

VIRTUAL/AUGMENTED REALITY FOR WEB

Christina Kayastha
Senior Software Engineer
Vistaprint, Cimpres
[@christikaes](#)

HELLO WORLD!

My name is Christina (:

Christina Kayastha
Senior Software Engineer
Vistaprint, Boston, MA
@christikaes

I'm all about:

- Icecream
- Community Events
- Bleeding Edge Technology



1

USER INTERFACE



2

EXPERIENCE DESIGN



3

VIRTUAL/AUGMENTED REALITY



4

BUILD FOR MOBILE



5

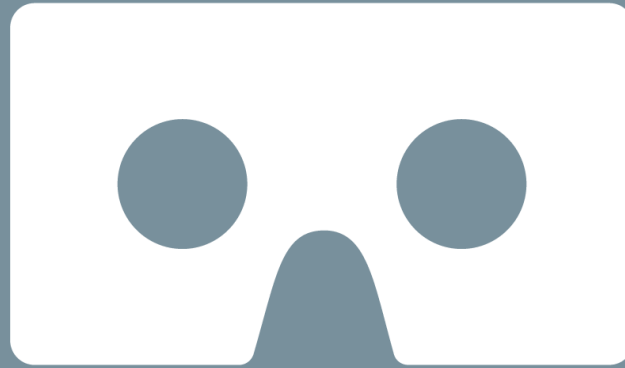
MANAGE STATE



6

AUTH & DATABASE





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Christina Kayastha
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VR/AR

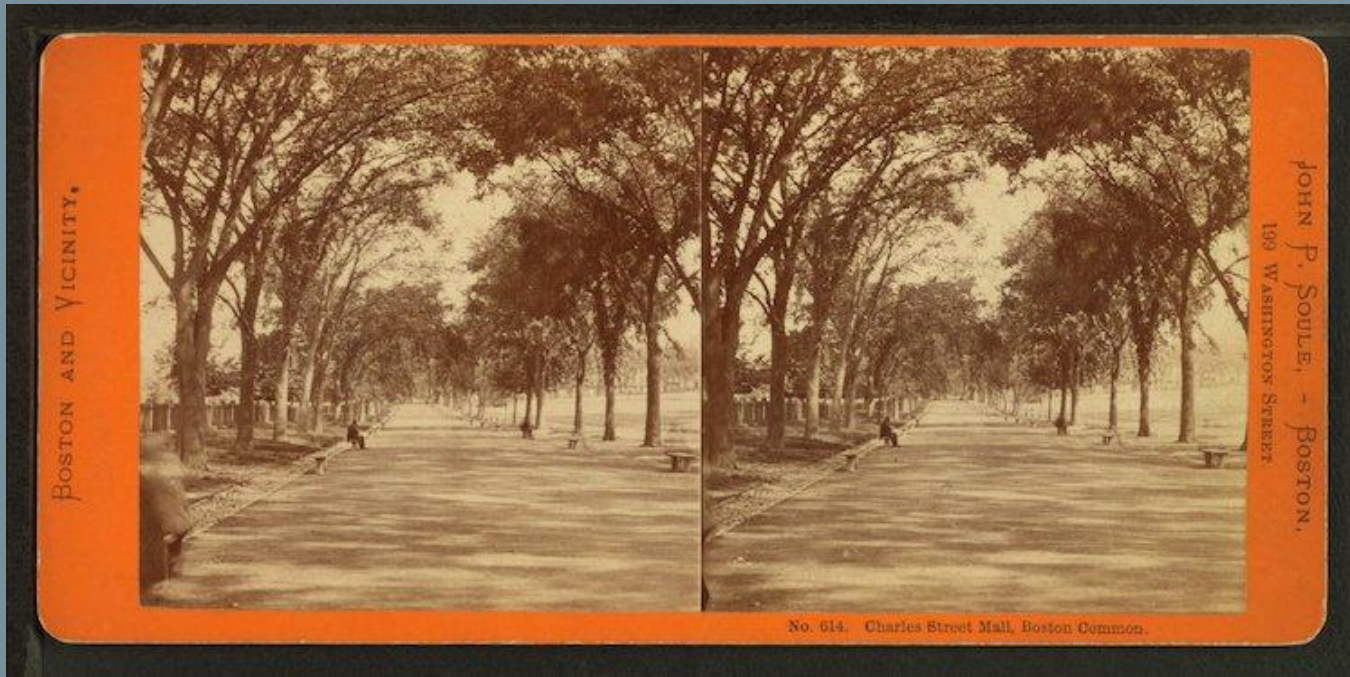
WHAT is it ?

HOW can I use it ?

WHY should I care ?



Why should I care about
VIRTUAL/AUGMENTED
REALITY?



When was the Stereoscopic Photo first made?

A) 1920

B) 1940

C) 1960



This device was made in 1950. What was it called?
A) Sensorama B) Sensebox C) Virtual sphere



What was this device called?
A) Telesphere Mask B) Vision Box



When was the VPL Data Suit made?

A) 2000

B) 1990

C) 1980





What is the VR/AR Experience of the FUTURE ?



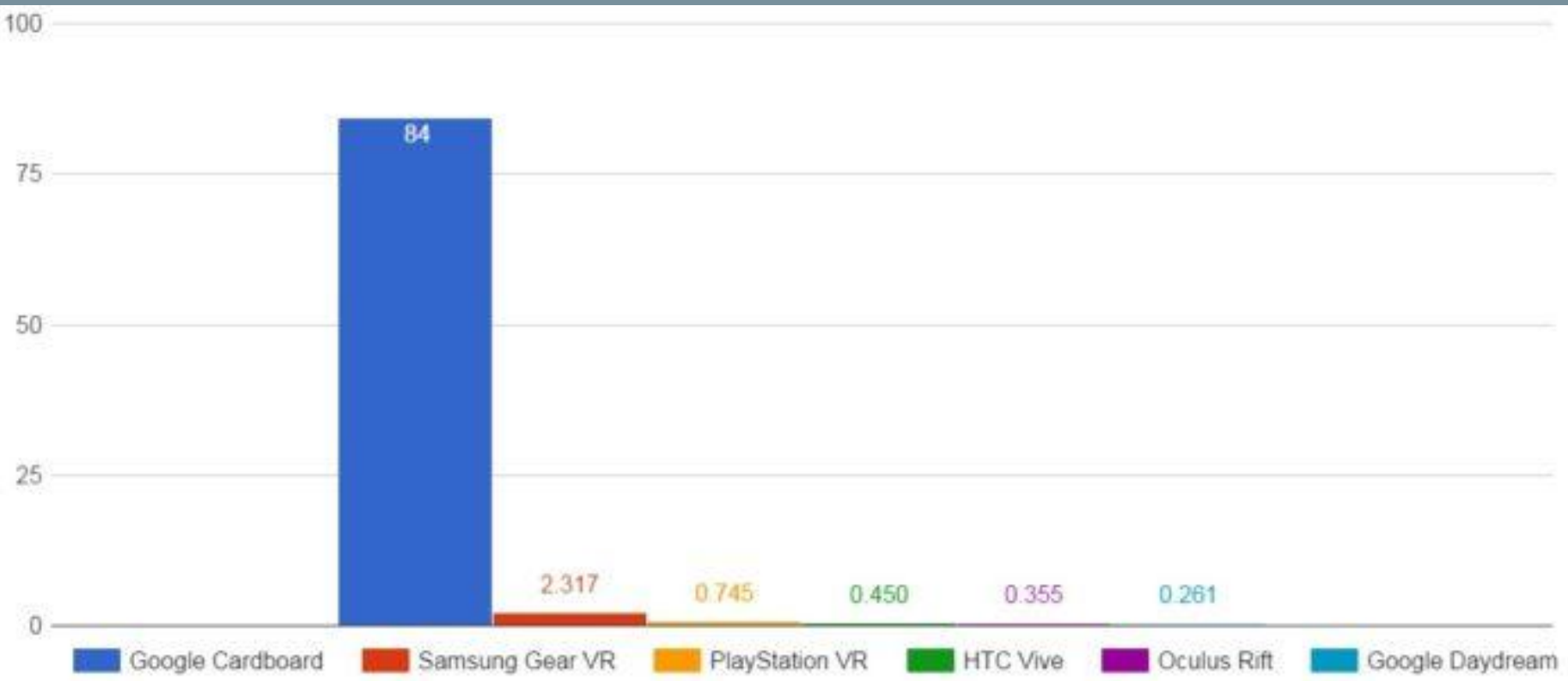






 wayfair®

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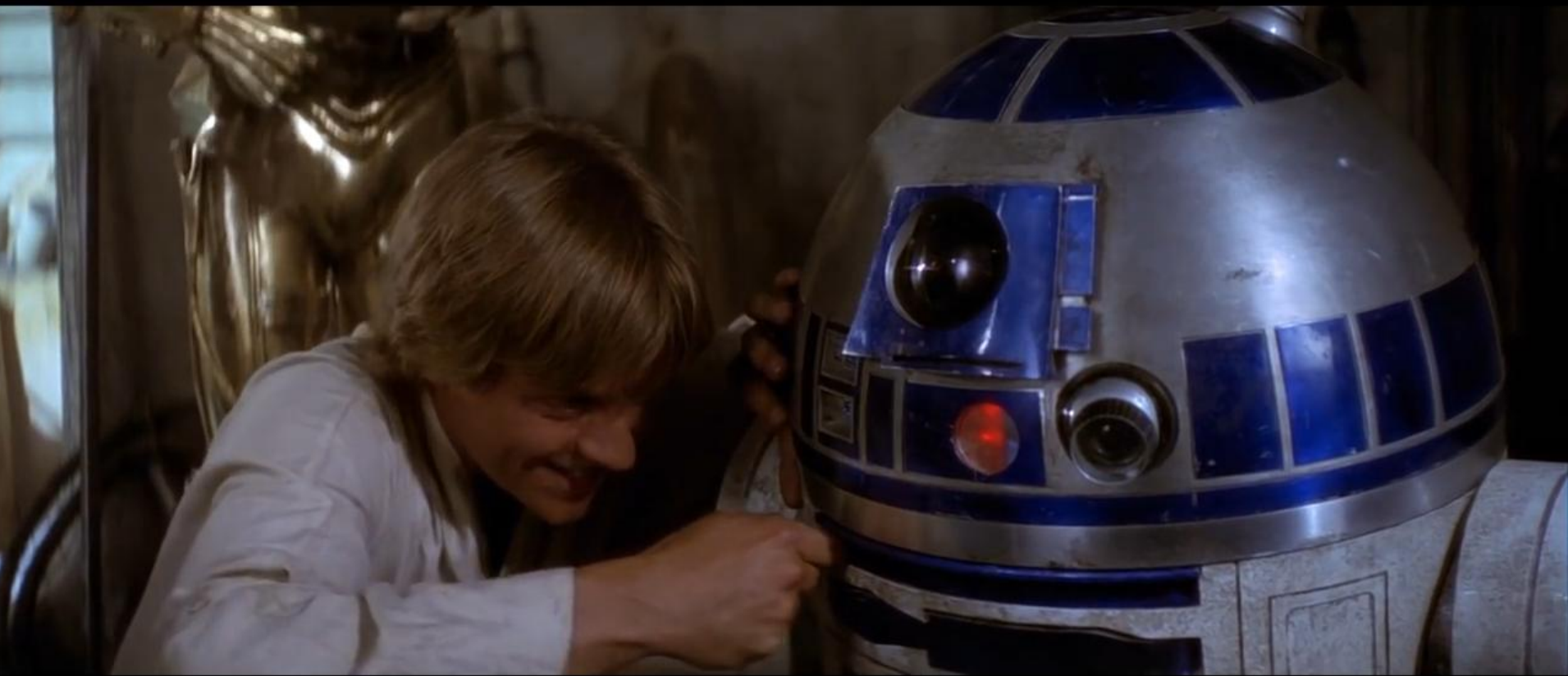


As Web Engineers, we
can reach the majority of
VR/AR consumers who
are adopting low-end
mobile devices



What is
WEB VR/AR
anyway?







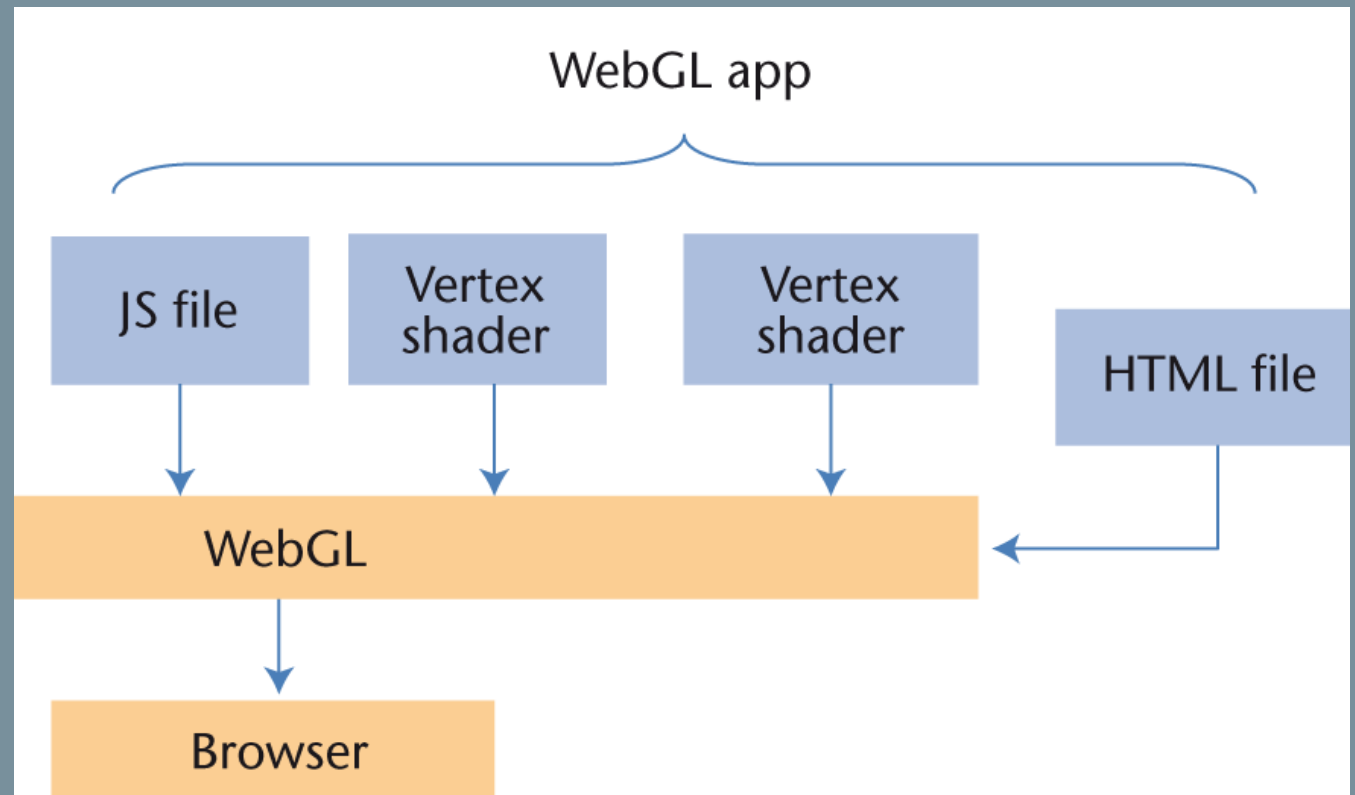


Web VR/AR brings the
power of VR/AR to the
browser!



How can I get started
with WEB VR/AR ?

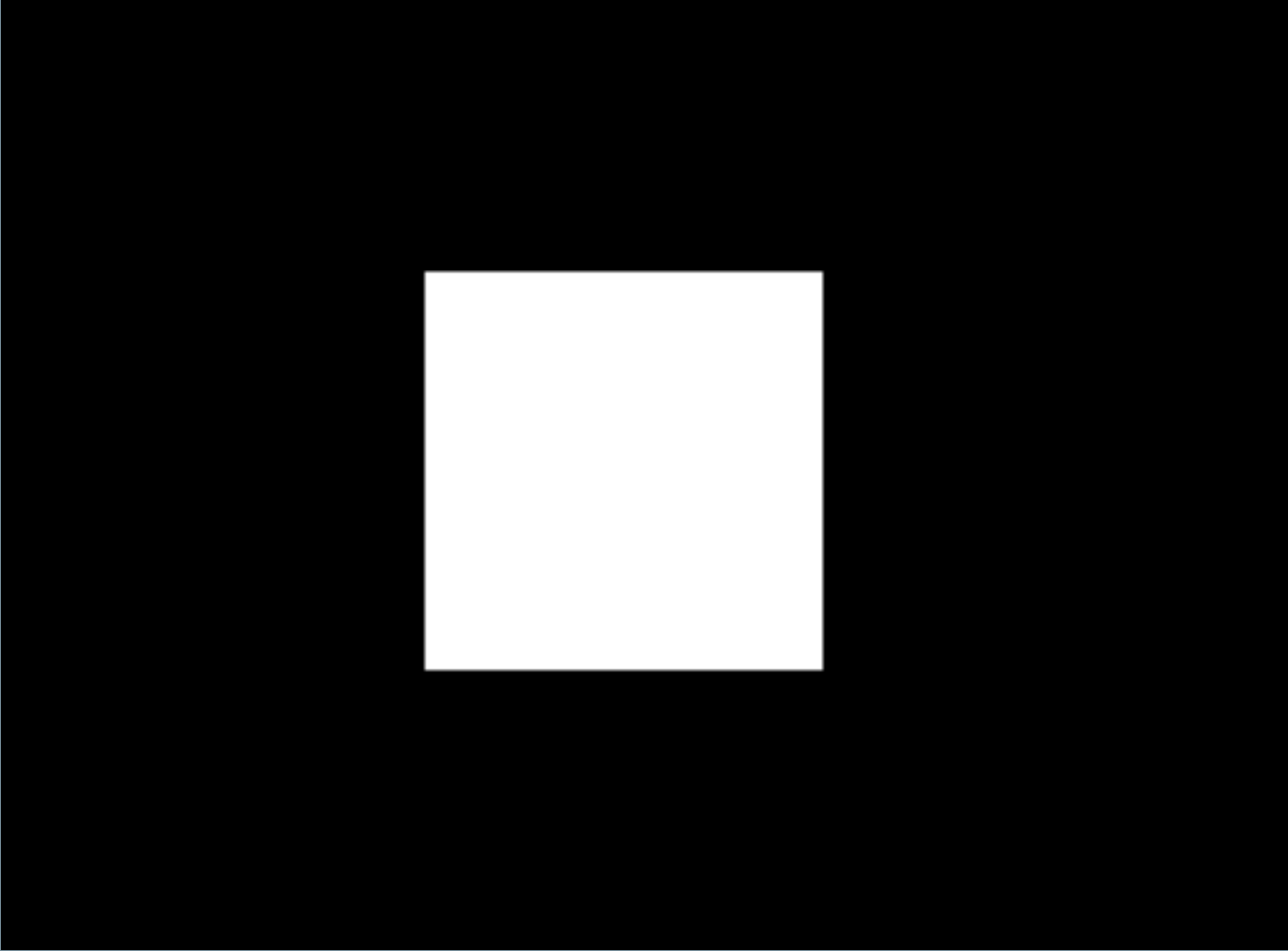
WEB GL



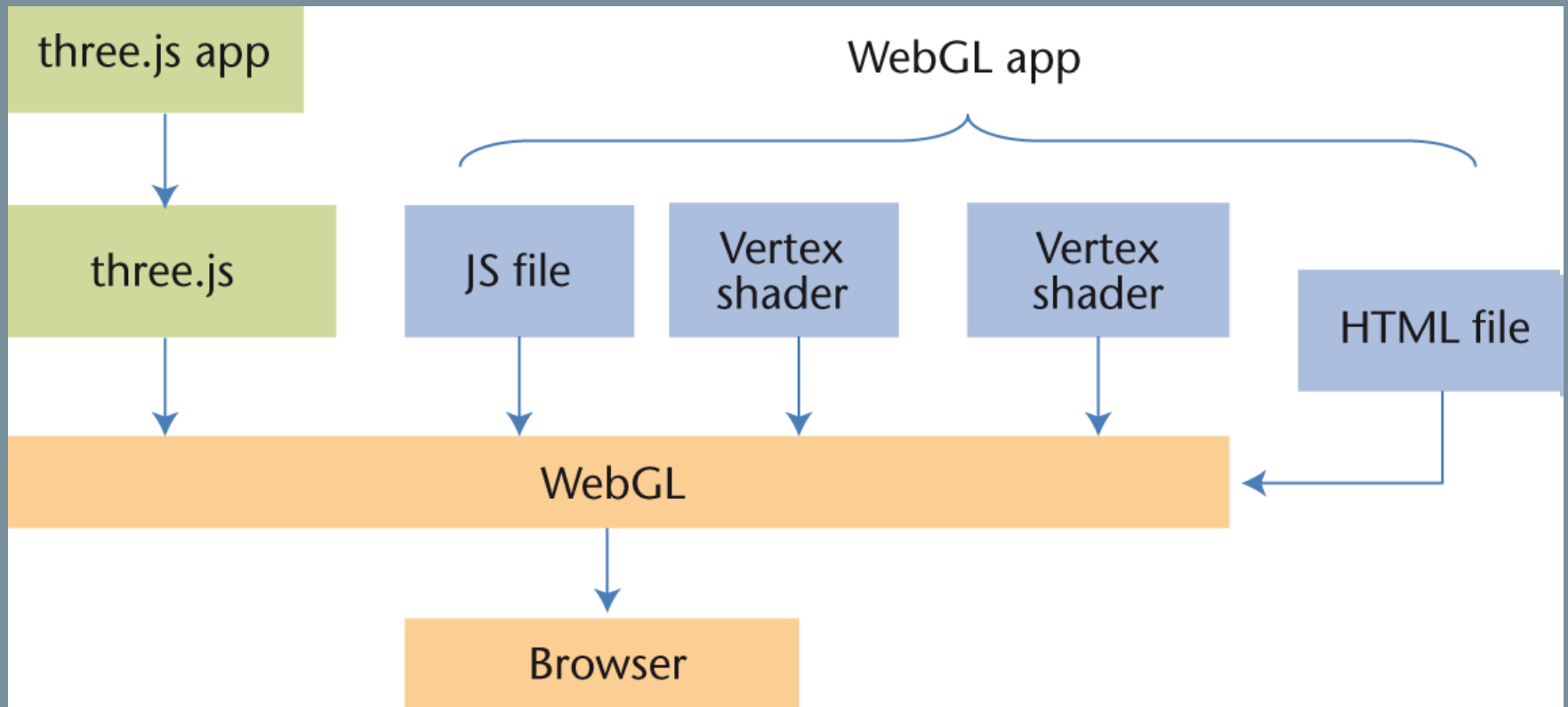
```

1 | function drawScene(gl, programInfo, buffers) {
7 |     // Clear the canvas before we start drawing on it.
8 |
9 |     // Our field of view is 45 degrees, with a width/height
10 |    // ratio that matches the display size of the canvas
11 |    // and we only want to see objects between 0.1 units
12 |
13 |    // Now move the drawing position a bit to where we want to
14 |
15 |    // Tell WebGL how to pull out the positions from the position
16 |
17 |    // Tell WebGL to use our program when drawing
18 |
19 |    // Set the shader uniforms
20 |
21 |    gl.drawArrays(gl.TRIANGLE_STRIP, offset, vertexCount);
22 |
23 |    programInfo.uniformLocations.projectionMatrix,
24 |    false,
25 |    projectionMatrix);
26 |
27 |    gl.uniformMatrix4fv(
28 |        programInfo.uniformLocations.modelViewMatrix,
29 |        false,
30 |        modelViewMatrix);
31 |
32 |    normalize,
33 |    stride,
34 |    offset);
35 |
36 |    gl.enableVertexAttribArray(
37 |        programInfo.attribLocations.vertexPosition);
38 |
39 | }

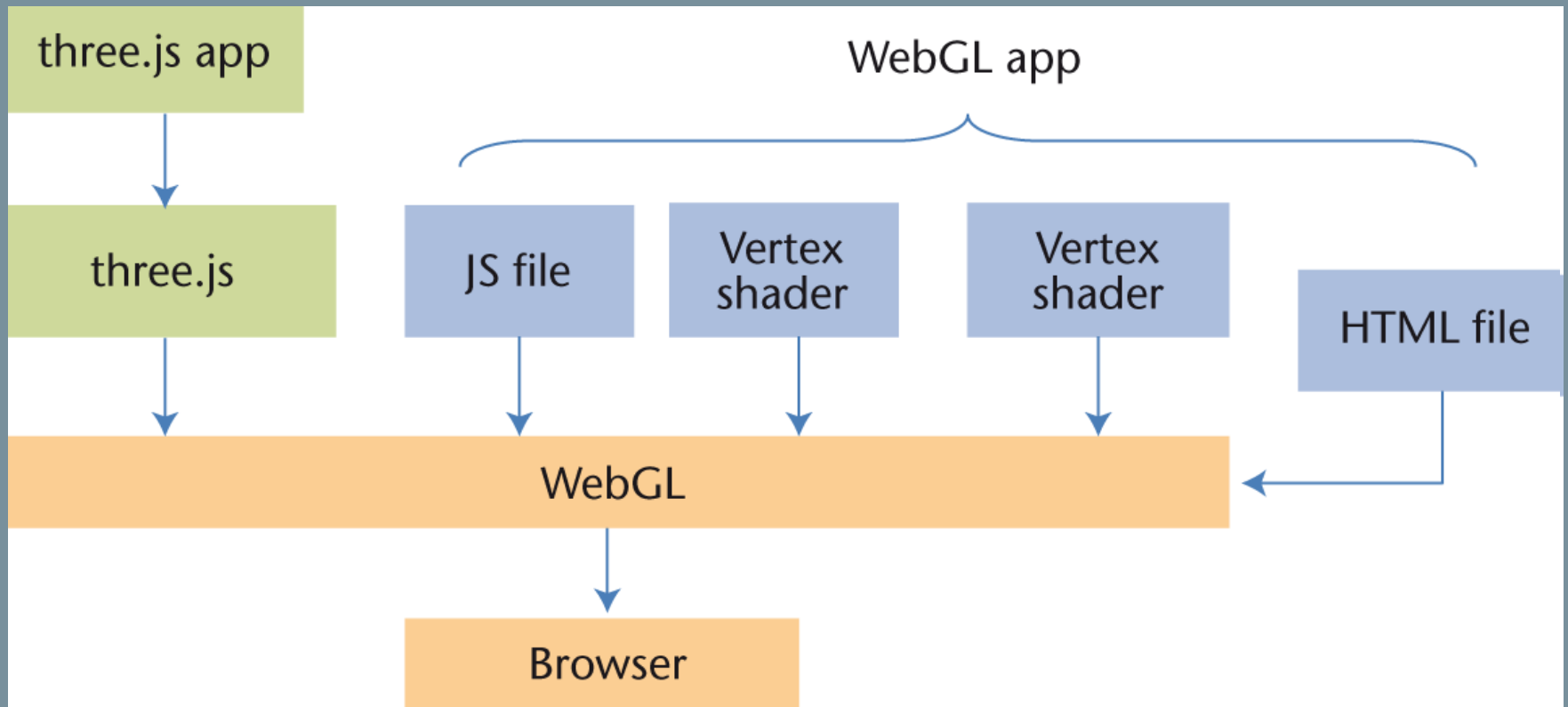
```



WEB GL



Three JS



```

// Set the scene size.
const WIDTH = 400;
const HEIGHT

// Set some c
const VIEW_AM
const ASPECT
const NEAR =
const FAR = 1

// Get the DO
const contain
document.

// Create a W
// and a scen
const rendere
const camera
new THREE
VIEW_
ASPEC
NEAR,
FAR
);

const scene =

// Add the co
scene.add(can

// Start the
renderer.setS

// Attach the renderer-supplied
// DOM element.
container.appendChild(renderer.domElement);

// Set up the sphere vars
const
const
const

// create the sphere's material
const

new // create a point light
const p
new T

// set
pointLi
pointLi
pointLi

// add
scene.a

// Move the S
// can see it.
sphere.position.z = -300;

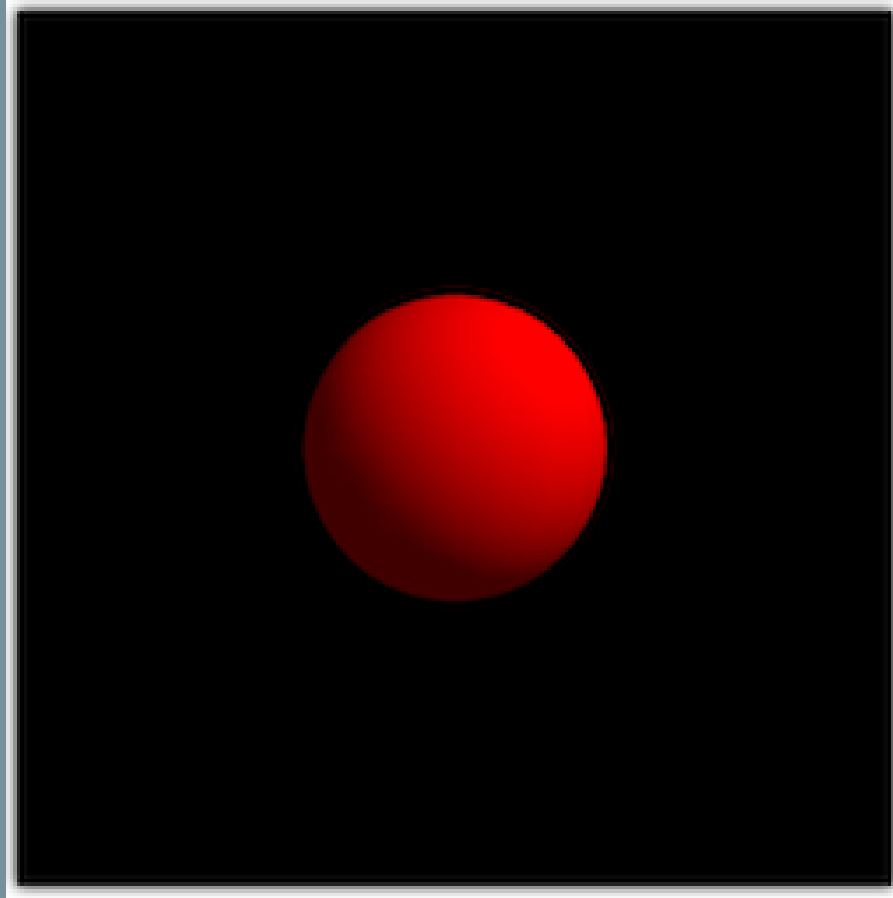
// Finally, add the sphere
scene.add(sphere);

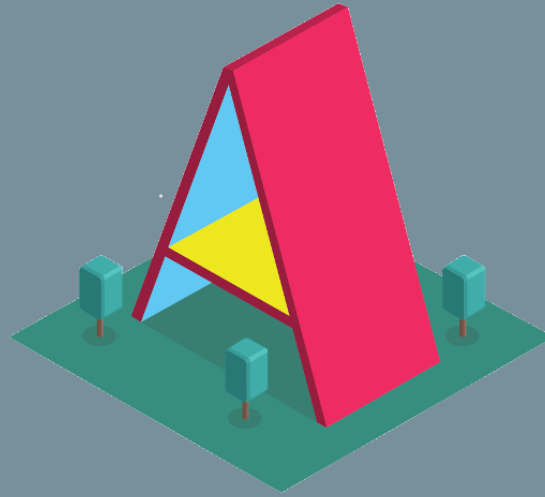
function update () {
  // Draw!
  renderer.render(scene, camera);

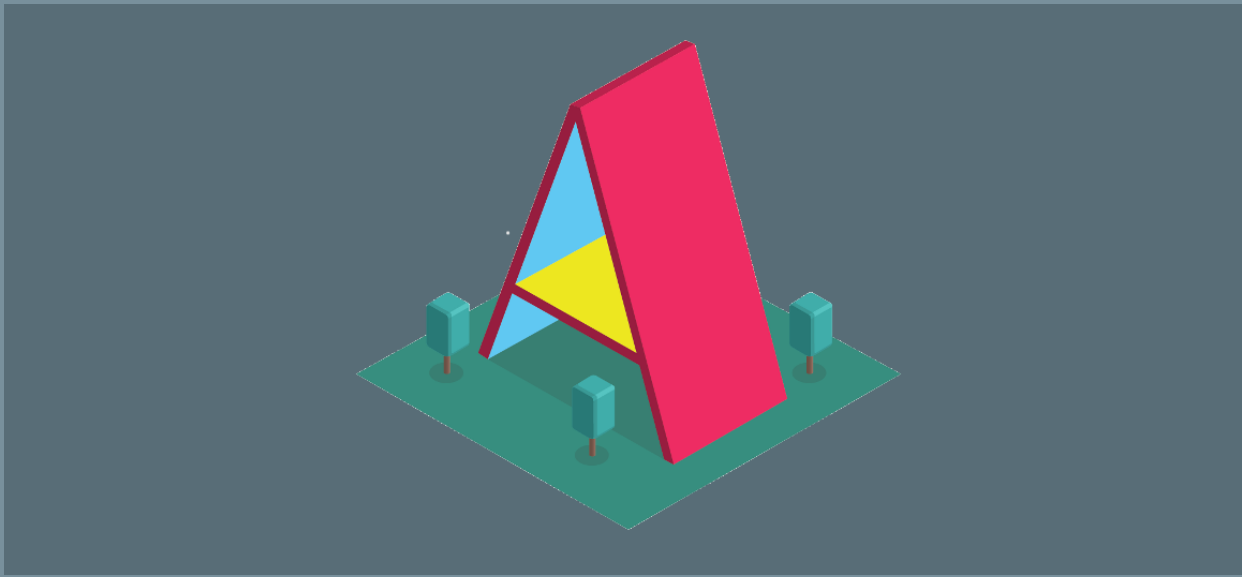
  // Schedule the next frame.
  requestAnimationFrame(update);
}

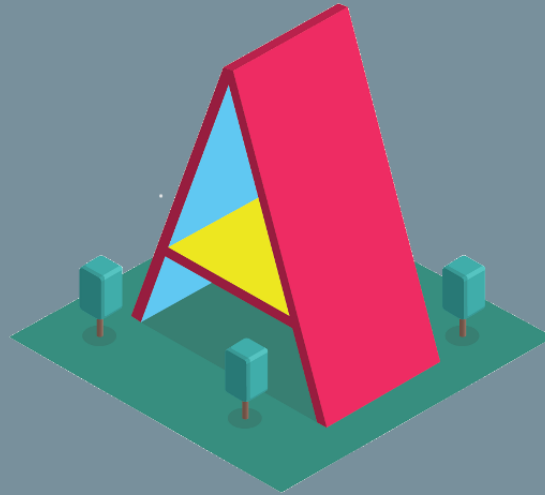
// Schedule the first frame.
requestAnimationFrame(update);

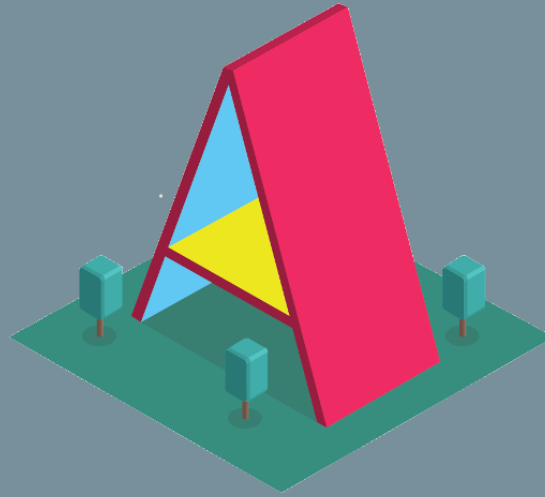
```













VR/AR

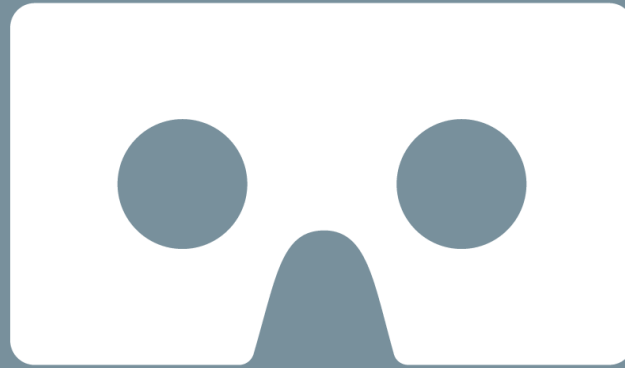
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THANK YOU!





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