



**experts club**

## **Desenvolvendo e exibindo gráficos 3D com three.js em JavaScript**

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10/02/2022

# Agenda

- Sobre mim e a minha relação com o código;
- Sobre a aula
- Requisitos, ambiente e recursos
- Web 3.0
- Metaverso
- 3D na web
- Three.js
- Frameworks Three.js
- Exemplos
- Demo - Prática



# Sobre mim e a minha relação com o código

- Ismael Nascimento 'Ash'
- Desde 2014 na área da tecnologia
- CTO Code Coast
- Consultor (arquitetura/desenvolvimento)
- Redes sociais:
  - [linkedin.com/in/ismaelash](https://linkedin.com/in/ismaelash)



# Sobre a aula

- Metaverso
- Three.js
- 3D na web com Javascript
- Código necessário para a aula criado anteriormente:
  - <https://github.com/ismaelash/desevolvendo-graficos-3d-threejs-javascript-2021-02-10>



# Requisitos, ambiente e recursos

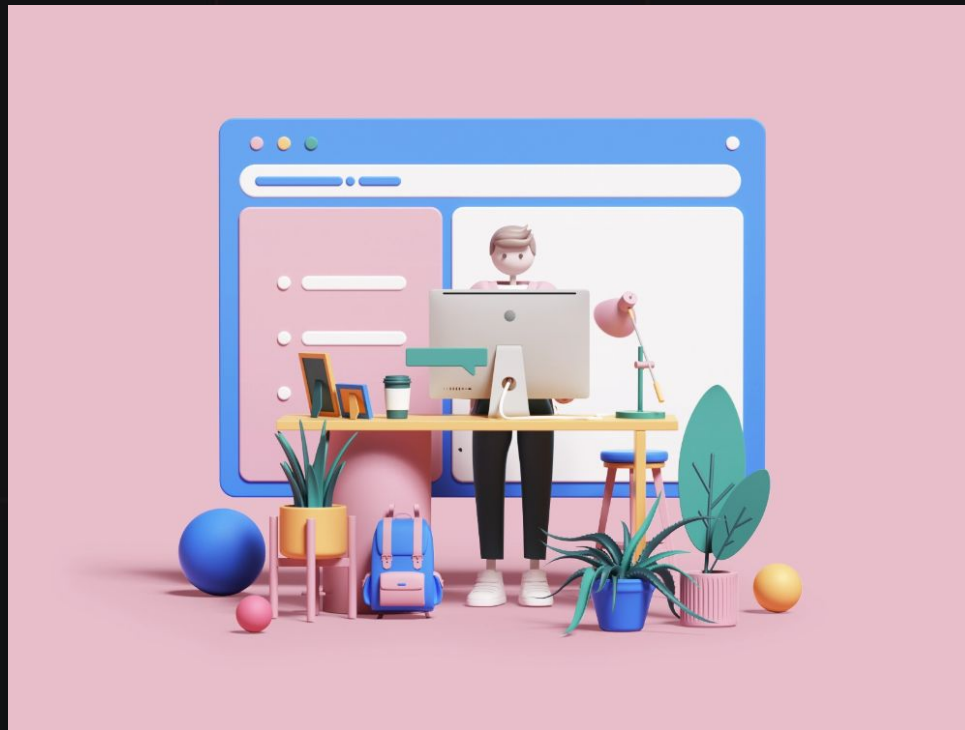
- Ambiente e recursos necessários:
  - Visual Studio Code
  - Node
  - Three.JS Snippets VSCode plugin



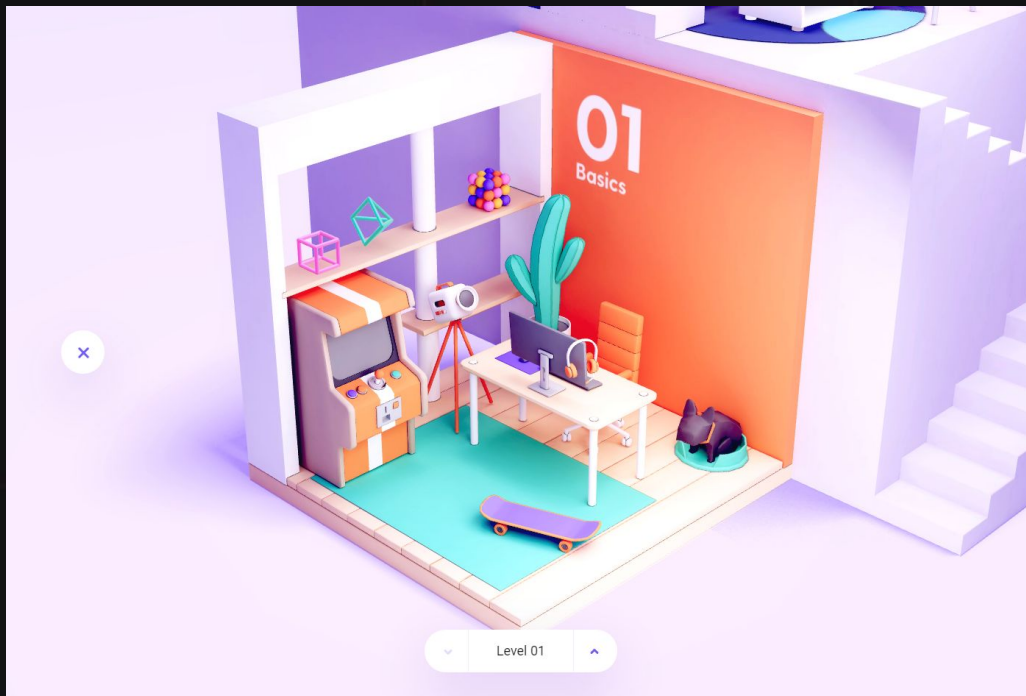


Web 3.0\_

# Web 3.0



# 3D na web



Level 01

Login Start learning now

## 01 Basics

Create your first scene and understand fundamentals like cameras, geometries, materials, textures.  
Add a debug panel to tweak your environment and animate everything.

14 lessons — 9h 38mn

01 Introduction	18mn
02 What is WebGL and why use Three.js	23mn
03 Basic scene	36mn
04 Webpack	35mn
05 Transform objects	46mn
06 Animations	30mn
07 Cameras	57mn
08 Fullscreen and resizing	30mn
09 Geometries	35mn



# Three.js

three.js r137

**Learn**

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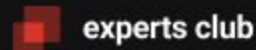
**Resources**

[Three.js Fundamentals](#)  
[Three.js Journey](#)  
[Learn Three.js](#)  
[初めてのThree.js](#)

**Merch**

[T-Shirts](#)

# Frameworks Three.js



pmndrs / react-three-fiber Public

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Code

Issues 18

Pull requests 5

Discussions

Actions

Projects

Security

Insights

master

9 branches

292 tags

Go to file

Add file

Code



mysterybear fix docs on invalidate with react-spring (#2043)

7484a21 8 days ago 1,957 commits

.changeset

RELEASING: Releasing 2 package(s)

21 days ago

.codesandbox

ci: fixes codesandbox CI by setting node version in ci.json (#1616)

5 months ago

.github

chore: update references from github namespace react-spring to pmndr...

3 months ago

.husky

um, npx?

11 months ago

docs

fix: docs on invalidate with react-spring (#2043)

8 days ago

example

fix: make frameLoop reactive

2 months ago

packages

fix(events): passthrough size via raycaster#computeOffsets (#2022)

17 days ago

.eslintignore

chore(internals): [v6] use preconstruct

11 months ago

.eslintrc.json

update deps, fix name

11 months ago

.gitignore

create ReactThreeTestInstance class & move types to folder

11 months ago

.prettierrc

fix t126 geom types, prettier

11 months ago

LICENSE

Update LICENSE

15 months ago

babel.config.js

fix babel-env browserslist

7 months ago

## About

A React renderer for Three.js

docs.pmnd.rs/react-three-fiber

react threejs animation renderer  
fiber 3d

Readme

MIT License

16.8k stars

176 watching

902 forks

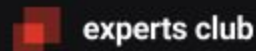
## Releases 7

v7.X.X Latest  
on Jul 15, 2021

+ 6 releases

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# Frameworks Three.js



google / model-viewer Public

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master 18 branches 41 tags

Go to file

Add file

Code

elalish Softer shadows (#3182)

28a1c81 5 days ago 1,170 commits

.github	allow deployment if fidelity fails (#2945)	3 months ago
packages	Softer shadows (#3182)	5 days ago
scripts	Remove magic leap (#1294)	2 years ago
.clang-format	Ensure traversal order (#1166)	2 years ago
.eslintignore	Remove editing adapter (#2469)	6 months ago
.eslintrc.yaml	3DOM Return types (#1539)	17 months ago
.gitignore	Separate out docs, fidelity tests and shared assets (#962)	2 years ago
.nvmrc	Separate out docs, fidelity tests and shared assets (#962)	2 years ago
CONTRIBUTING.md	Simplify CONTRIBUTING versioning documentation (#1266)	2 years ago
LICENSE	use unmodified license text (#1239)	2 years ago
README.md	Windows 10 install info (#2304)	10 months ago
lerna.json	Separate out docs, fidelity tests and shared assets (#962)	2 years ago
package-lock.json	patch (#3128)	26 days ago
package.json	Updating iOS testing versions (#3079)	2 months ago

## About

Easily display interactive 3D models on the web and in AR!

modelviewer.dev

webcomponents augmented-reality three.js gltf glb model-viewer 3d 3d-models webxr magic-leap

Readme

Apache-2.0 License

Code of conduct

4k stars

135 watching

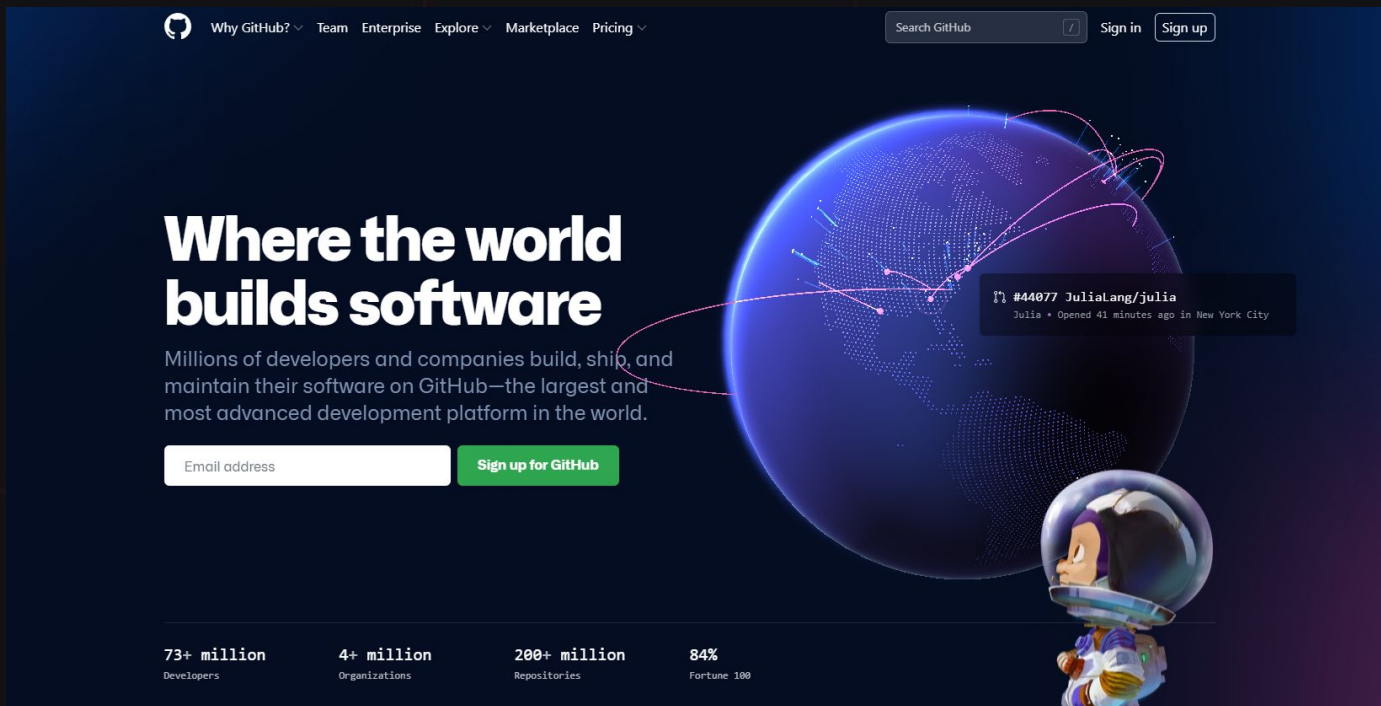
471 forks

## Releases 38

v1.10.1 Latest 26 days ago

+ 37 releases

# Exemplos



The image is a mockup of the GitHub homepage. At the top, there is a navigation bar with the GitHub logo, links for 'Why GitHub?', 'Team', 'Enterprise', 'Explore', 'Marketplace', and 'Pricing'. On the right side of the navigation bar, there is a search bar labeled 'Search GitHub', a link to 'Sign in', and a 'Sign up' button. The main content area features a large, stylized blue globe with glowing pink and blue lines representing code paths. To the left of the globe, the headline 'Where the world builds software' is displayed in large white text. Below the headline, a paragraph states: 'Millions of developers and companies build, ship, and maintain their software on GitHub—the largest and most advanced development platform in the world.' Below this text is a white input field for 'Email address' and a green 'Sign up for GitHub' button. To the right of the globe, a dark rectangular box displays a repository preview for '#44077 JuliaLang/julia', indicating it was 'Opened 41 minutes ago in New York City'. In the bottom right corner, there is a small, colorful illustration of an astronaut. At the bottom of the page, four statistics are listed: '73+ million Developers', '4+ million Organizations', '200+ million Repositories', and '84% Fortune 100'.

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## Where the world builds software

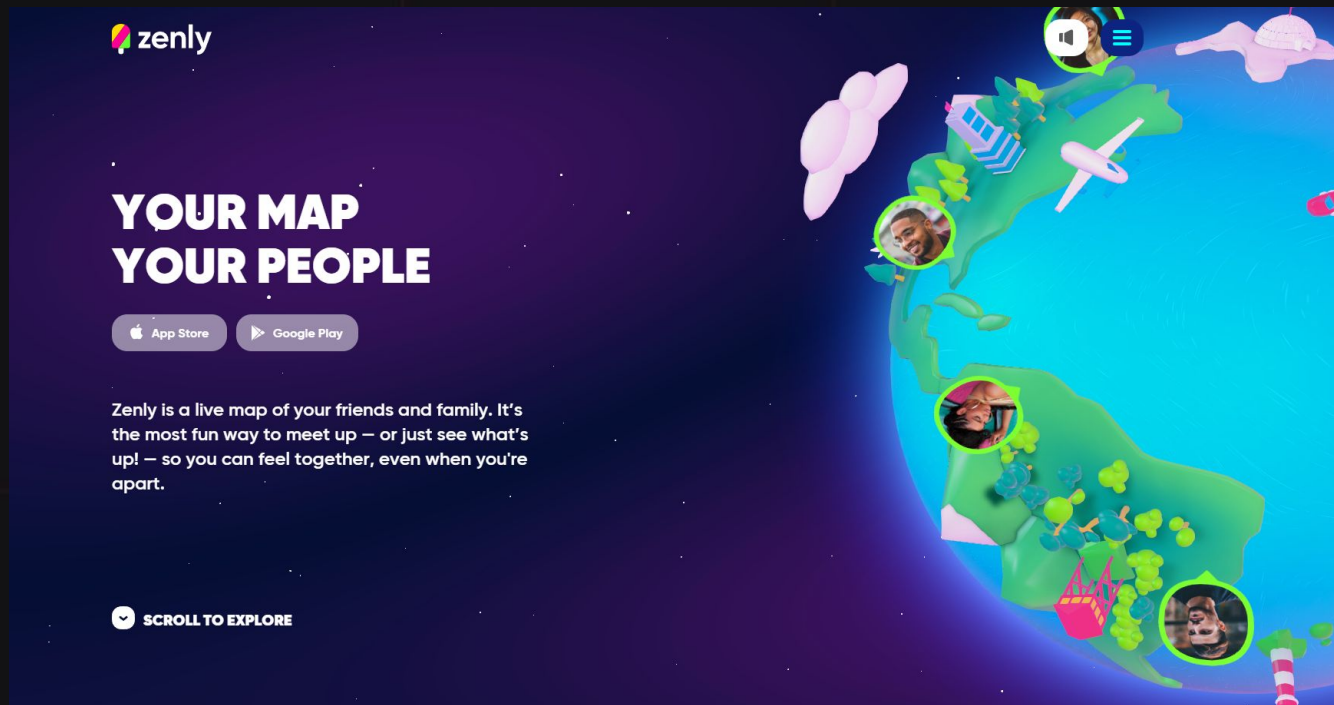
Millions of developers and companies build, ship, and maintain their software on GitHub—the largest and most advanced development platform in the world.

Email address Sign up for GitHub

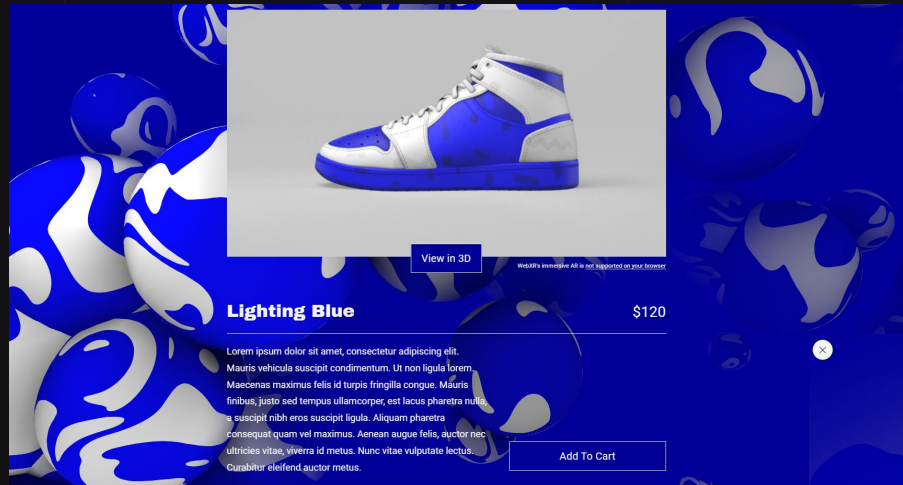
#44077 JuliaLang/julia  
Julia • Opened 41 minutes ago in New York City

73+ million Developers  
4+ million Organizations  
200+ million Repositories  
84% Fortune 100

# Exemplos



# Exemplos





# Demo - Prática





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# Referências

- <https://github.com/pmndrs/react-three-fiber>
- <https://www.youtube.com/watch?v=pGM7-0es8TM>
- <https://threejs.org/>
- <https://github.com/pmndrs/react-three-fiber>
- <https://webxr-sneakers.lusion.co/product/00>
- <https://zen.ly/>
- <https://www.youtube.com/watch?v=f-9LEoYYvE4>





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# Obrigado!

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