Programa Stereo

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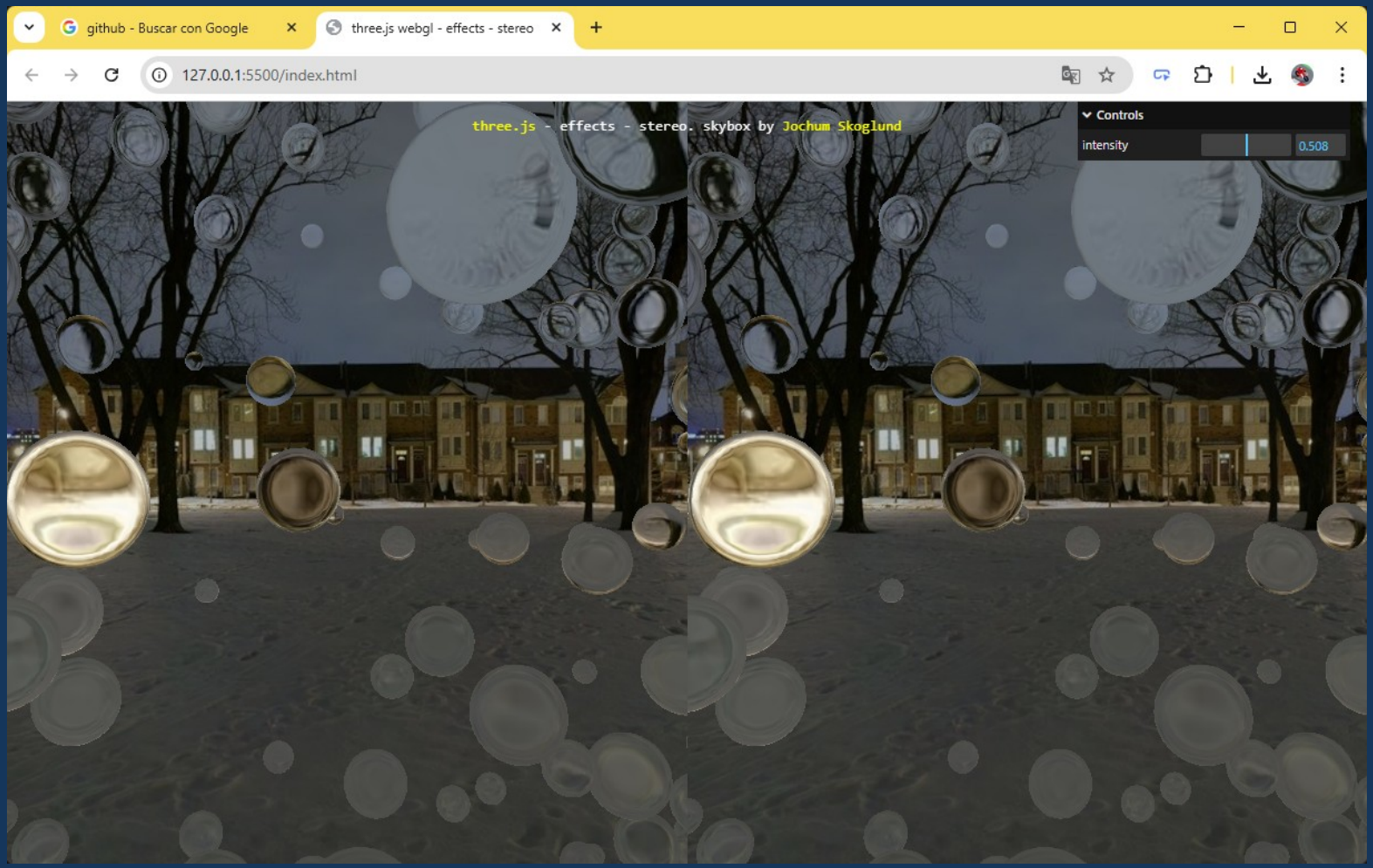
Stereo

- Index.html



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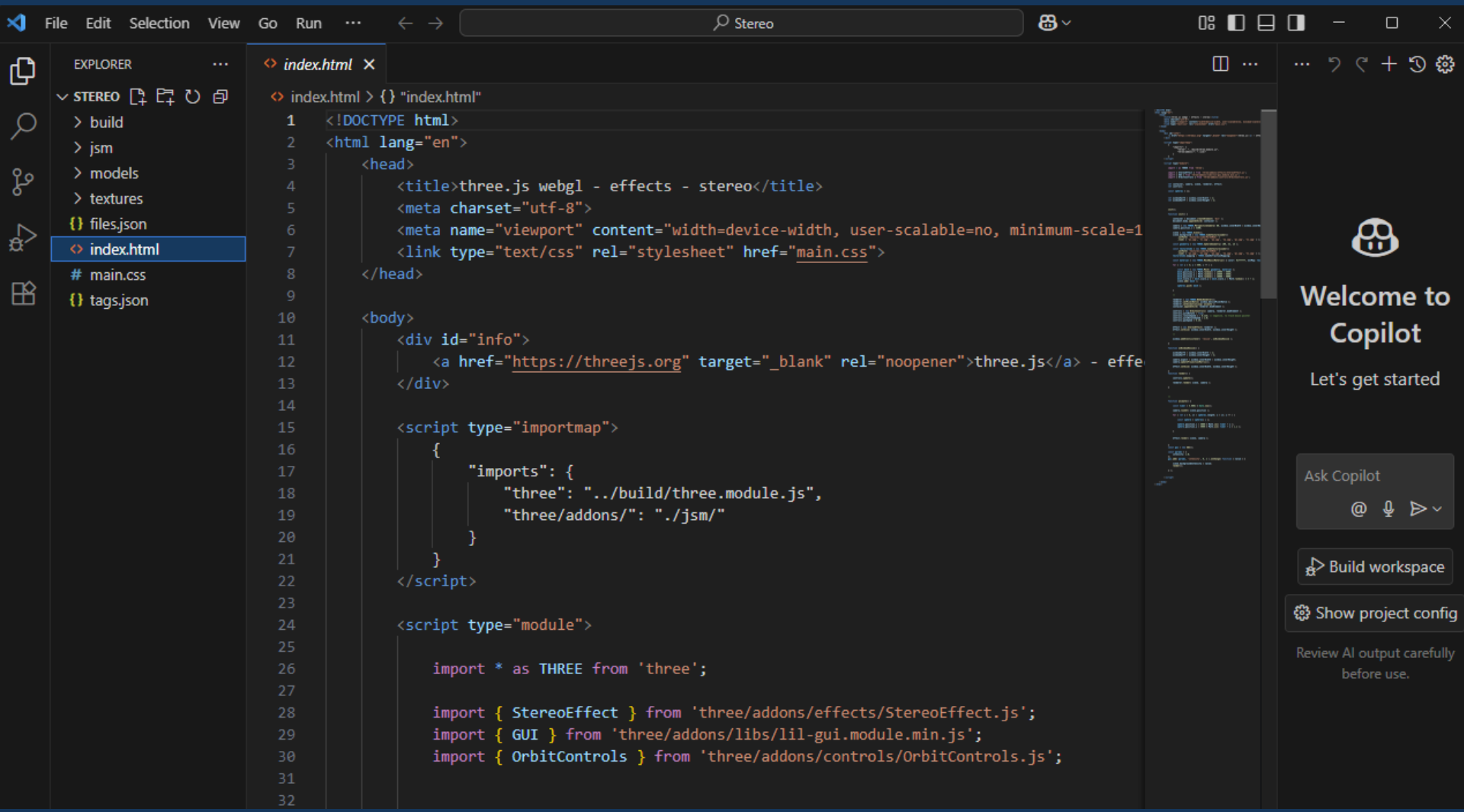

index.html

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```
33          let container, camera, scene, renderer, effect;
34          let controls;
35
36          const spheres = [];
37
38
39          let windowHalfX = window.innerWidth / 2;
40          let windowHalfY = window.innerHeight / 2;
41
42
43
44          init();
45
```

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```
46          function init() {
47
48              container = document.createElement( 'div' );
49              document.body.appendChild( container );
50
51              camera = new THREE.PerspectiveCamera( 60, window.innerWidth / window.innerHeight, 1, 100000 );
52              camera.position.z = 3200;
53
54              scene = new THREE.Scene();
55              scene.background = new THREE.CubeTextureLoader()
56                  .setPath( 'textures/cube/Park3Med/' )
57                  .load( [ 'px.jpg', 'nx.jpg', 'py.jpg', 'ny.jpg', 'pz.jpg', 'nz.jpg' ] );
58
59              const geometry = new THREE.SphereGeometry( 100, 32, 16 );
60
61              const textureCube = new THREE.CubeTextureLoader()
62                  .setPath( 'textures/cube/Park3Med/' )
63                  .load( [ 'px.jpg', 'nx.jpg', 'py.jpg', 'ny.jpg', 'pz.jpg', 'nz.jpg' ] );
64              textureCube.mapping = THREE.CubeRefractionMapping;
65
66              const material = new THREE.MeshBasicMaterial( { color: 0xffffff, envMap: textureCube, refractionRatio: 0.95 } );
67
68              for ( let i = 0; i < 500; i ++ ) {
69
70                  const mesh = new THREE.Mesh( geometry, material );
71                  mesh.position.x = Math.random() * 10000 - 5000;
72                  mesh.position.y = Math.random() * 10000 - 5000;
73                  mesh.position.z = Math.random() * 10000 - 5000;
74                  mesh.scale.x = mesh.scale.y = mesh.scale.z = Math.random() * 3 + 1;
75                  scene.add( mesh );
76
77                  spheres.push( mesh );
78
79              }
80
```

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```
81              //
82
83              renderer = new THREE.WebGLRenderer();
84              renderer.setPixelRatio( window.devicePixelRatio );
85              renderer.setAnimationLoop( animate );
86              container.appendChild( renderer.domElement );
87
88              controls = new OrbitControls( camera, renderer.domElement );
89              controls.autoRotate = true;
90              controls.rotateSpeed = - 0.125; // negative, to track mouse pointer
91              controls.autoRotateSpeed = 1.0;
92              controls.panSpeed = 0.25;
93
94
95              effect = new StereoEffect( renderer );
96              effect.setSize( window.innerWidth, window.innerHeight );
97
98              //
99
100             window.addEventListener( 'resize', onWindowResize );
101
102         }
```

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```
104         function onWindowResize() {
105
106             windowHalfX = window.innerWidth / 2;
107             windowHalfY = window.innerHeight / 2;
108
109             camera.aspect = window.innerWidth / window.innerHeight;
110             camera.updateProjectionMatrix();
111
112             effect.setSize( window.innerWidth, window.innerHeight );
113
114         }
115         function render() {
116
117             controls.update();
118
119             renderer.render( scene, camera );
120
121         }
122
123
124
```

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```
125         //
126
127         function animate() {
128
129             const timer = 0.0001 * Date.now();
130
131             camera.lookAt( scene.position );
132
133             for ( let i = 0, il = spheres.length; i < il; i ++ ) {
134
135                 const sphere = spheres[ i ];
136
137                 sphere.position.x = 5000 * Math.cos( timer + i );
138                 sphere.position.y = 5000 * Math.sin( timer + i * 1.1 );
139
140             }
141
142
143             effect.render( scene, camera );
144
145
146         }
147         const gui = new GUI();
148
149         const params = {
150             intensity: 1.0,
151         };
152         gui.add( params, 'intensity', 0, 1 ).onChange( function ( value ) {
153
154             scene.backgroundIntensity = value;
155             render();
156
157         } );
158
159
```

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```
160            </script>
161
162        </body>
163    </html>
```

Referencias Bibliográficas