

In App.js

```
import React, { Component } from 'react'
import Project from './component/Project'
import './App.css';
export class App extends Component {
  constructor(props){
    super(props);
    this.canvasRef= React.createRef();
  }

  componentDidMount

  render() {
    return (
      <div>
        <canvas className="Webgl" ref={this.canvasRef} ></canvas>

        <nav>
          <a href="/">Sphere</a>
          <ul>
            <li>good</li>
            <li>bad</li>
            <li>things</li>
          </ul>
        </nav>
        <h1 className="title">goood analysis</h1>

        <Project canvasRef={this.canvasRef} />
      </div>
    )
  }
}

export default App
```

in project.js

```
import React, { Component } from 'react'
import * as THREE from 'three';
import {OrbitControls} from 'three/examples/jsm/controls/OrbitControls'
export class Project extends Component {
  //constructor(props){
  //  super(props);
  // };
  //shape
  componentDidMount(){
    //canvas ref from App.js
    this.canvasRef=this.props.canvasRef;

    //create scene
    this.scene=new THREE.Scene();

    //create the shape by providing geometry aand material
    const geometry=new THREE.SphereGeometry(3,64,64);

    const material =new THREE.MeshStandardMaterial({
      color:"#00ff83",
    });
    const mesh =new THREE.Mesh(geometry,material);
    this.scene.add(mesh)

    //Sizes of the view port
    this.size={
      width:window.innerWidth,
      height:window.innerHeight
    }

    //Light
    this.light= new THREE.PointLight(0xffffffff,1,100);
    this.light.position.set(0,10,10)//[1(-num)=left],[1(+num)=right],[2(-
num)=goes to down],[2(+num)=top],[3(-num)=back],[3(+num)=front]
    this.scene.add(this.light);

    //camera
    this.camera=new
THREE.PerspectiveCamera(45,this.size.width/this.size.height,0.1,100)
    //camera.position
    this.camera.position.z=20

    this.scene.add(this.camera)
```

```
//Renderer
this.renderer=new THREE.WebGLRenderer({
  canvas:this.canvasRef.current
});
this.renderer.setSize(this.size.width,this.size.height);
this.renderer.setPixelRatio(2)
this.renderer.render(this.scene,this.camera);

//controles
const controls =new OrbitControls(this.camera,this.canvasRef.current)
controls.enableDamping=true
controls.enablePan=false
controls.enableZoom=false
controls.autoRotate=true
controls.autoRotateSpeed=5

//Resize
window.addEventListener('resize',()=>{
  //update Sizes
  console.log(window.innerWidth);
  this.size.width=window.innerWidth;
  this.size.height=window.innerHeight;

  //update the width of camera
  this.camera.aspect=this.size.width/this.size.height;
  this.camera.updateProjectionMatrix();
  this.renderer.setSize(this.size.width,this.size.height)
})

const loop=()=>{
  this.renderer.render(this.scene,this.camera)
  window.requestAnimationFrame(loop);
  controls.update()
}
loop()
}
```

```
    render() {  
      return (  
        <div>  
  
        </div>  
      )  
    }  
  }  
}  
  
export default Project
```

In App.css

```
*{  
  margin:0;  
  padding:0;  
  box-sizing: border-box;  
}  
  
body,html{  
  overflow-x: hidden;  
}  
  
.Webgl{  
  position: absolute;  
  top:0;  
  left:0;  
  z-index:1;  
}  
  
nav{  
  color:white;  
  z-index:2;  
  position:relative;  
  padding:4rem 8rem;
```

```
display: flex;
justify-content: space-between;
}

nav a{
  text-decoration: none;
  color:white;
  font-weight: bold ;
}

nav ul{
  list-style: none;
  display: flex;
  gap:4rem;
}

.title{
  color:white;
  z-index:2;
  position: absolute;
  font-size: 3rem;
  left:50%;
  top:75%;
  transform: translate(-50%,-75%);
}
```