Primitives And HTML Attributes	5 mins 26 secs	Physics And Collisions	10 mins 59 secs
ECS Architecture	7 mins 30 secs	Keyboard Input	11 mins
Position And Relative Positioning	9 mins 04 secs	Sound And Positional Audio	11 mins 47 secs
Rotation And Relative Rotation	4 mins 54 secs	<u>Video</u>	4 mins 38 secs
Scale, Relative Scale, And Reflection	9 mins 28 secs	360° Video	5 mins 15 secs
Image Textures And Materials	15 mins 45 secs	Stereoscopic images	6 mins 40 secs
Image And Curved-Image Primitives	19 mins 04 secs		
Breaking Primitives Down	9 mins 22 secs	_	
Ground	3 mins 58 secs		
Animation in Aframe	10 mins 20 secs		
Custom Component-I	13 mins 01 sec		
Init, setAttribute (Custom Component-II)	12 mins 17 secs		
Custom Component-III	7 mins 18 secs		
Cursor and Gaze Controls	10 mins 11 secs		