

# Instalando o NodeJS e Criando o primeiro app em React JS

Acesse o site <https://nodejs.org>

**Guilherme Henrique de Souza**

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The screenshot shows the official Node.js website at nodejs.org/en. The main heading is "Run JavaScript Everywhere". A green button labeled "Download Node.js (LTS)" is highlighted with a red arrow. To the right, a code editor window displays a sample HTTP server code. A red oval highlights the text "Clique para fazer o download" (Click to download) overlaid on the bottom right of the code editor.

Node.js — Run JavaScript Everywhere

nodejs.org/en

Security releases are now available! ↗

Learn About Download Blog Docs ↗ Certification ↗

Trip report Node.js collaboration summit (2024 London) →

# Run JavaScript Everywhere

Node.js® is a free, open-source, cross-platform JavaScript runtime environment that lets developers create servers, web apps, command line tools and scripts.

Download Node.js (LTS)

Downloads Node.js v20.12.2<sup>1</sup> with long-term support.  
Node.js can also be installed via package managers.

Want new features sooner? Get Node.js v21.7.3<sup>1</sup> instead.

Create an HTTP Server Write Tests Read and Hash a File Streams Pipeline Work with Threads

```
1 // server.mjs
2 import { createServer } from 'node:http';
3
4 const server = createServer((req, res) => {
5   res.writeHead(200, { 'Content-Type': 'text/plain' });
6   res.end('Hello World!\n');
7 });
8
9 // starts a simple http server locally on port 3000
10 server.listen(3000, '127.0.0.1', () => {
11   console.log('Listening on 127.0.0.1:3000');
12 });
13
14 // run with `node server.mjs`
```

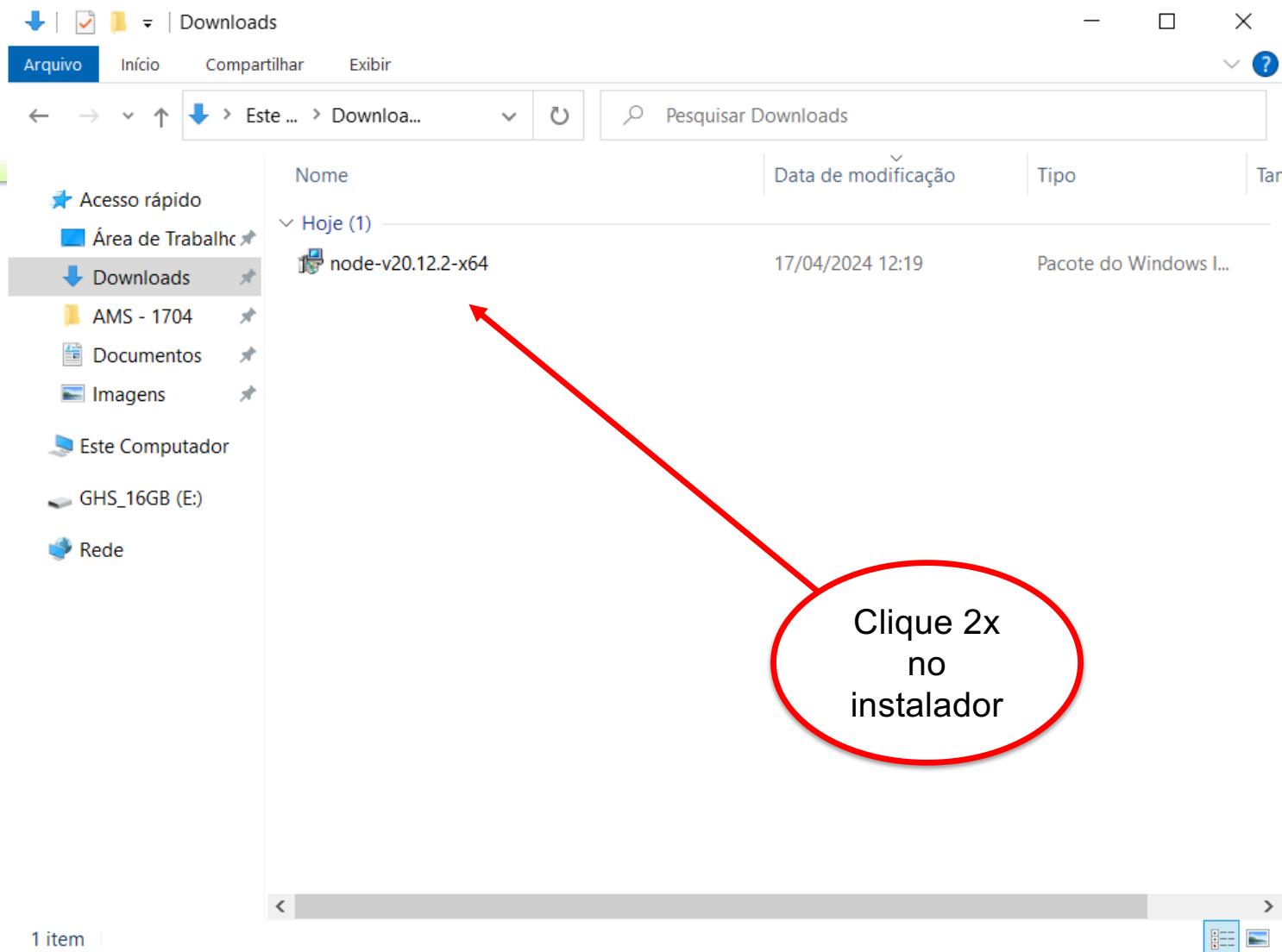
JavaScript

Copy to clipboard

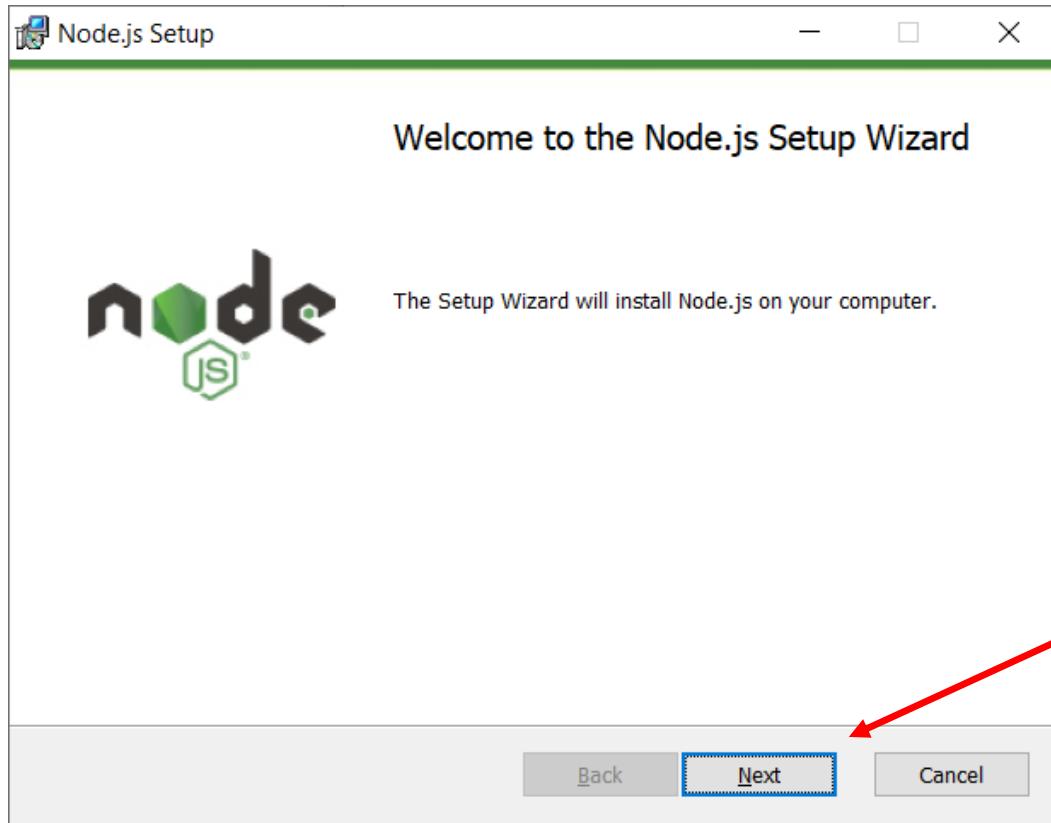
Clique para fazer o download

Professor: Guilherme Henrique de Souza (guilherme.souza@etec.sp.gov.br ou guilherme.souza183@fatec.sp.gov.br )

## Instalando o NodeJS e Criando o primeiro app em React JS

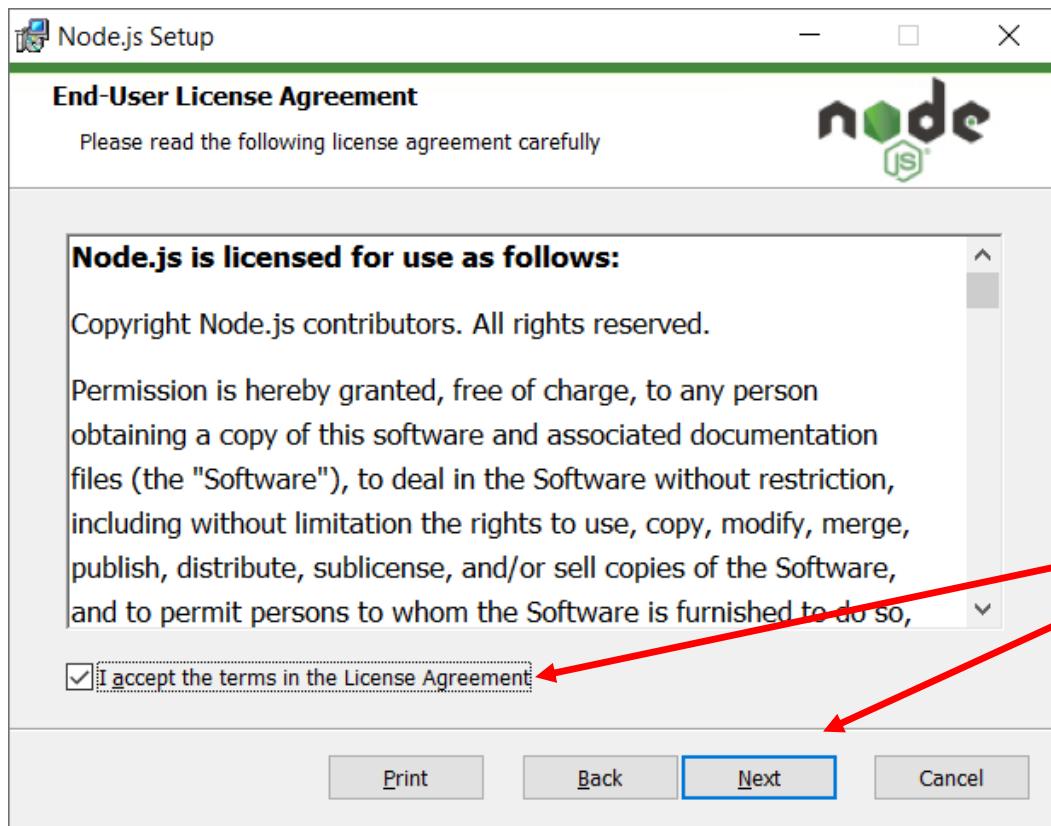


# Instalando o Node.js



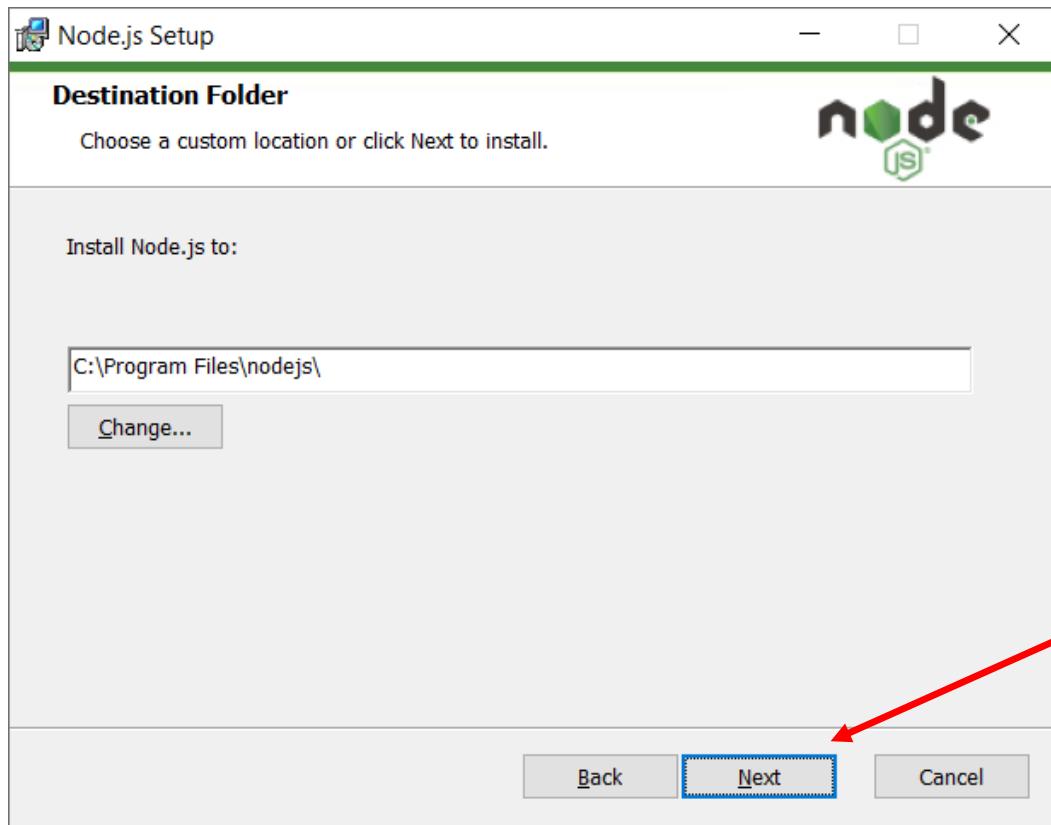
Clique para  
avançar

# Instalando o Node.js



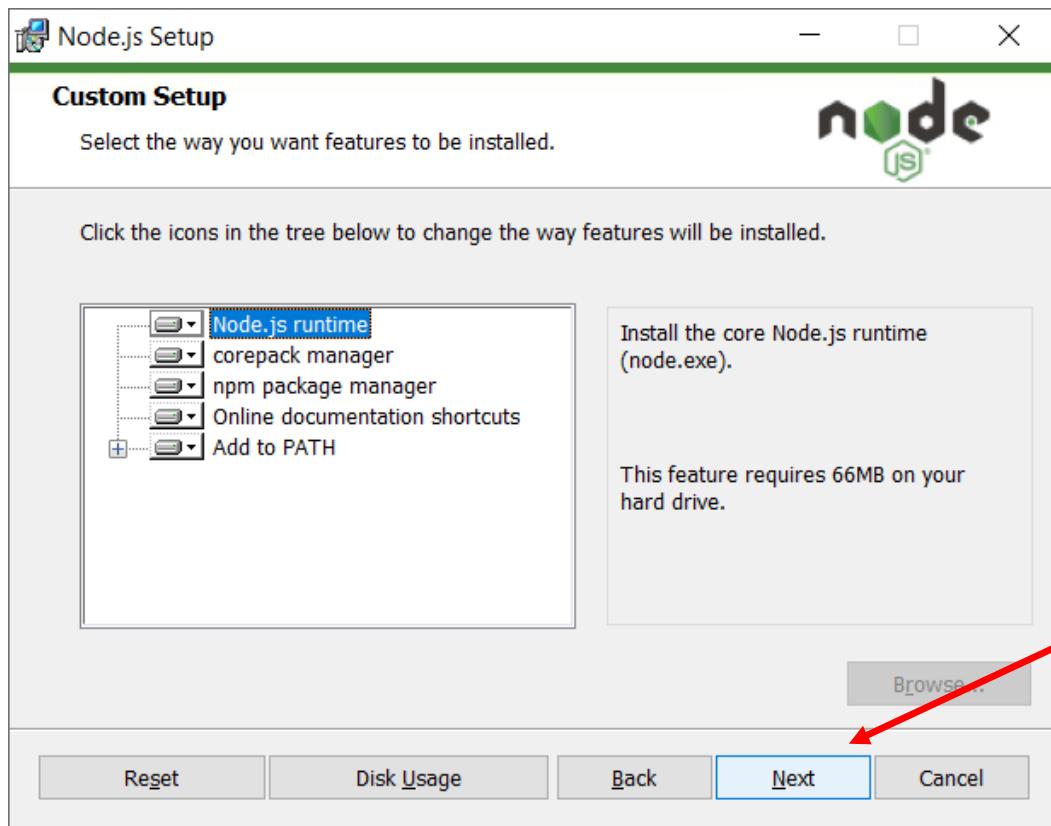
Aceite os termos,  
e clique para  
avançar

# Instalando o Node.js



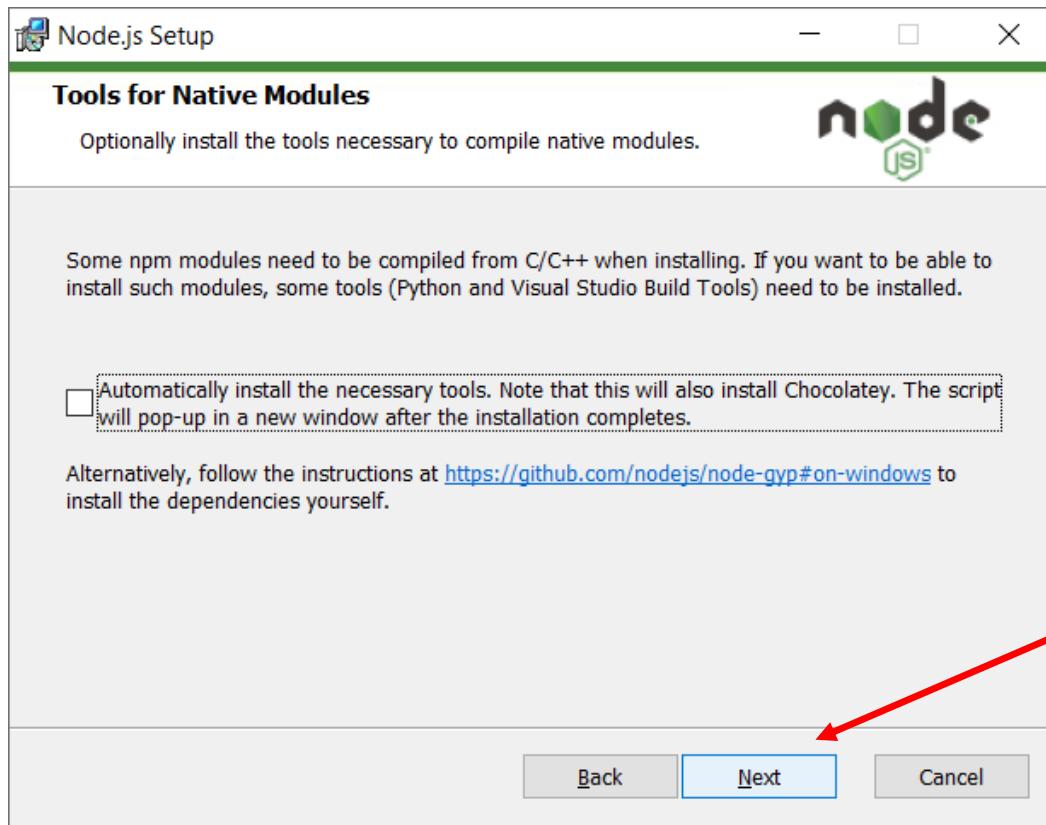
Clique para  
avançar

# Instalando o Node.js



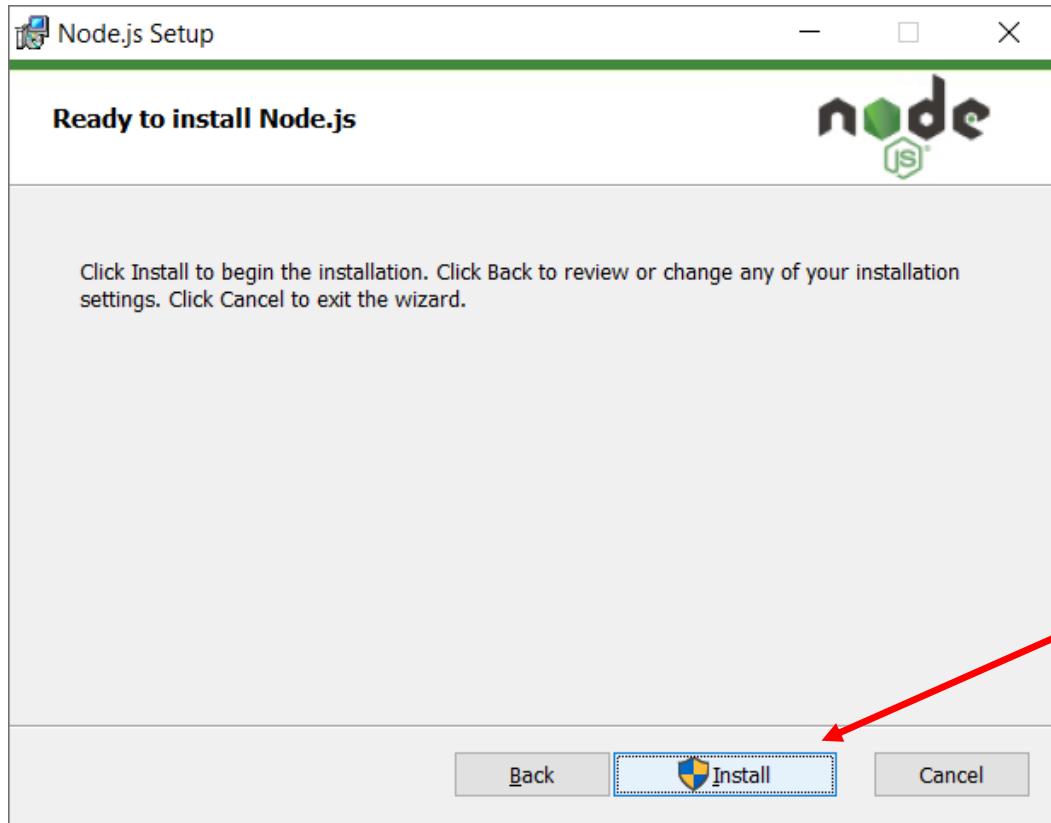
Clique para  
avançar

# Instalando o Node.js

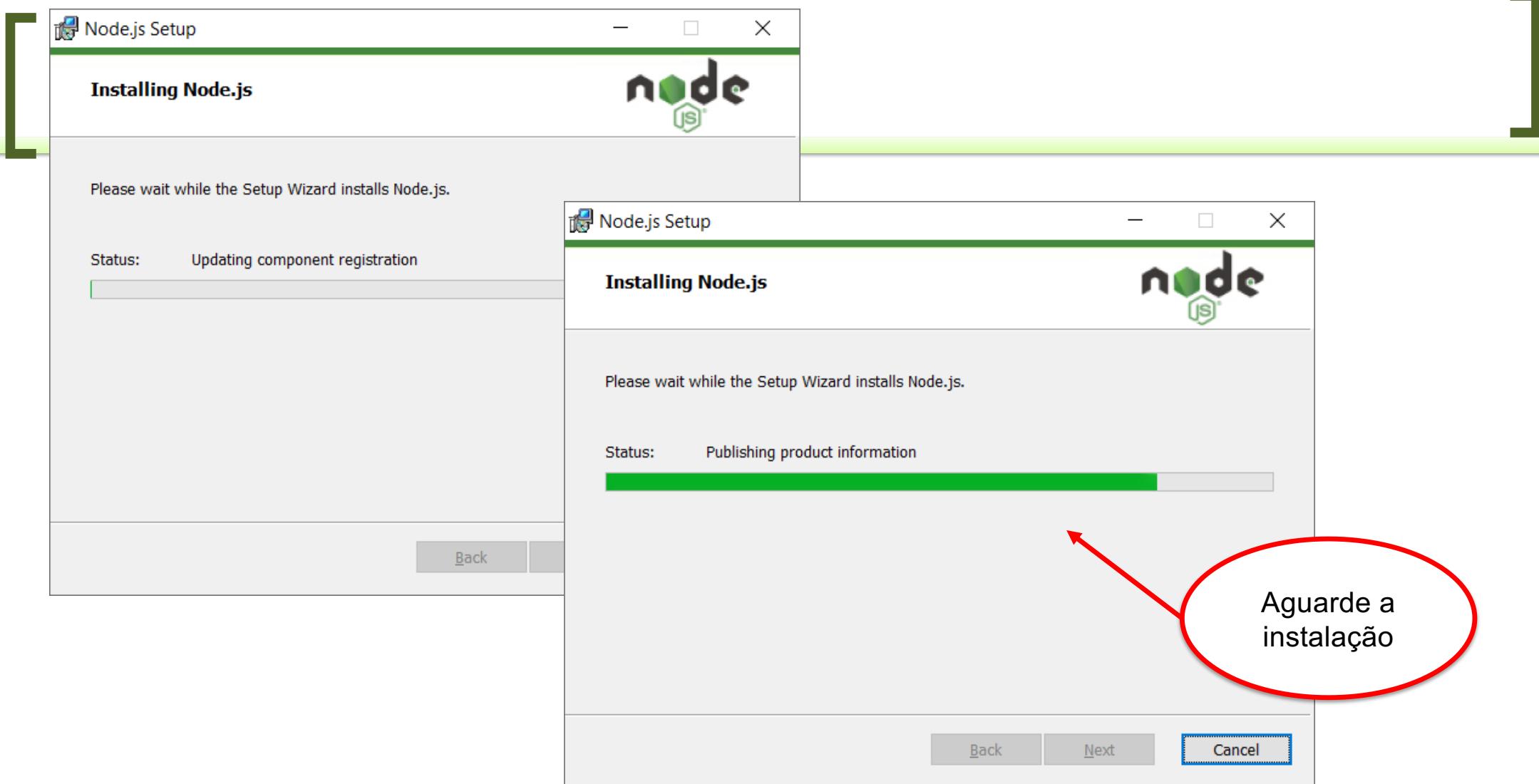


Clique para  
avançar

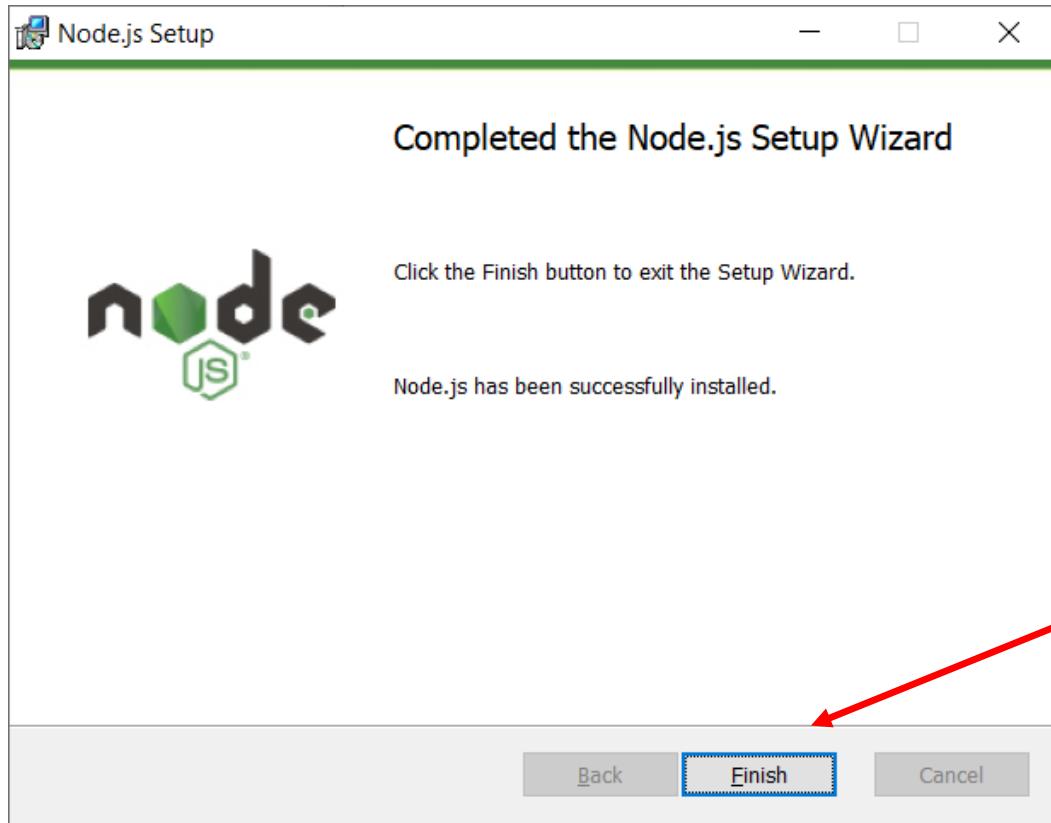
# Instalando o Node.js



Clique para  
iniciar a  
instalação

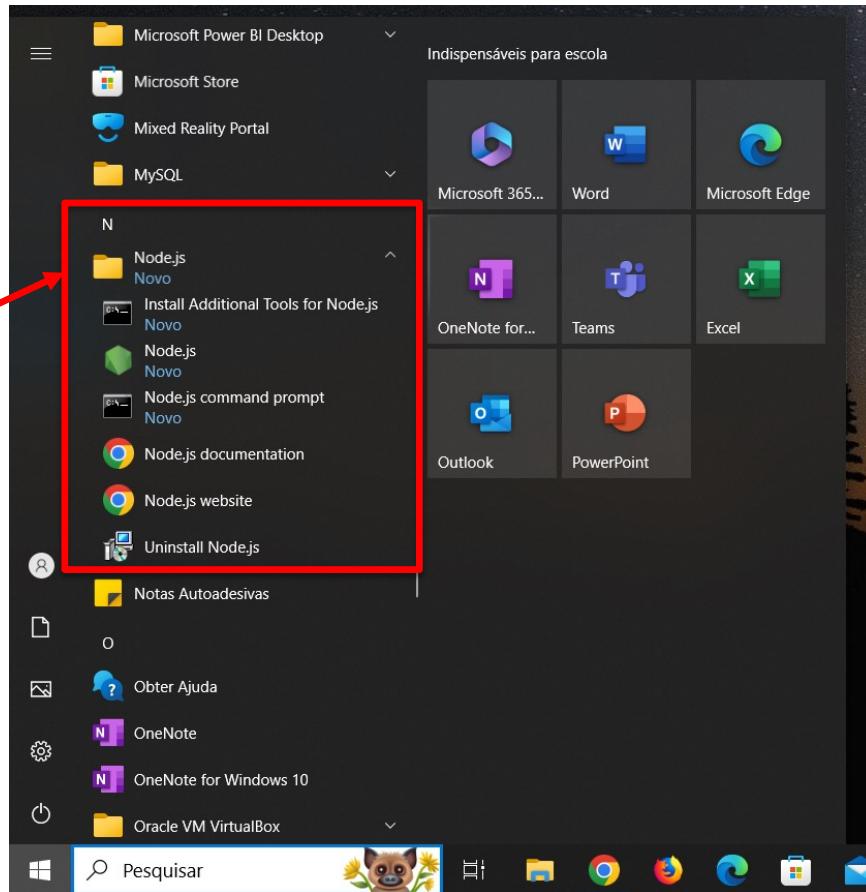


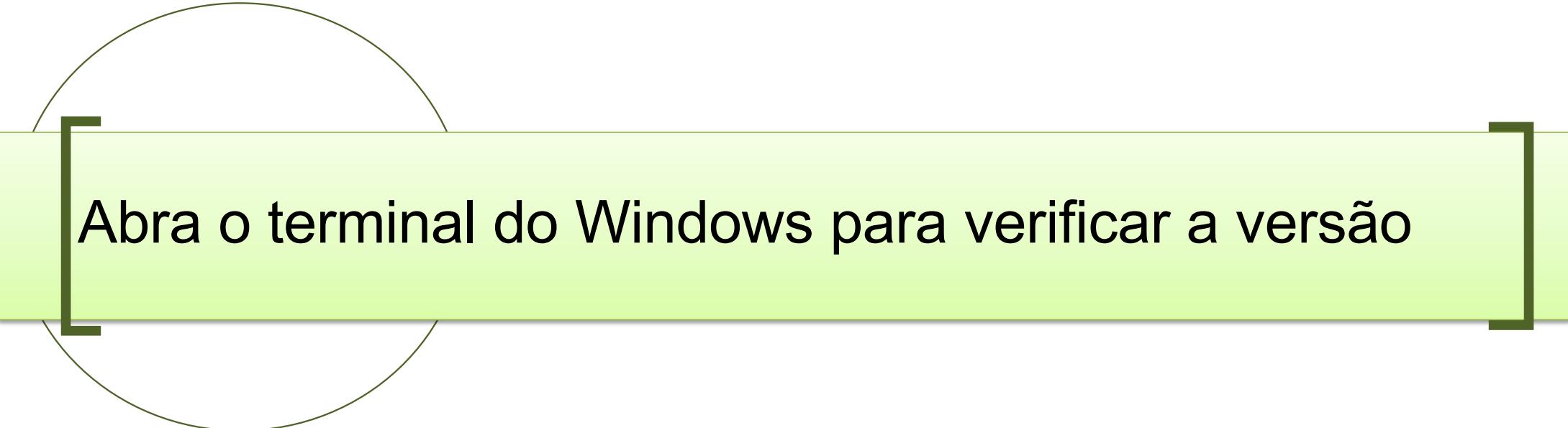
# Instalando o Node.js



Clique para  
finalizar

Grupo de  
programas no  
Windows





**Abra o terminal do Windows para verificar a versão**

**Guilherme Henrique de Souza**

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Selecionar Prompt de Comando

Microsoft Windows [versão 10.0.19044.3086]  
(c) Microsoft Corporation. Todos os direitos reservados.

C:\Users\admin>



Prompt de  
Comando

Prompt de Comando

```
Microsoft Windows [versão 10.0.19044.3086]
(c) Microsoft Corporation. Todos os direitos reservados.
```

```
C:\Users\admin>node -v
v20.12.2
```

```
C:\Users\admin>
```

Digite  
**node -v**

[ Prompt de Comando ]

```
Microsoft Windows [versão 10.0.19044.3086]
(c) Microsoft Corporation. Todos os direitos reservados.
```

```
C:\Users\admin>node -v
v20.12.2
```

```
C:\Users\admin>npm -v
10.5.0
```

```
C:\Users\admin>
```

Digite  
**npm -v**

# Criando um novo Projeto React JS

**Guilherme Henrique de Souza**

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```
C:\ Prompt de Comando  
Microsoft Windows [versão 10.0.19044.3086]  
(c) Microsoft Corporation. Todos os direitos reservados.  
  
C:\Users\admin>node -v  
v20.12.2  
  
C:\Users\admin>npm -v  
10.5.0  
  
C:\Users\admin>cd Desktop ←  
C:\Users\admin\Desktop>
```

Digite  
**cd Desktop**

```
C:\Windows\system32\cmd.exe
```

```
Microsoft Windows [versão 10.0.19044.3086]
(c) Microsoft Corporation. Todos os direitos reservados.
```

```
C:\Users\admin>node -v
v20.12.2
```

```
C:\Users\admin>npm -v
10.5.0
```

```
C:\Users\admin>cd Desktop
```

```
C:\Users\admin\Desktop>npx create-react-app aula01
```

Digite o comando  
**npx create-react-app aula01**

```
npm exec create-react-app aula01
```

```
C:\Users\admin\Desktop>npx create-react-app aula01
Need to install the following packages:
create-react-app@5.0.1
Ok to proceed? (y)
```

Digite y

```
npm install react react-dom react-scripts cra-template

C:\Users\admin\Desktop>npx create-react-app aula01
Need to install the following packages:
create-react-app@5.0.1
Ok to proceed? (y) y
npm WARN deprecated tar@2.2.2: This version of tar is no longer supported, and will not receive security updates. Please upgrade asap.

Creating a new React app in C:\Users\admin\Desktop\aula01.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...
[██████████] - idealTree:webpack-dev-server: sill placeDep ROOT schema-utils@3.3.0 OK for: @pmmwh/react-refres
```

Aguarde a  
instalação e  
criação

```
C:\Windows\system32\cmd.exe
run `npm fund` for details

8 vulnerabilities (2 moderate, 6 high)

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.

Success! Created aula01 at C:\Users\admin\Desktop\aula01
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd aula01
  npm start

Happy hacking! ←
C:\Users\admin\Desktop>
```

Pronto

```
Run `npm audit` for details.

Success! Created aula01 at C:\Users\admin\Desktop\aula01
Inside that directory, you can run several commands:

npm start
  Starts the development server.

npm run build
  Bundles the app into static files for production.

npm test
  Starts the test runner.

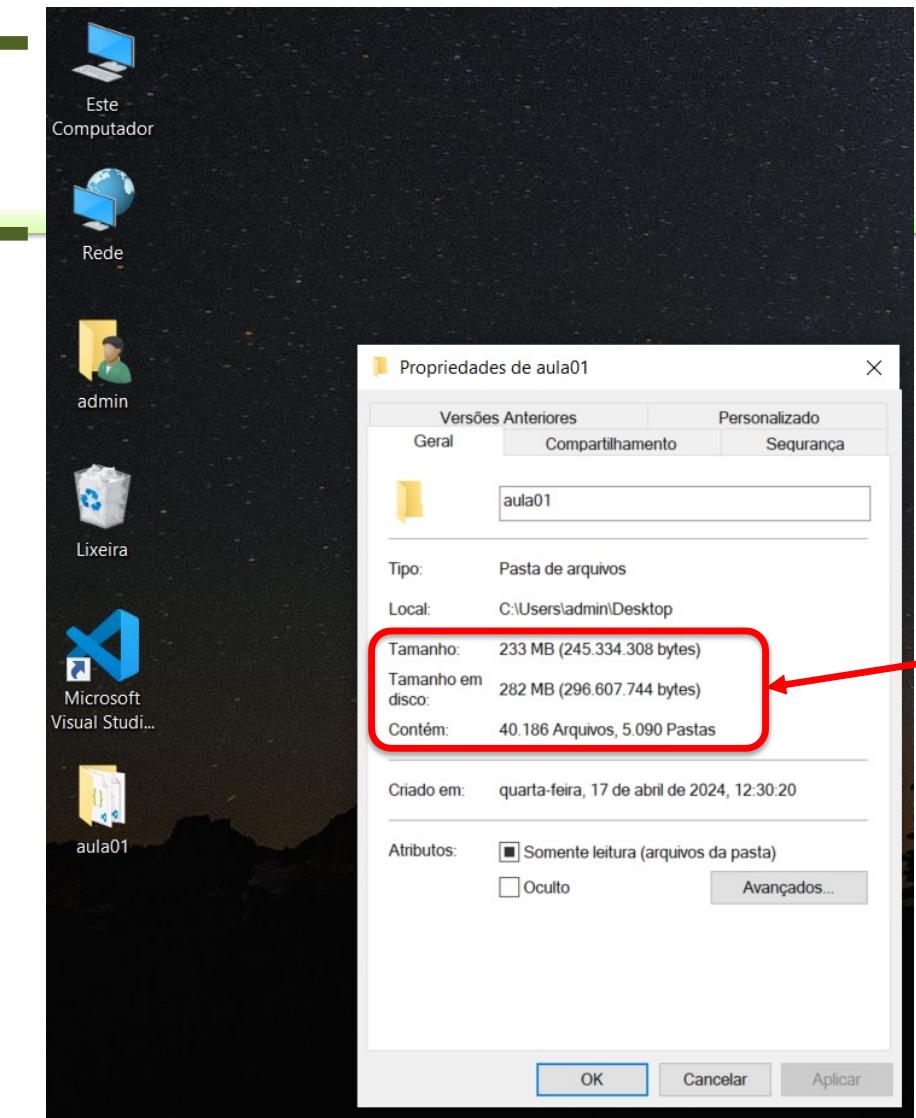
npm run eject
  Removes this tool and copies build dependencies, configuration files
  and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

cd aula01
npm start

Happy hacking!

C:\Users\admin\Desktop>
```



Tamanho da pasta

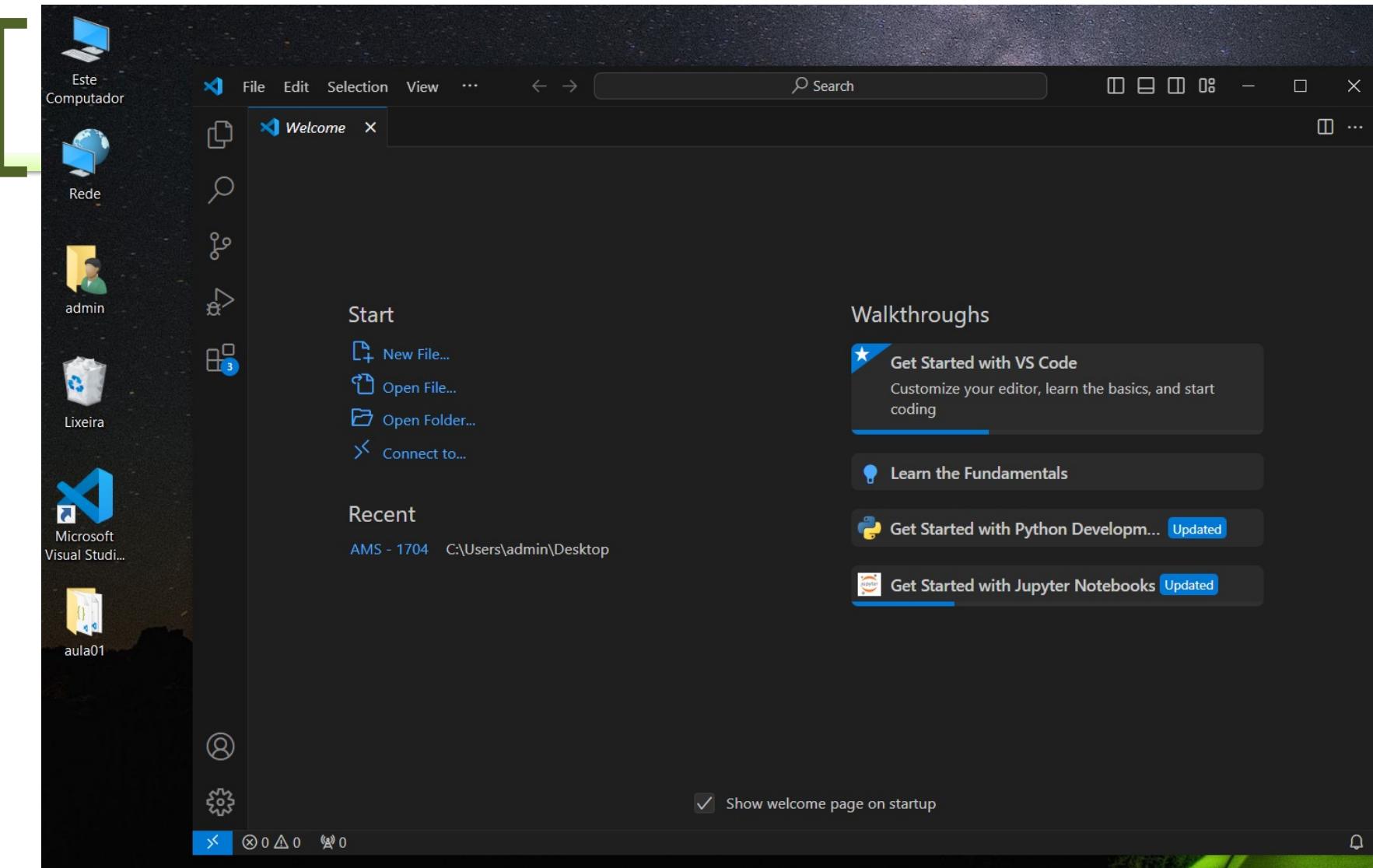
# Abrindo o Projeto no Visual Code

**Guilherme Henrique de Souza**

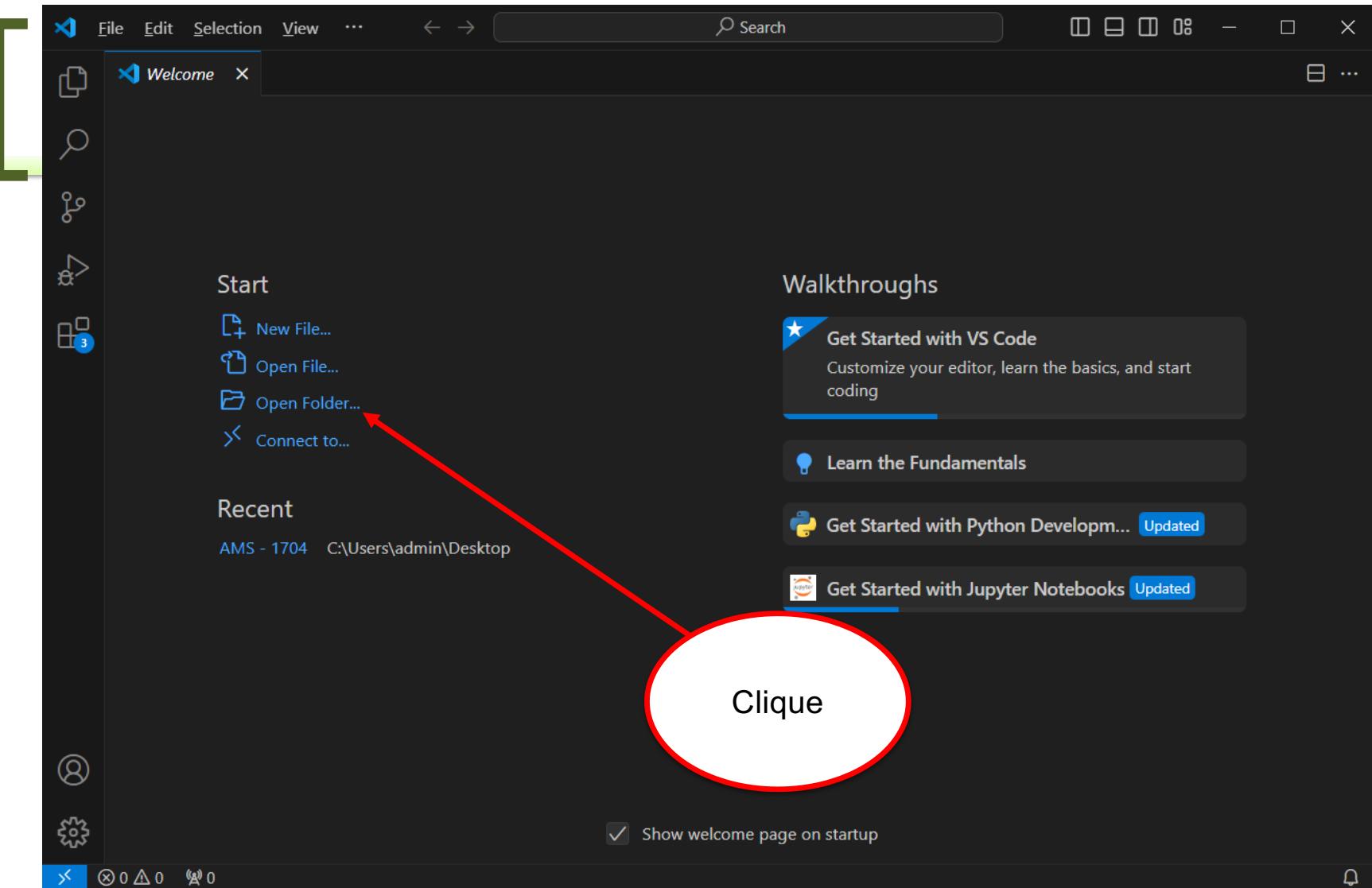
[guilherme.souza@etec.sp.gov.br](mailto:guilherme.souza@etec.sp.gov.br)

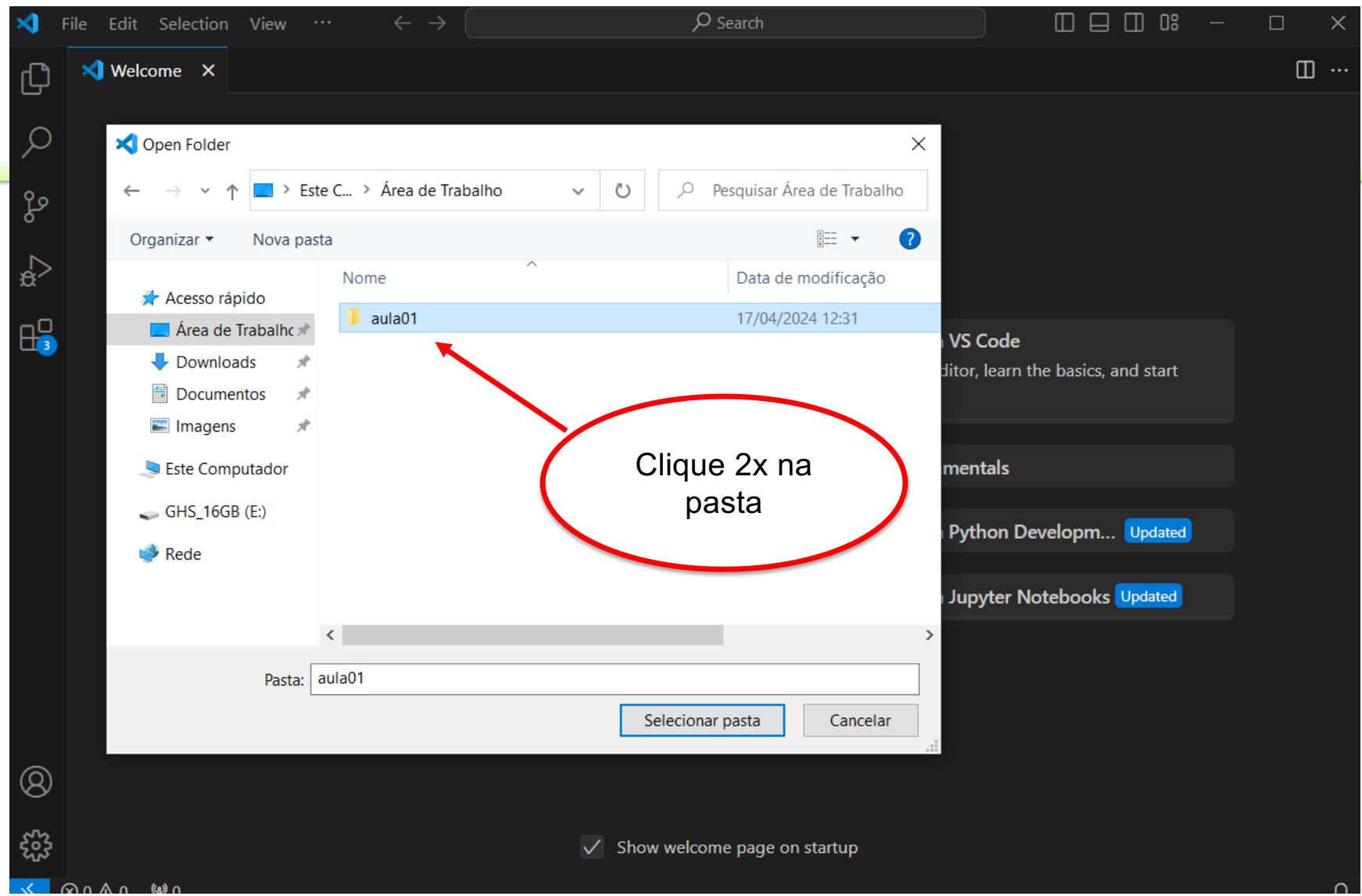
[guilherme.souza183@fatec.sp.gov.br](mailto:guilherme.souza183@fatec.sp.gov.br)

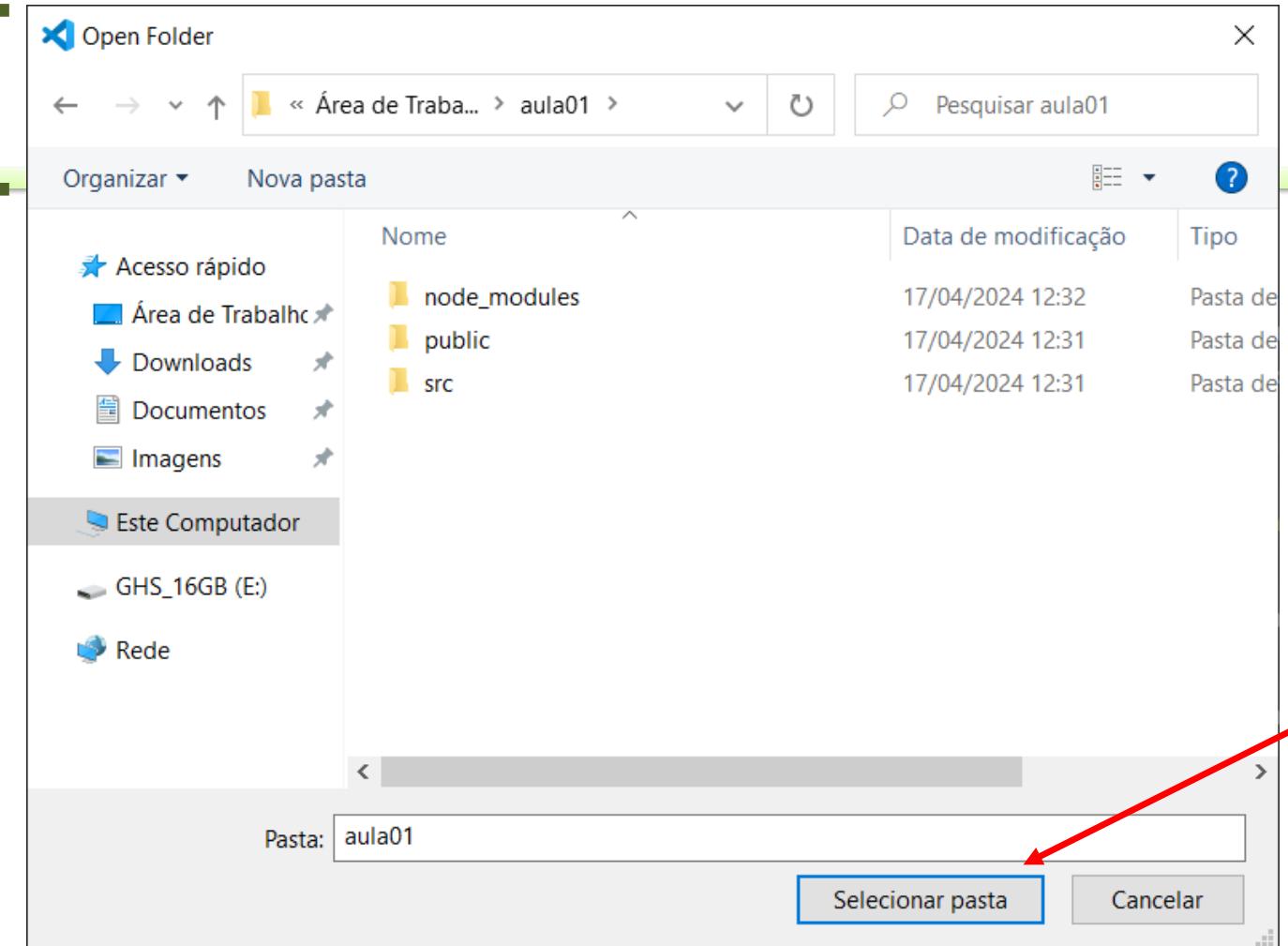
## Instalando o NodeJS e Criando o primeiro app em React JS



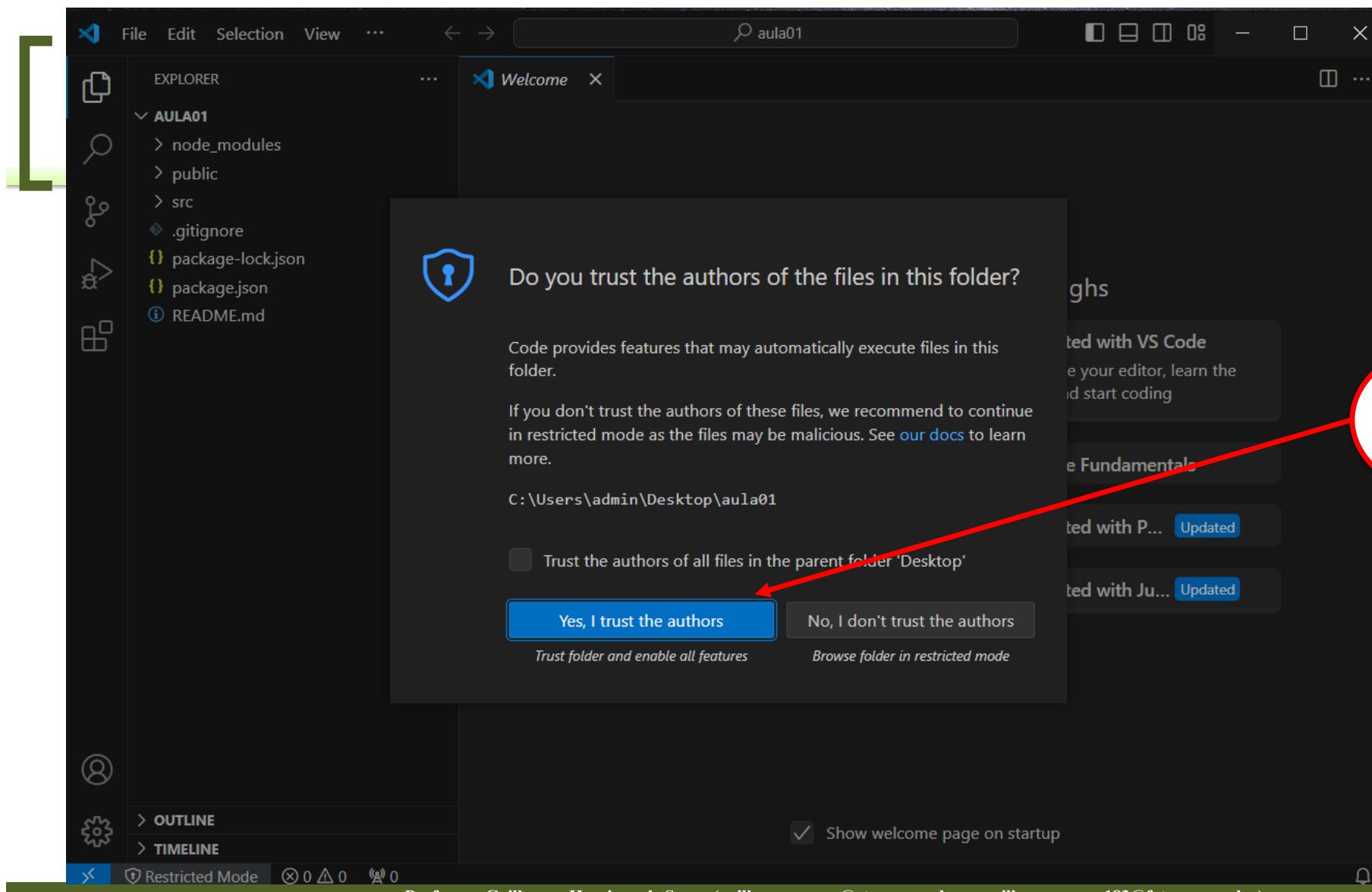
Professor: Guilherme Henrique de Souza (guilherme.souza@etec.sp.gov.br ou guilherme.souza183@fatec.sp.gov.br )



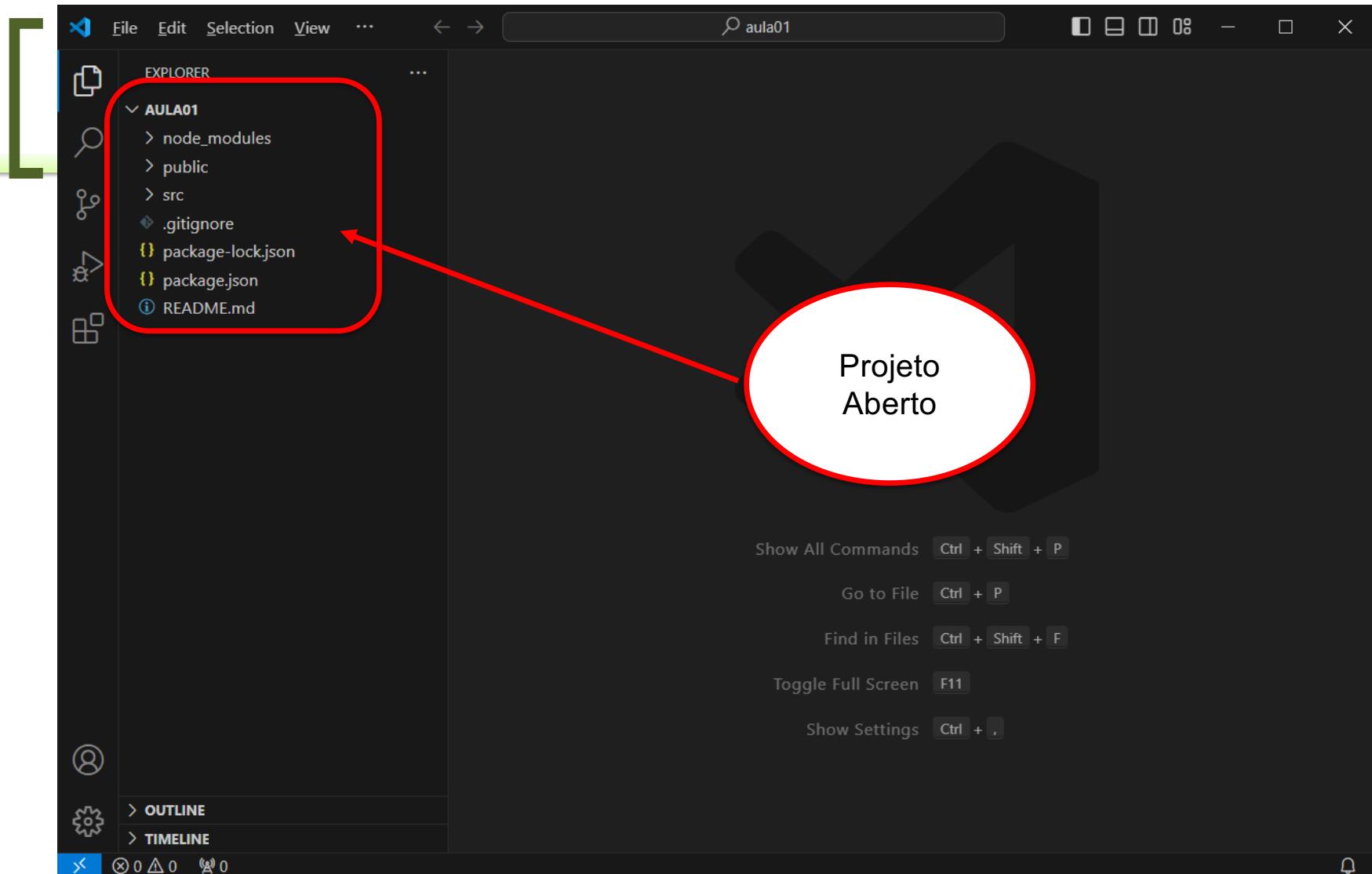


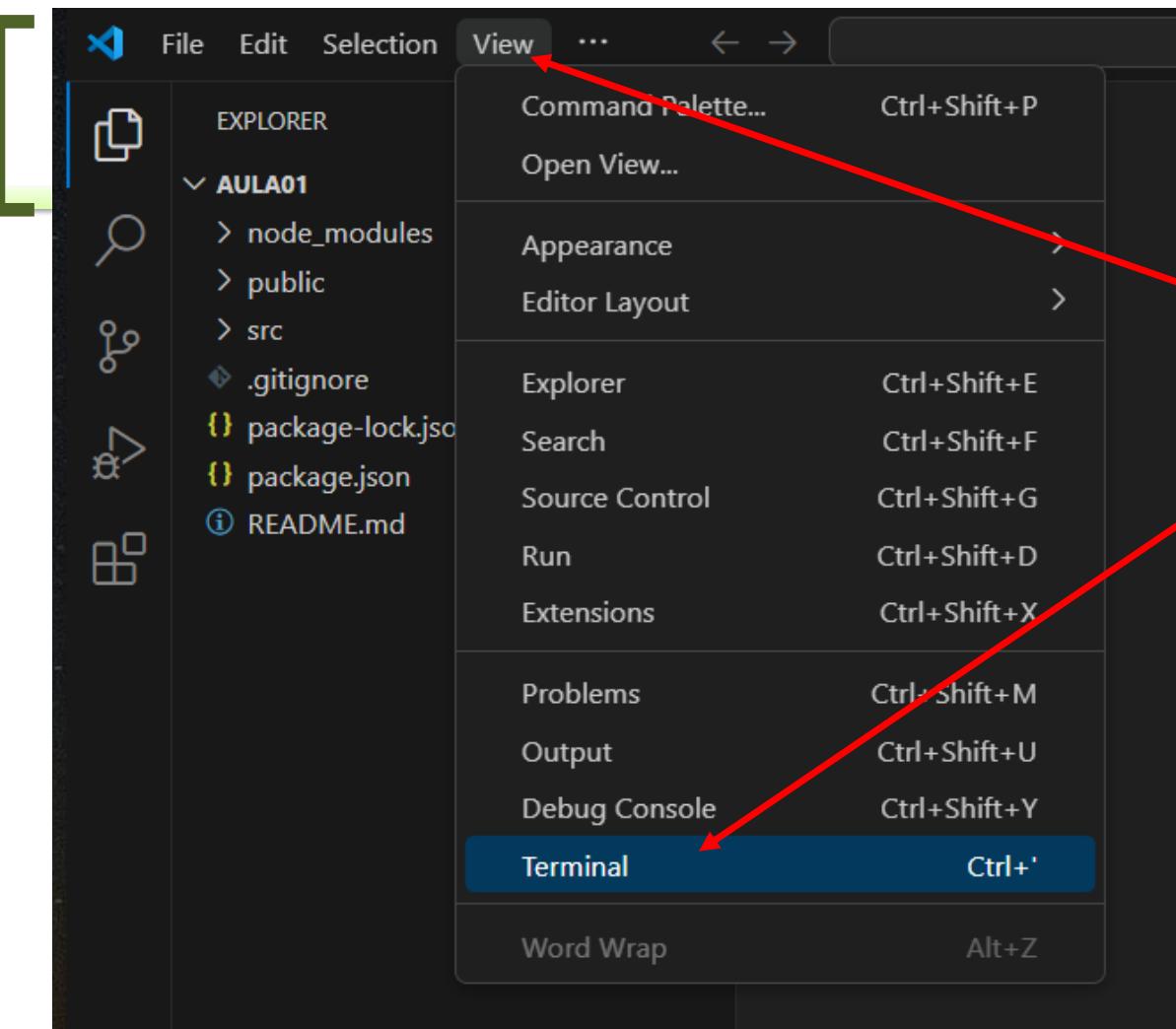


## Instalando o NodeJS e Criando o primeiro app em React JS

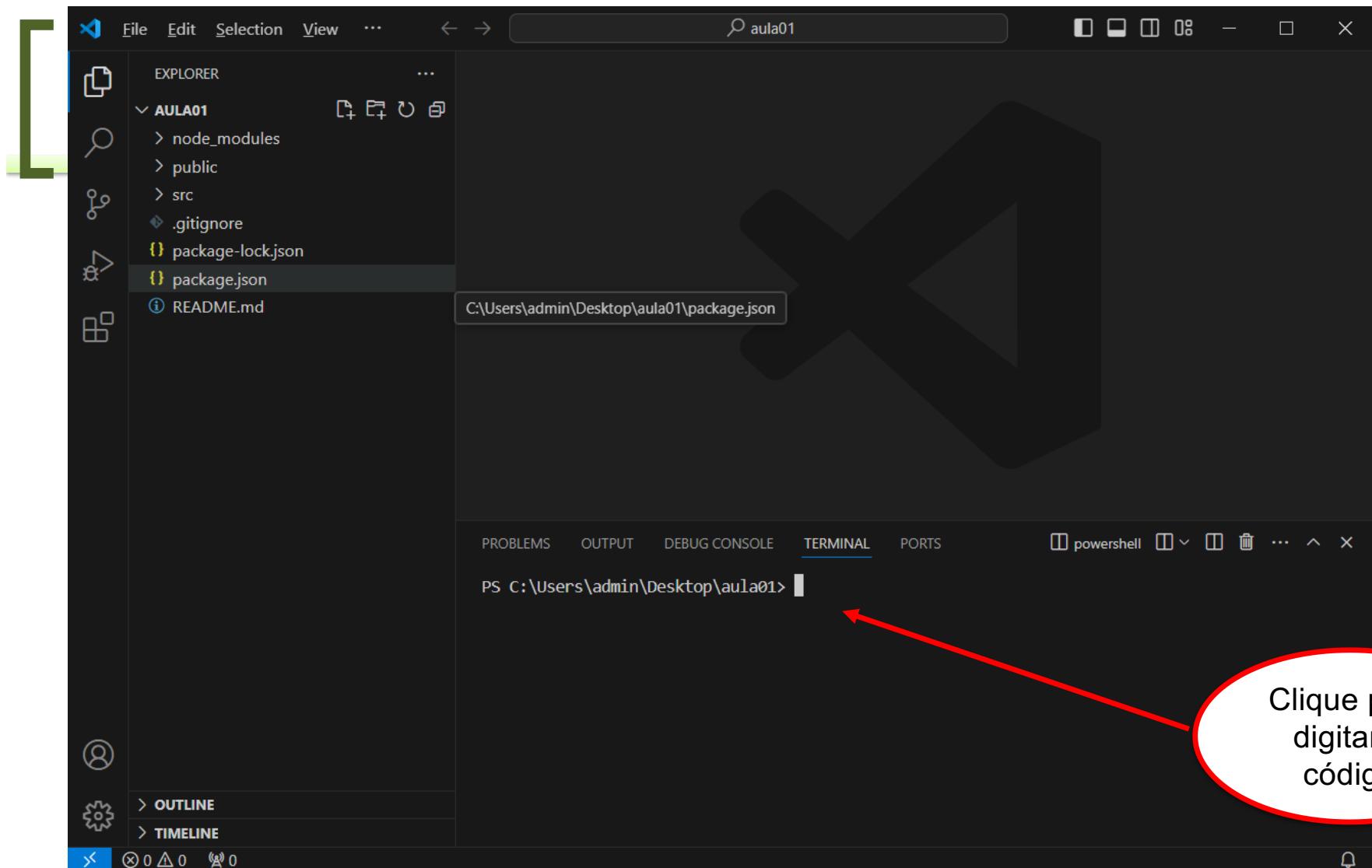


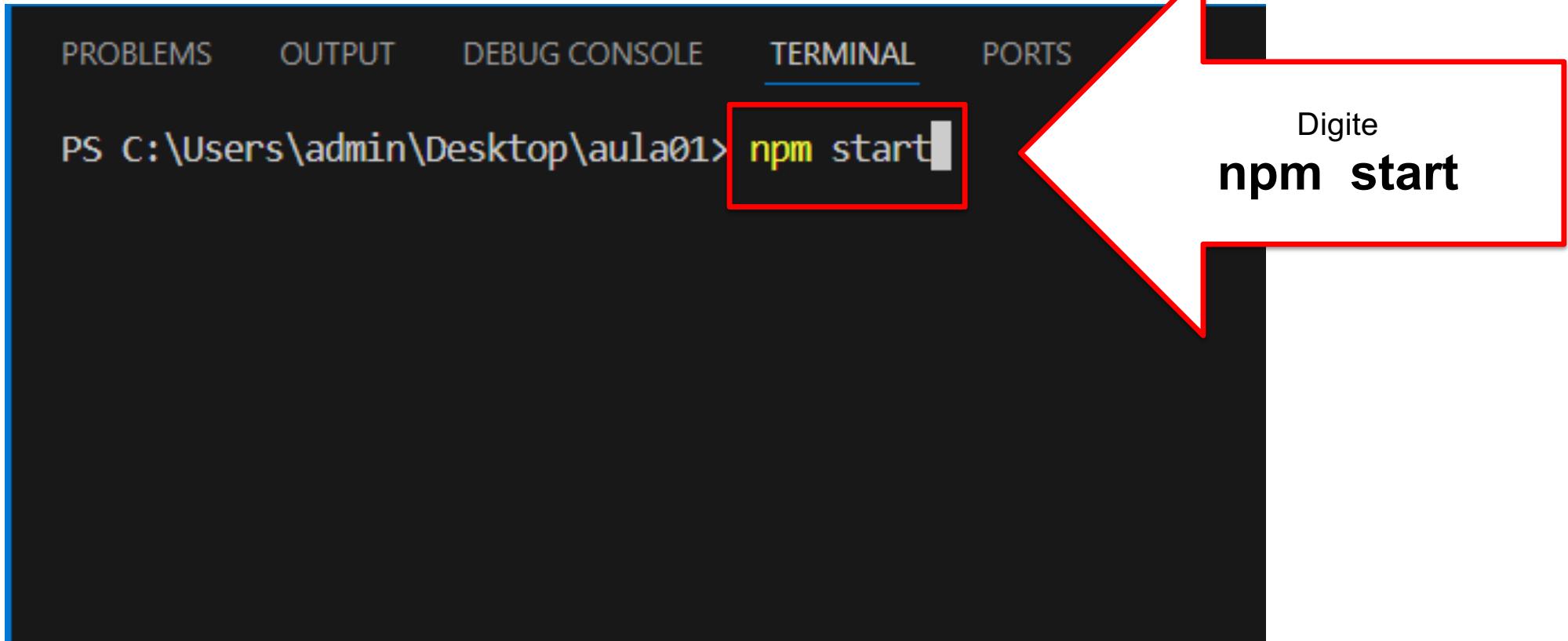
Professor: Guilherme Henrique de Souza (guilherme.souza@etec.sp.gov.br ou guilherme.souza183@fatec.sp.gov.br )





Clique para abrir  
o terminal no  
Visual Code





A screenshot of a terminal window in Visual Studio Code. The window has tabs at the top: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (which is underlined in blue), and PORTS. The main area shows a command prompt: PS C:\Users\admin\Desktop\aula01>. Below the prompt, the command 'npm start' is entered and highlighted with a red rectangle. A large white arrow points from the text 'Digite npm start' to the highlighted command in the terminal.

Digite  
**npm start**

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

Compiled successfully!

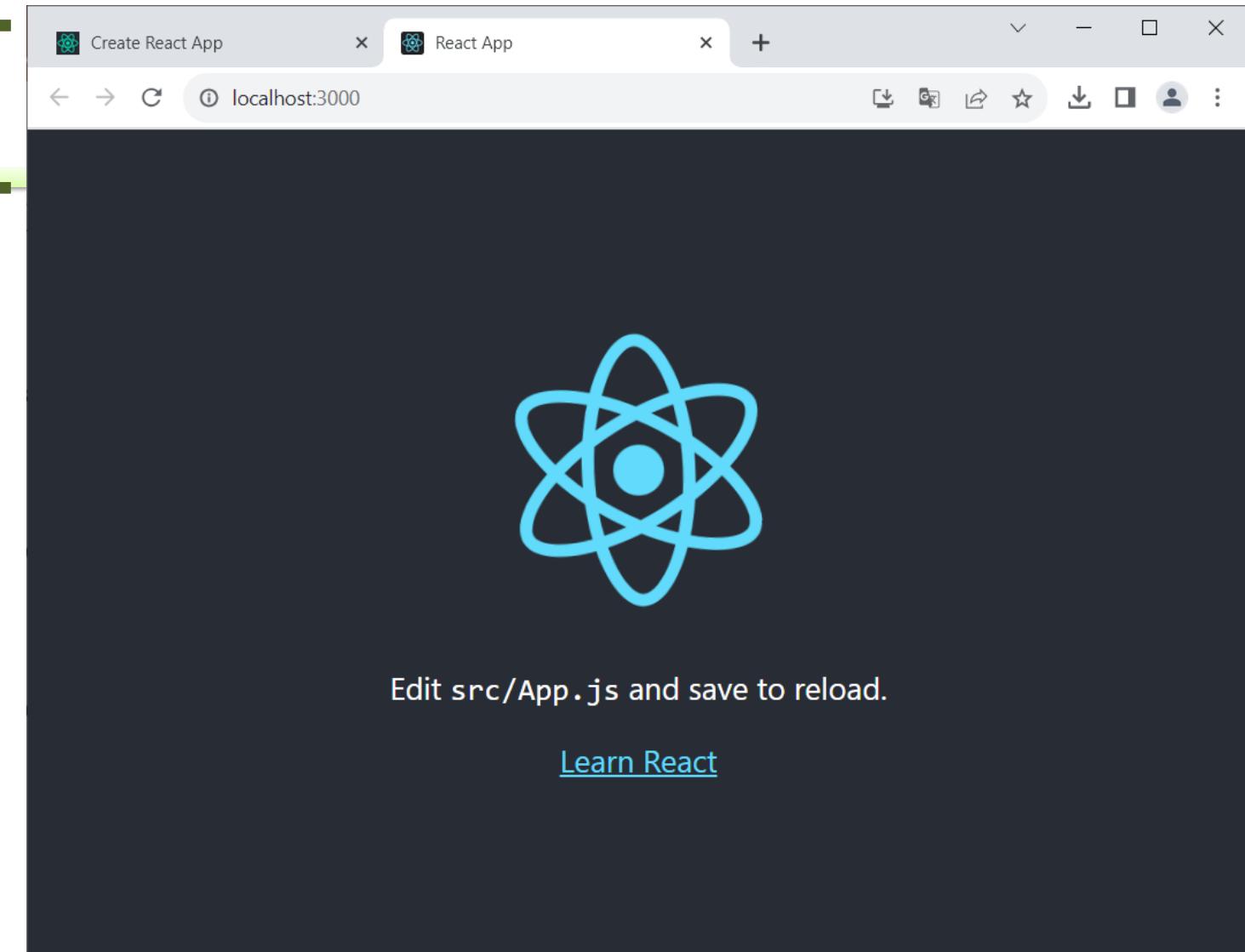
You can now view aula01 in the browser.

Local:          http://localhost:3000
On Your Network: http://192.168.4.10:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

Servidor Local,  
Servidor na Rede



# Visualizando arquivos do Projeto

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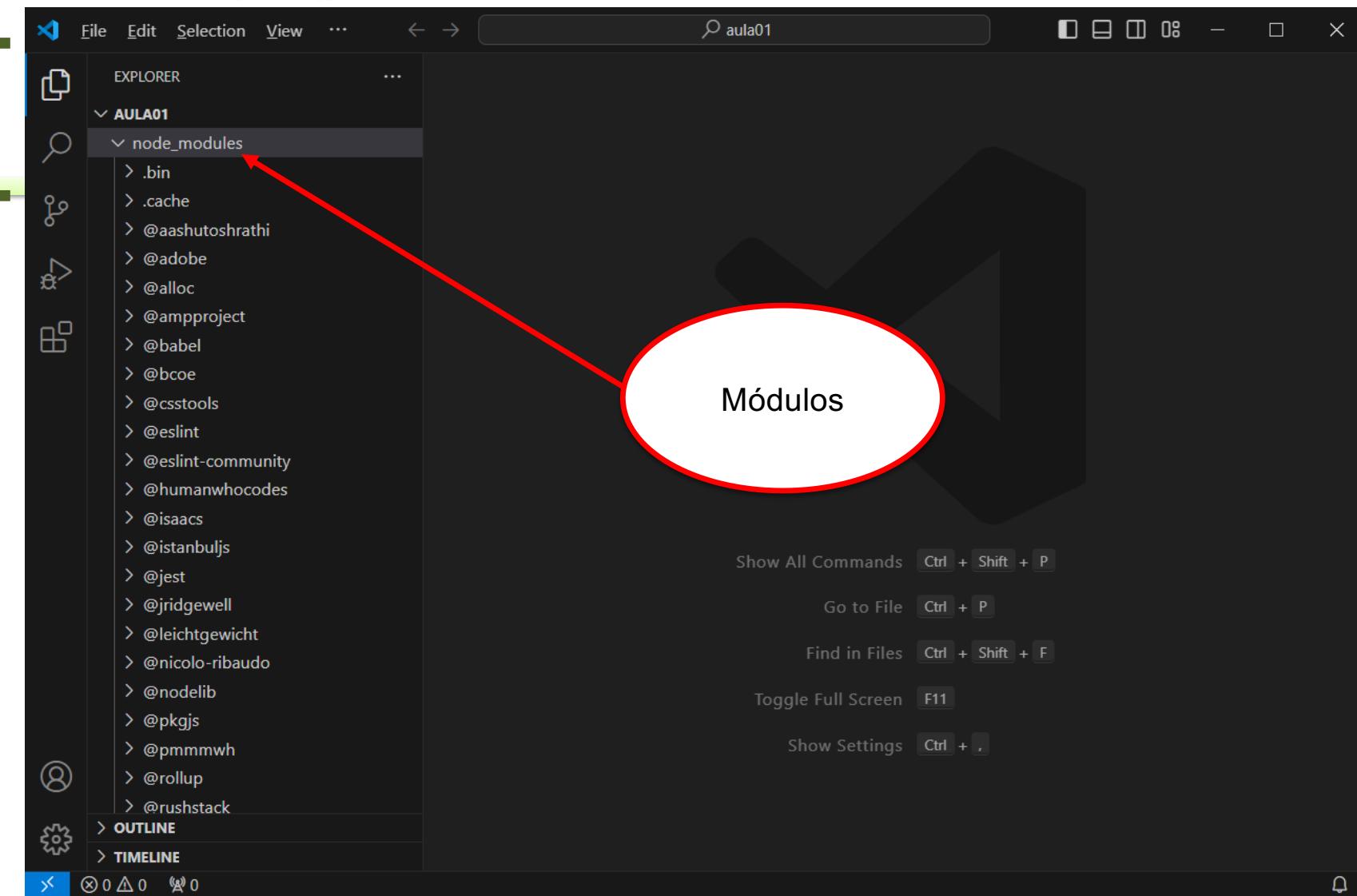
[guilherme.souza183@fatec.sp.gov.br](mailto:guilherme.souza183@fatec.sp.gov.br)

## Instalando o NodeJS e Criando o primeiro app em React JS

```
└── AULA01
    ├── node_modules
    └── public
        ├── favicon.ico
        ├── index.html
        ├── logo192.png
        ├── logo512.png
        ├── manifest.json
        └── robots.txt
    └── src
        ├── App.css
        ├── App.js
        ├── App.test.js
        ├── index.css
        ├── index.js
        ├── logo.svg
        ├── reportWebVitals.js
        ├── setupTests.js
        └── .gitignore
    └── package-lock.json
    └── package.json
    └── README.md
```

public

src



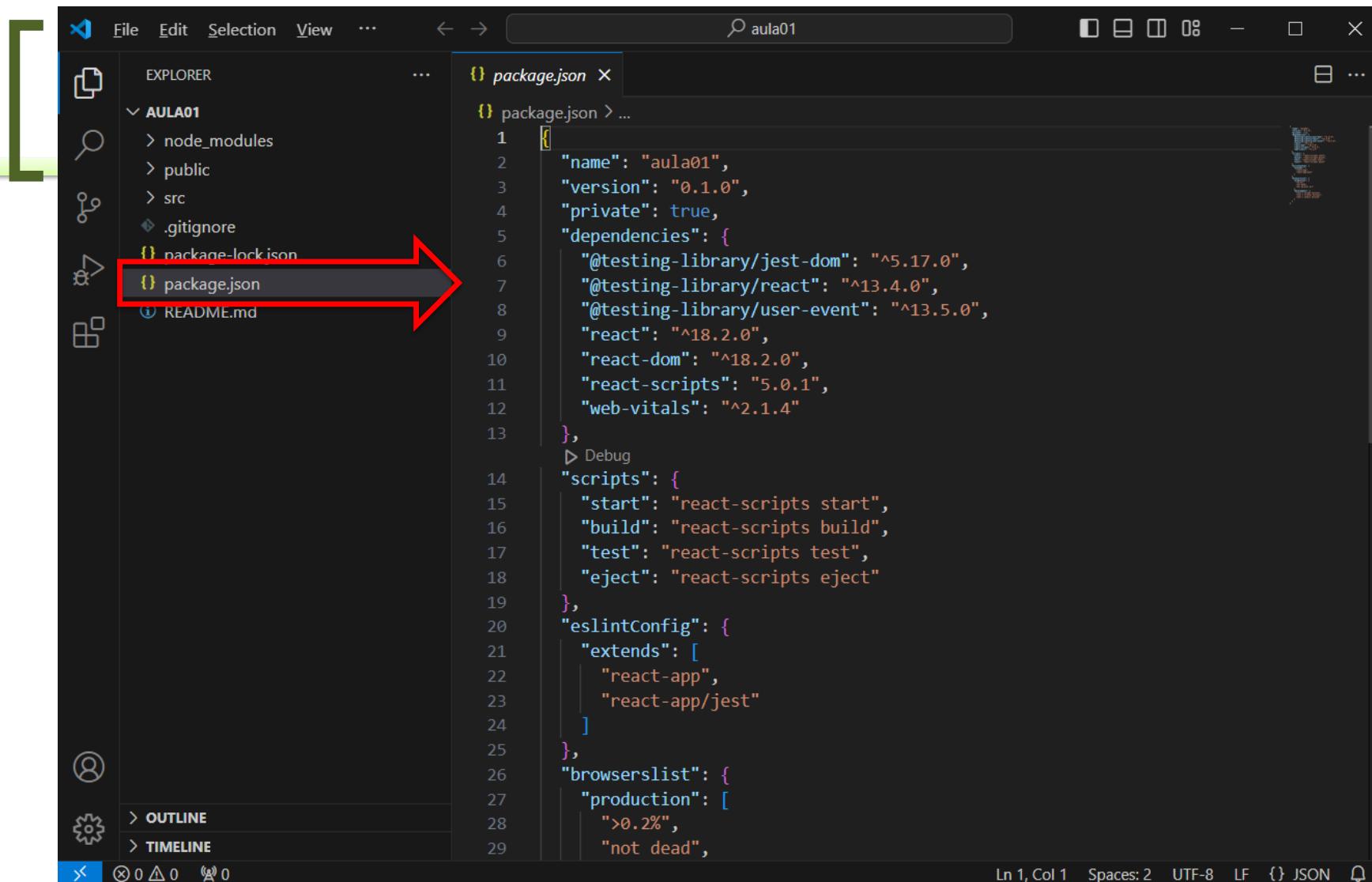
# Arquivo package.json

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## Instalando o NodeJS e Criando o primeiro app em React JS



A screenshot of the Visual Studio Code (VS Code) interface. The title bar says "aula01". The left sidebar shows a file tree with a red arrow pointing to the "package.json" file, which is highlighted with a red box. The main editor area displays the contents of the "package.json" file:

```
1  {
2    "name": "aula01",
3    "version": "0.1.0",
4    "private": true,
5    "dependencies": {
6      "@testing-library/jest-dom": "^5.17.0",
7      "@testing-library/react": "^13.4.0",
8      "@testing-library/user-event": "^13.5.0",
9      "react": "^18.2.0",
10     "react-dom": "^18.2.0",
11     "react-scripts": "5.0.1",
12     "web-vitals": "^2.1.4"
13   },
14   "scripts": {
15     "start": "react-scripts start",
16     "build": "react-scripts build",
17     "test": "react-scripts test",
18     "eject": "react-scripts eject"
19   },
20   "eslintConfig": {
21     "extends": [
22       "react-app",
23       "react-app/jest"
24     ]
25   },
26   "browserslist": {
27     "production": [
28       ">0.2%",
29       "not dead",
30     ]
31   }
32 }
```

The status bar at the bottom shows: Ln 1, Col 1 Spaces: 2 UTF-8 LF {} JSON

# Arquivo index.html

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## Instalando o NodeJS e Criando o primeiro app em React JS

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer (Left):** Shows the project structure for "AULA01". The "public" folder contains "favicon.ico", "index.html", "logo192.png", "logo512.png", "manifest.json", and "robots.txt". A red arrow points to the "index.html" file.
- Code Editor (Right):** Displays the content of "index.html". The code includes meta tags for charset, viewport, theme-color, and description, as well as links for icon and manifest files. It also includes a note about the use of "%PUBLIC\_URL%" and a noscript fallback.
- Status Bar (Bottom):** Shows file statistics: 0△0, and status information: Ln 11, Col 7, Spaces: 2, UTF-8, LF, HTML.

Professor: Guilherme Henrique de Souza (guilherme.souza@etec.sp.gov.br ou guilherme.souza183@fatec.sp.gov.br)

The screenshot shows the Visual Studio Code interface with the title bar "index.html - aula01 - Visual Studio Code". The left sidebar displays the project structure under "AULA01", including "node\_modules", "public" (containing "favicon.ico", "index.html", "logo192.png", "logo512.png", "manifest.json", and "robots.txt"), "src", ".gitignore", "package-lock.json", "package.json", and "README.md". A red arrow points from the "index.html" item in the Explorer to the code editor. The code editor shows the HTML content of "index.html". A red circle highlights the line "". A callout bubble with a red border and arrow points to this div, containing the text "DIV com o id root".

```
public > index.html > html > head > meta
19      NOTICE THE USE OF %PUBLIC_URL% IN THE TAGS ABOVE.
20      IT WILL BE REPLACED WITH THE URL OF THE `PUBLIC` FOLDER DURING THE
21      ONLY FILES INSIDE THE `PUBLIC` FOLDER CAN BE REFERENCED FROM THE H
22
23      UNLIKE "/favicon.ico" OR "favicon.ico", "%PUBLIC_URL%/favicon.ico"
24      WORK CORRECTLY BOTH WITH CLIENT-SIDE ROUTING AND A NON-ROOT PUBLIC
25      LEARN HOW TO CONFIGURE A NON-ROOT PUBLIC URL BY RUNNING 'npm run b
26      -->
27      <title>React App</title>
28      </head>
29      <body>
30      <noscript>You Need To Enable JavaScript To Run This App.</noscript>
31      <div id="root"></div>
32      <!--
33      This HTML File Is A Template.
34      If You Open It Directly In The Browser, You Will See An Empty Page
35
36      You Can Add Webfonts, Meta Tags, Or Analytics To This File.
37      The Build Step Will Place The Bundled Scripts Into The <body> Tag.
38
39      To Begin The Development, Run `npm Start` Or `yarn Start`.
40      To Create A Production Bundle, Use `npm Run Build` Or `yarn Build`
41      -->
42      </body>
43      </html>
```

# Arquivo index.js

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The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "AULA01". The "index.js" file in the "src" folder is selected and highlighted with a red arrow.
- Code Editor:** Displays the "index.js" file content. A red box highlights the line of code: `const root = ReactDOM.createRoot(document.getElementById('root'));`. A red callout bubble points to this line with the text: "Vinculando o <div> na pagina index.html".
- Bottom Status Bar:** Shows file information: "Ln 1, Col 1", "Spaces: 2", "UTF-8", "LF", "JavaScript", and icons for search, replace, and notifications.

```
index.js
src > JS index.js > ...
1 import React from 'react';
2 import ReactDOM from 'react-dom/client';
3 import './index.css';
4 import App from './App';
5 import reportWebVitals from './reportWebVitals';
6
7 const root = ReactDOM.createRoot(document.getElementById('root'));
8 root.render(
9   <React.StrictMode>
10    |   <App />
11    </React.StrictMode>
12 );
13
14 // If you want to start measuring performance in your app, pass a
15 // to log results (for example: reportWebVitals(console.log))
16 // or send to an analytics endpoint. Learn more: https://bit.ly/
17 reportWebVitals();
18
```

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "AULA01". The "src" folder contains "App.css", "App.js", "App.test.js", "#index.css", and "index.js". A red arrow points from the "index.js" file in the Explorer to its content in the editor.
- Editor:** The "index.js" file is open. The code imports React and ReactDOM, and creates a root element using ReactDOM.createRoot. It then renders an  component within a StrictMode container. A red callout bubble highlights the line "`<App />`" with the text "Chamada do componente App".
- Bottom Status Bar:** Shows file statistics (0△0) and encoding information (JavaScript).

```
1 import React from 'react';
2 import ReactDOM from 'react-dom/client';
3 import './index.css';
4 import App from './App';
5 import reportWebVitals from './reportWebVitals';
6
7 const root = ReactDOM.createRoot(document.getElementById('root'));
8 root.render(
9   <React.StrictMode>
10    |   <App />
11    |   </React.StrictMode>
12  );
13
14 // If you want to start measuring performance in your app, pass a function
15 // to log results (for example: reportWebVitals(console.log))
16 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
17 reportWebVitals();
18
```

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "AULA01". The file "JS App.js" is selected and highlighted with a red arrow.
- Code Editor:** Displays the content of "JS App.js". The code defines a functional component named "App" which returns a JSX structure including a logo and a link to the React website.
- Status Bar:** Shows the file path "src > JS App.js > ...", line 1, column 1, and other status information like "Spaces: 2", "UTF-8", and "JavaScript".

A red circle highlights the text "A função App é o componente" (The function App is the component) with an arrow pointing to the "App" function in the code editor.

```
src > JS App.js > ...
1 import logo from './logo.svg';
2 import './App.css';
3
4 function App() {
5   return (
6     <div className="App">
7       <header className="App-header">
8         <img src={logo} className="App-logo" alt="logo" />
9         <p>
10           Edit <code>src/App.js</code> and save to reload.
11         </p>
12         <a
13           className="App-link"
14           href="https://reactjs.org"
15           target="_blank"
16           rel="noopener noreferrer"
17         >
18           Learn React
19         </a>
20       </header>
21     </div>
22   );
23 }
24
25 export default App;
```

## Instalando o NodeJS e Criando o primeiro app em React JS

The screenshot shows the Visual Studio Code interface with the following details:

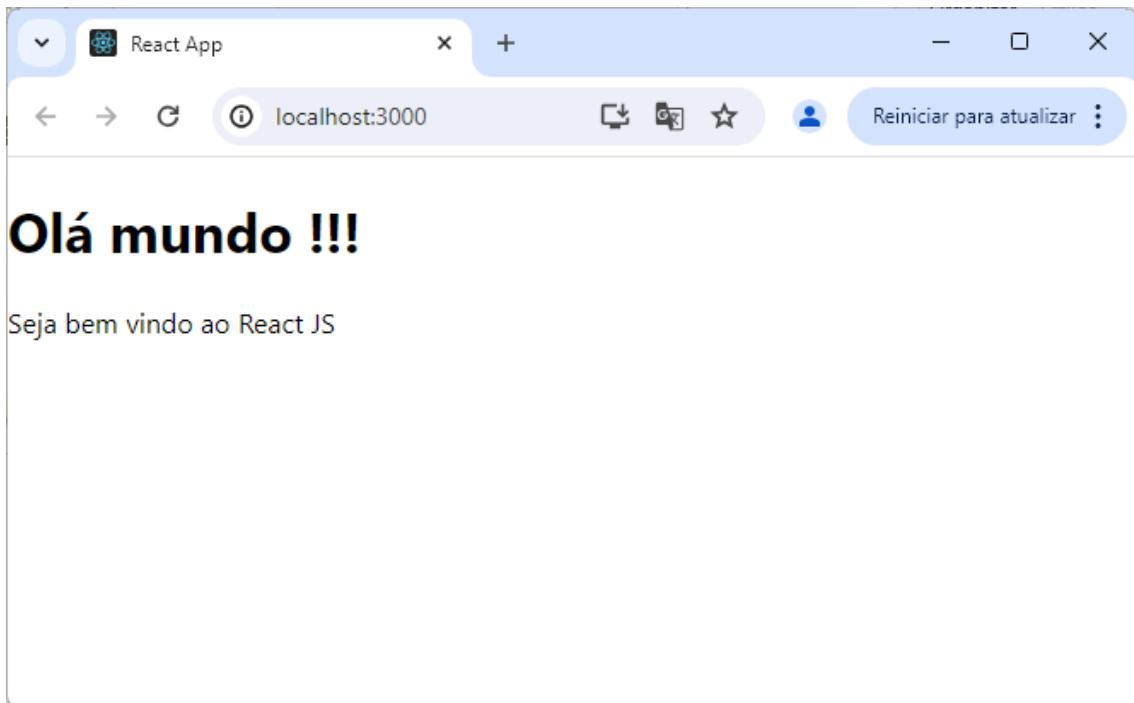
- File Explorer:** Shows the project structure under "AULA01". The "src" folder contains "App.css", "App.js" (selected), "App.test.js", "index.css", "index.js", "logo.svg", "reportWebVitals.js", and "setupTests.js". It also includes ".gitignore", "package-lock.json", "package.json", and "README.md".
- Code Editor:** Displays the content of "App.js".

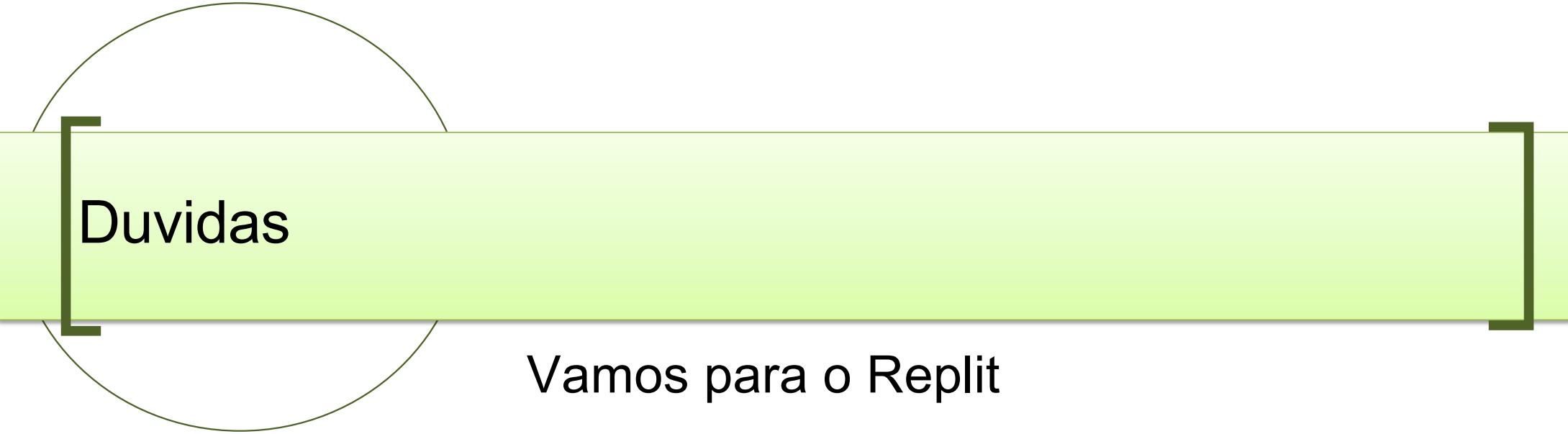
```
1 function App() {  
2   return [  
3     <div>  
4     |  
5     </div>  
6   ];  
7 }  
8  
9 export default App;
```
- Status Bar:** Shows "Ln 4, Col 7" and "Spaces: 2".

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```
[JS] App.js      X  
src > [JS] App.js > [App] App  
1  function App() {  
2    return (  
3      <div>  
4      |  
5      </div>  
6    );  
7  }  
8  
9  export default App;  
10
```

```
JS App.js      X
src > JS App.js > ⚙ App
1  function App() {
2    return (
3      <div>
4        <h1>Olá mundo !!!</h1>
5        <p>Seja bem vindo ao React JS</p>
6      </div>
7    );
8  }
9
10 export default App;
11
```





Duvidas

Vamos para o Replit

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