

Lesson: Create an Auto Walk-Through Scene in A-Frame (No JavaScript)

Learning Objectives

By the end of this session, students will:

- Understand A-Frame scene structure (, ,)
- Load 3D models and textures
- Use the animation component to move the camera automatically
- Build a simple VR tour that starts on load — no JavaScript required

Requirements

- VS Code or text editor
- Live Server extension
- Folder structure:

project/assets/skytexture.jpeg, victorian_house.glb, striga.glb

Step 1 — Base Scene

Create index.html and paste the following:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>A-Frame Auto Walk-Through</title>
  <script src="https://aframe.io/releases/1.6.0/aframe.min.js"></script>
</head>
<body>
  <a-scene>
    <a-assets>
      
      <a-asset-item id="house" src="victorian_house.glb"></a-asset-item>
      <a-asset-item id="striga" src="striga.glb"></a-asset-item>
    </a-assets>

    <a-sky src="#sky"></a-sky>
    <a-plane rotation="-90 0 0" width="100" height="100"
color="#222"></a-plane>
    <a-entity light="type: ambient; intensity: 0.5"></a-entity>
    <a-entity light="type: directional; color: #fff; intensity: 1"
position="2 10 -10"></a-entity>
    <a-gltf-model src="#house" position="0 0 -20" scale="2 2
2"></a-gltf-model>
    <a-gltf-model src="#striga" position="0 0 -27" scale="90 90 90"
animation-mixer></a-gltf-model>
```

```

    <a-entity id="cameraRig" position="0 1.6 10"
      animation="property: position; to: 0 1.6 -20; dur: 10000; easing:
easeInOutSine; autoplay: true;">
      <a-camera look-controls wasd-controls-enabled="false"></a-camera>
    </a-entity>
  </a-scene>
</body>
</html>

```

Step 2 — Explanation

Component	Purpose
<a-scene>	Main 3D environment container
<a-assets>	Preloads textures and models before rendering
<a-sky>	Adds a 360° sky texture
<a-plane>	Creates a flat ground
<a-gltf-model>	Loads 3D GLB models
<a-entity light>	Adds lighting
<a-camera>	Viewer's perspective
animation	Moves the camera rig automatically

Step 3 — Try Adjustments

- Change duration: dur: 20000 for slower walk
- Change destination: to: 0 1.6 -40 for longer path
- Change easing: linear for constant speed

Step 4 — Looping Example

```

animation="property: position; dir: alternate; loop: true; to: 0 1.6 -20;
dur: 15000; easing: easeInOutSine;"

```

Reflection Questions

1. Why animate the camera rig instead of the camera?
2. What happens if autoplay is set to false?
3. How could you create a more complex path?