

Three.js

Dit is de eerste poging. Hierbij heb ik dezelfde code gebruikt als in de kubus. Daar heb ik vervolgens een gltf loader aan toegevoegd, om het blender bestand te laden. De vogel kwam niet in beeld.

```
<script>
  var scene = new THREE.Scene();

  var loader = new THREE.GLTFLoader();

  loader.load( 'animaties/Workshop-Animeren.gltf', function ( gltf ) {
    scene.add( gltf.scene );

    gltf.animations; // Array<THREE.AnimationClip>
    gltf.scene; // THREE.Scene
    gltf.scenes; // Array<THREE.Scene>
    gltf.cameras; // Array<THREE.Camera>
    gltf.asset; // Object
  },

  // undefined, function ( error ) {
  //   console.error( error );
  // }

  // called while loading is progressing
  function ( xhr ) {
    console.log( ( xhr.loaded / xhr.total * 100 ) + '% loaded' );
  },
  // called when loading has errors
  function ( error ) {
    console.log( 'An error happened', error );
  }
);

var camera = new THREE.PerspectiveCamera( 75, window.innerWidth / window.innerHeight, 0.1, 1000 );

var renderer = new THREE.WebGLRenderer();
renderer.setSize( window.innerWidth, window.innerHeight );
document.body.appendChild( renderer.domElement );

camera.position.z = 5;

// function animate() {
//   requestAnimationFrame( animate );

//   gltf.rotation.x += 0.01;
//   gltf.rotation.y += 0.01;

//   renderer.render( scene, camera );
// }

// animate();
</script>
```

Dit is de tweede poging. De vogel kwam hierbij wel in beeld. Na de volgende keer opstarten van de file lukte dat niet meer. Ik kreeg het probleem niet meer opgelost.

```
<> animatie.html x
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset=utf-8>
5      <title>My first three.js app</title>
6      <style>
7        body { margin: 0; }
8        canvas { width: 100%; height: 100% }
9      </style>
10   </head>
11   <body>
12     <script src="js/three.js"></script>
13     <script src="js/GLTFLoader.js"></script>
```

```
63   <script>
64     init();
65     var vogel;
66
67     function init() {
68
69       camera = new THREE.PerspectiveCamera( 75, window.innerWidth / window.innerHeight, 0.25, 1000 );
70       camera.position.set( - 1.8, 0.9, 2.5 );
71
72
73       scene = new THREE.Scene();
74
75       // Instantiate a loader
76       var loader = new THREE.GLTFLoader();
77
78       // Load a glTF resource
79       loader.load( 'animations/Workshop-Animeren-geel.glTF', function ( gltf ) {
80         console.log(gltf);
81         vogel = gltf;
82         //animate();
83
84         scene.add( gltf.scene );
85         gltf.animations; // Array<THREE.AnimationClip>
86         gltf.scene;       // THREE.Scene
87         gltf.scenes;      // Array<THREE.Scene>
88         gltf.cameras;     // Array<THREE.Camera>
89
90         var light = new THREE.AmbientLight(0xffffff);
91         scene.add(light);
92
93         renderer = new THREE.WebGLRenderer( { antialias: true } );
94         renderer.setSize( window.innerWidth, window.innerHeight );
95         document.body.appendChild( renderer.domElement );
96       } );
97
98
99     function animate() {
100       requestAnimationFrame( animate );
101       console.log(vogel.rotation);
102       vogel.rotation.x += 0.01;
103       vogel.rotation.y += 0.01;
104
105       renderer.render( scene, camera );
106     }
107   </script>
108 </body>
109 </html>
```

Dit is de derde poging. Hierbij heb ik andere loaders gebruikt (Object Loader en MTL Loader) en ook Orbit Control toegevoegd, zodat ik mijn 3D object zou kunnen draaien als ik de linkermuisknop erop ingedrukt hield. Dit werkte allemaal wederom niet.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset=utf-8>
  <title>Vogel - By Britt</title>
  <style>
    body { margin: 0; }
    canvas { width: 100%; height: 100% }
  </style>
</head>
<body>
  <script src="./js/three.js"></script>
  <script src="./js/OBJLoader.js"></script>
  <script src="./js/MTLLoader.js"></script>
  <script src="./js/OrbitControl.js"></script>
<script>
  var scene = new THREE.Scene();
  var camera = new THREE.PerspectiveCamera( 75, window.innerWidth/window.innerHeight, 0.1, 1000 );

  var renderer = new THREE.WebGLRenderer();
  renderer.setSize( window.innerWidth, window.innerHeight );
  document.body.appendChild( renderer.domElement );

  camera.position.z = 200;

  var controls = new THREE.OrbitControls(camera, renderer.domElement);
  controls.enableDamping = true;
  controls.dampingFactor = 0.25;
  controls.enableZoom = true;

  var keyLight = new THREE.DirectionalLight(new THREE.Color('hsl(30, 100%, 75%)'), 1.0);
  keyLight.position.set(-100, 0, 100);

  var fillLight = new THREE.DirectionalLight(new THREE.Color('hsl(240, 100%, 75%)'), 0.75);
  fillLight.position.set(100, 0, 100);
```

```

var backLight = new THREE.DirectionalLight(0xffffff, 1.0);
backLight.position.set(100, 0, -100).normalize();

scene.add(keyLight);
scene.add(fillLight);
scene.add(backLight);

var mtlLoader = new THREE.MTLLoader();
mtlLoader.setTexturePath('/Threejsutut/js/');
mtlLoader.setPath('/Threejsutut/js/');
mtlLoader.load('animations/vogel-geel.mtl', function (materials) {

    materials.preload();

    var objLoader = new THREE.OBJLoader();
    objLoader.setMaterials(materials);
    objLoader.setPath('/Threejsutut/js/animations/');
    objLoader.load('vogel-geel.obj', function (object) {

        scene.add(object);
        object.position.y -= 60;

    });

});

var animate = function () {

    requestAnimationFrame( animate );

    controls.update();

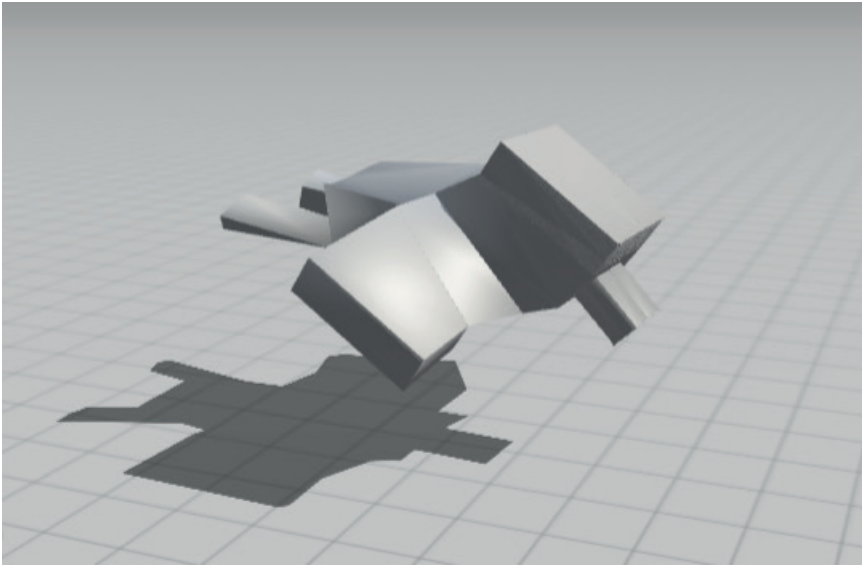
    renderer.render(scene, camera);

};

animate();
</script>
</body>
</html>

```

Dit is hoe mijn 3D animatie eruit zag.



Dit is hoe mijn vogel uit de inspiratieweek eruit zag.



Dit is een statisch ontwerp van hoe het eindresultaat eruit had moeten komen te zien.



