

Three.js: Creator Ricardo Cabello (mrDoob)

Javascript API for WebGL

Results can be high or low level, in canvas or SVG
Compatible with most modern browsers
Hooks into the GPU

CPU can render few calculations very
quickly, while GPU does it slowly however
With far more parallel processing concurrently

Points & Triangles are drawn and then the pixels
therein are colored according to the
material shader

github.com/mrdoob/three.js/

Basic Scene

[github.com/nikolas
nikolic/
meetup](https://github.com/nikolasnikolic/meetup)

index.html

main.js

└ Scene

└ Camera

└ Renderer

└ geometry

└ material/shader

THREE variable lots of classes

Scene

- ↳ Like a container
- ↳ Objects, lights, models, particles
- ↳ Rendered as output

Mesh

- ↳ Combination

- ↳ geometry

- ↳ material

↳ color in hex `0xffffff` = white
in RGB

Easiest thing to forget is to forget to add the mesh object to scene. Next, lights. Lastly, camera.

Camera

- ↳ point of view

- ↳ can have many cameras and switch them programmatically

- ↳ Kinds

- ↳ perspective → similar to eye w/ adjustable mm

- ↳ box → isometric

Perspective Camera (positionable too)

↳ Main

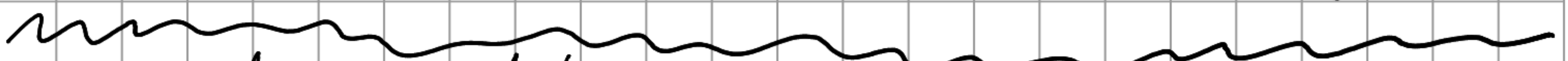
↳ in degrees

↳ aspect ratio adjustable

↳ Size \rightarrow "Size" of image \rightarrow stretchable to viewport

(Aspect ratio is width/height)

Renderer takes element to transform into canvas and renders objects



Loading Modules triggers CORS restrictions

To load needed additional modules, run a server,

Bundle needed to follow imports to new files
Webpack is dominant