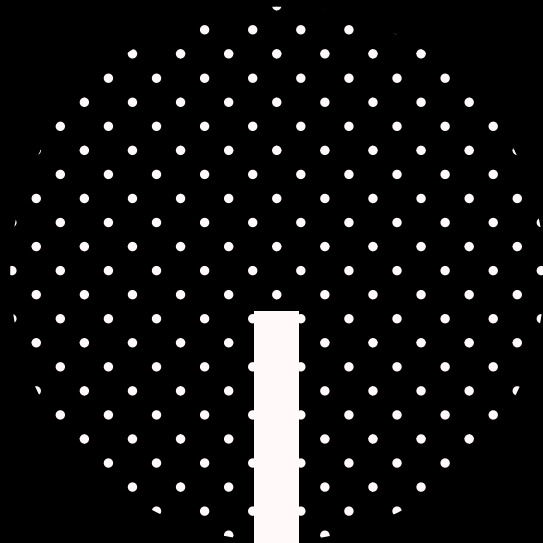




CYBERLIFE

PREPARAÇÃO DO
SERVIDOR NODEJS





RECURSOS NECESSÁRIOS

NodeJS

Git

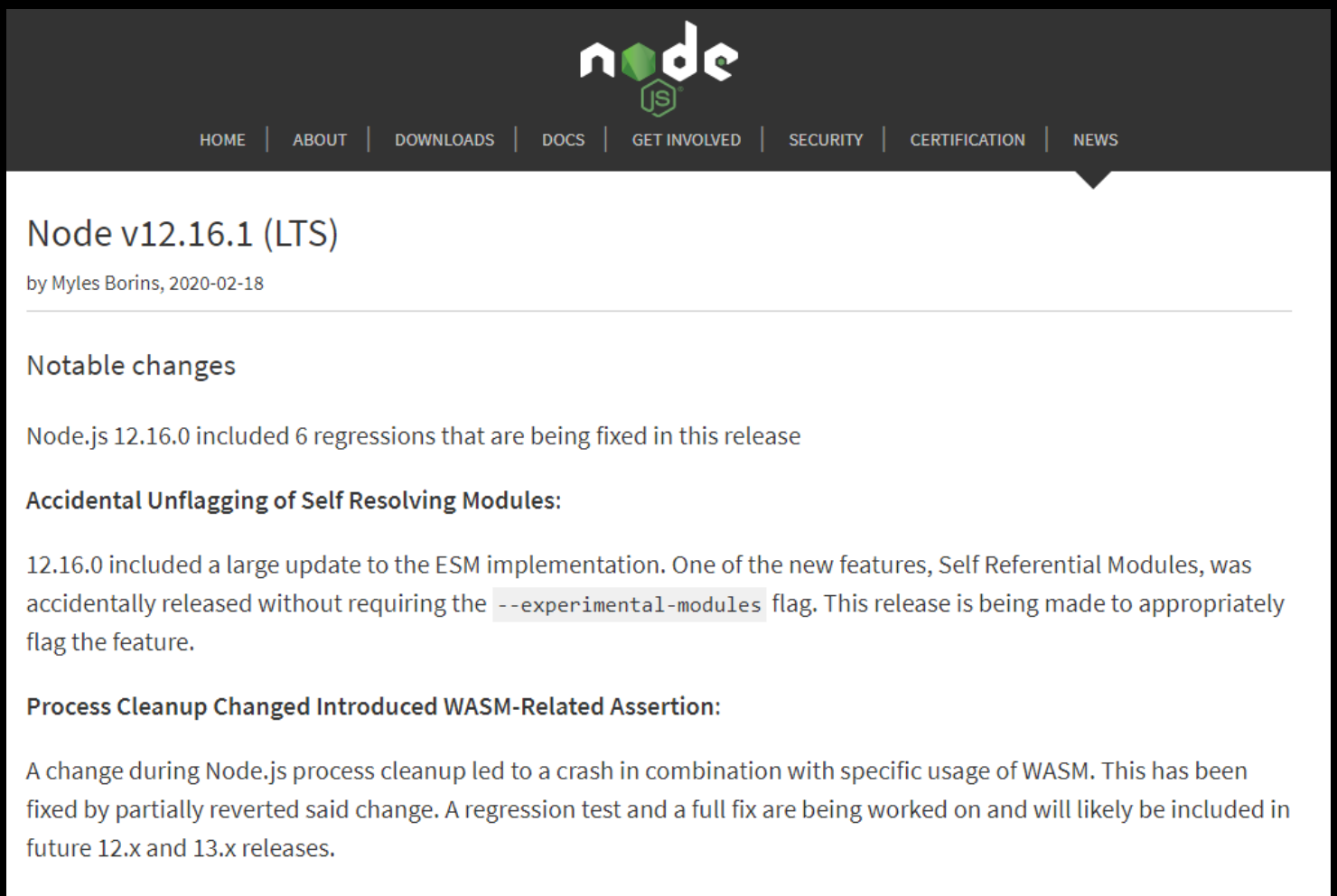
Visual Studio Code



INSTALANDO O NODEJS PARA WINDOWS 7

Para realizar o download do NodeJS, acesse o site à seguir:

<https://nodejs.org/en/blog/release/v12.16.1/>



The screenshot shows the Node.js v12.16.1 (LTS) release page. At the top is the Node.js logo and a navigation bar with links: HOME, ABOUT, DOWNLOADS, DOCS, GET INVOLVED, SECURITY, CERTIFICATION, and NEWS. The main heading is "Node v12.16.1 (LTS)" followed by the author "by Myles Borins, 2020-02-18". Below this is a section titled "Notable changes" which states that Node.js 12.16.0 included 6 regressions being fixed in this release. Two specific changes are highlighted: "Accidental Unflagging of Self Resolving Modules" and "Process Cleanup Changed Introduced WASM-Related Assertion".

Node v12.16.1 (LTS)
by Myles Borins, 2020-02-18

Notable changes

Node.js 12.16.0 included 6 regressions that are being fixed in this release

Accidental Unflagging of Self Resolving Modules:

12.16.0 included a large update to the ESM implementation. One of the new features, Self Referential Modules, was accidentally released without requiring the `--experimental-modules` flag. This release is being made to appropriately flag the feature.

Process Cleanup Changed Introduced WASM-Related Assertion:

A change during Node.js process cleanup led to a crash in combination with specific usage of WASM. This has been fixed by partially reverted said change. A regression test and a full fix are being worked on and will likely be included in future 12.x and 13.x releases.

Esta será a página que aparecerá.

Em seguida, desça um pouco na página até chegar nesta parte:

- [065a32f064] - **Revert** "src: make --use-largepages a runtime option" (Myles Borins) #31782
- [3d5beebc62] - **Revert** "src: make large_pages node.cc include conditional" (Myles Borins) #31782
- [43d02e20e0] - **src**: keep main-thread Isolate attached to platform during Dispose (Anna Henningsen) #31795
- [7a5954ef26] - **src**: fix -Winconsistent-missing-override warning (Colin Ihrig) #30549

Windows 32-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-x86.msi>

Windows 64-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-x64.msi>

Windows 32-bit Binary: <https://nodejs.org/dist/v12.16.1/win-x86/node.exe>

Windows 64-bit Binary: <https://nodejs.org/dist/v12.16.1/win-x64/node.exe>

macOS 64-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1.pkg>

macOS 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-darwin-x64.tar.gz>

Linux 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-x64.tar.xz>

Linux PPC LE 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-ppc64le.tar.xz>

Linux s390x 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-s390x.tar.xz>

AIX 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-aix-ppc64.tar.gz>

SmartOS 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-sunos-x64.tar.xz>

ARMv7 32-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-armv7l.tar.xz>

ARMv8 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-arm64.tar.xz>

Source Code: <https://nodejs.org/dist/v12.16.1/node-v12.16.1.tar.gz>

Other release files: <https://nodejs.org/dist/v12.16.1/>

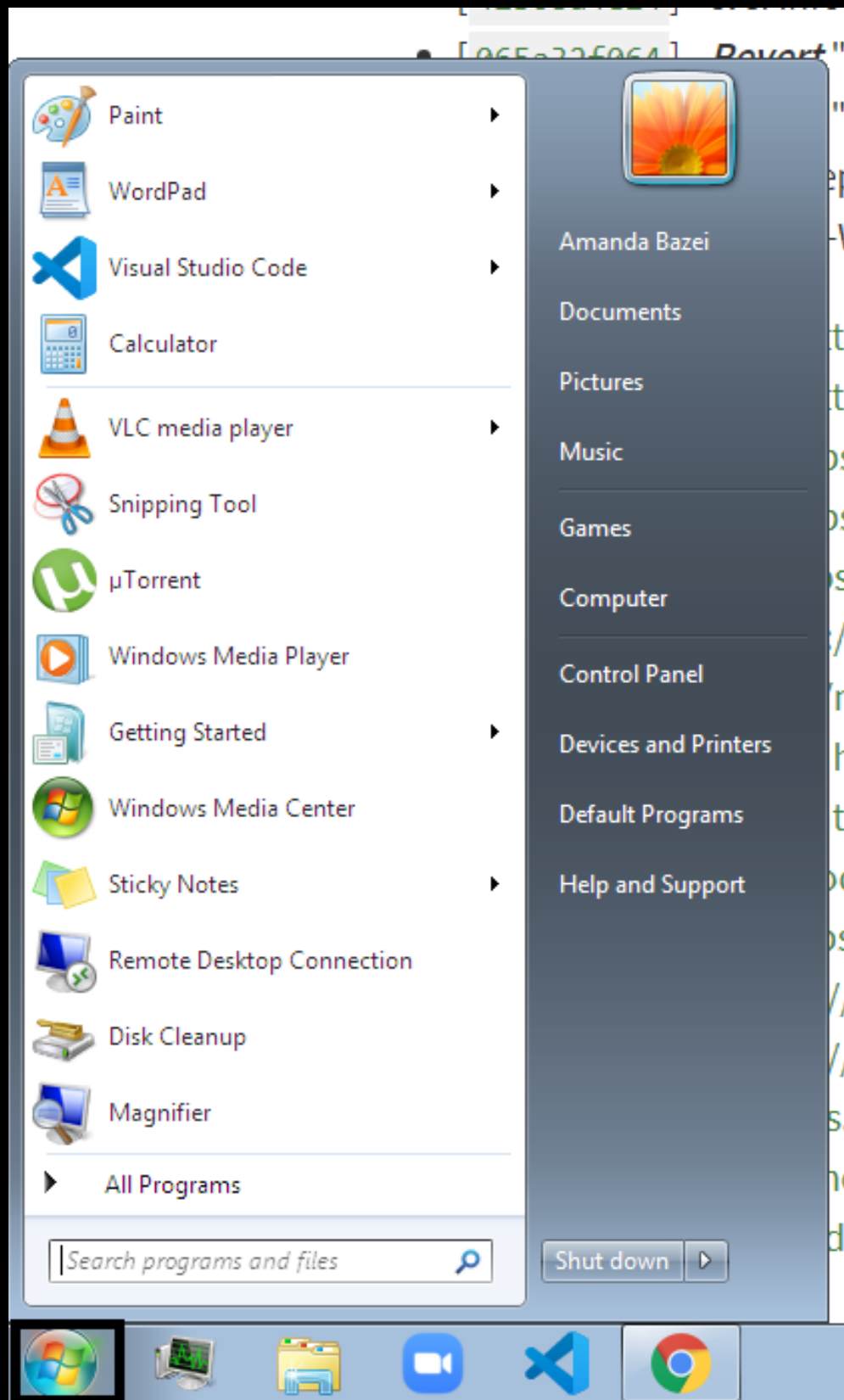
Documentation: <https://nodejs.org/docs/v12.16.1/api/>

SHASUMS

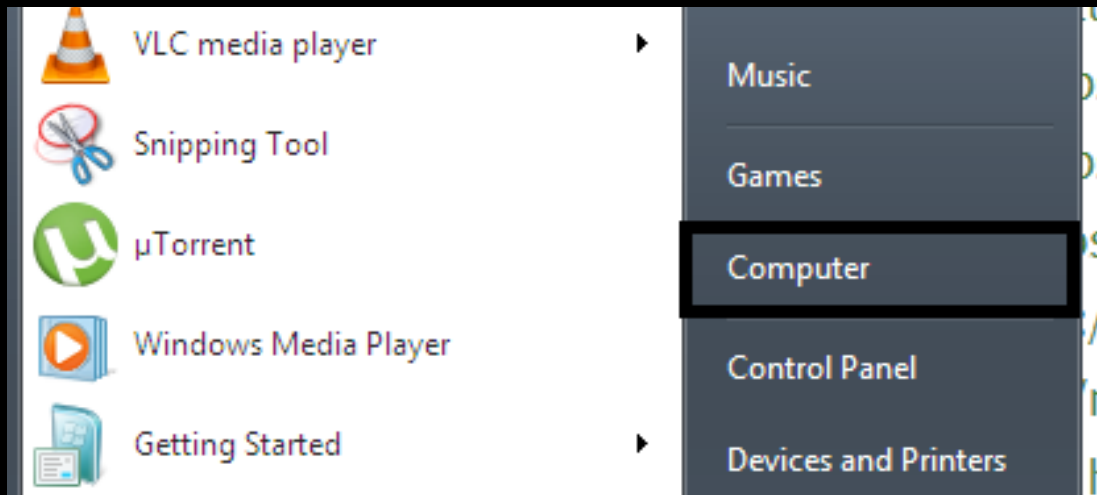
Quando chegar nesta parte, verifique o sistema operacional da máquina antes de avançar para a instalação.

Para isso, siga os seguintes passos:

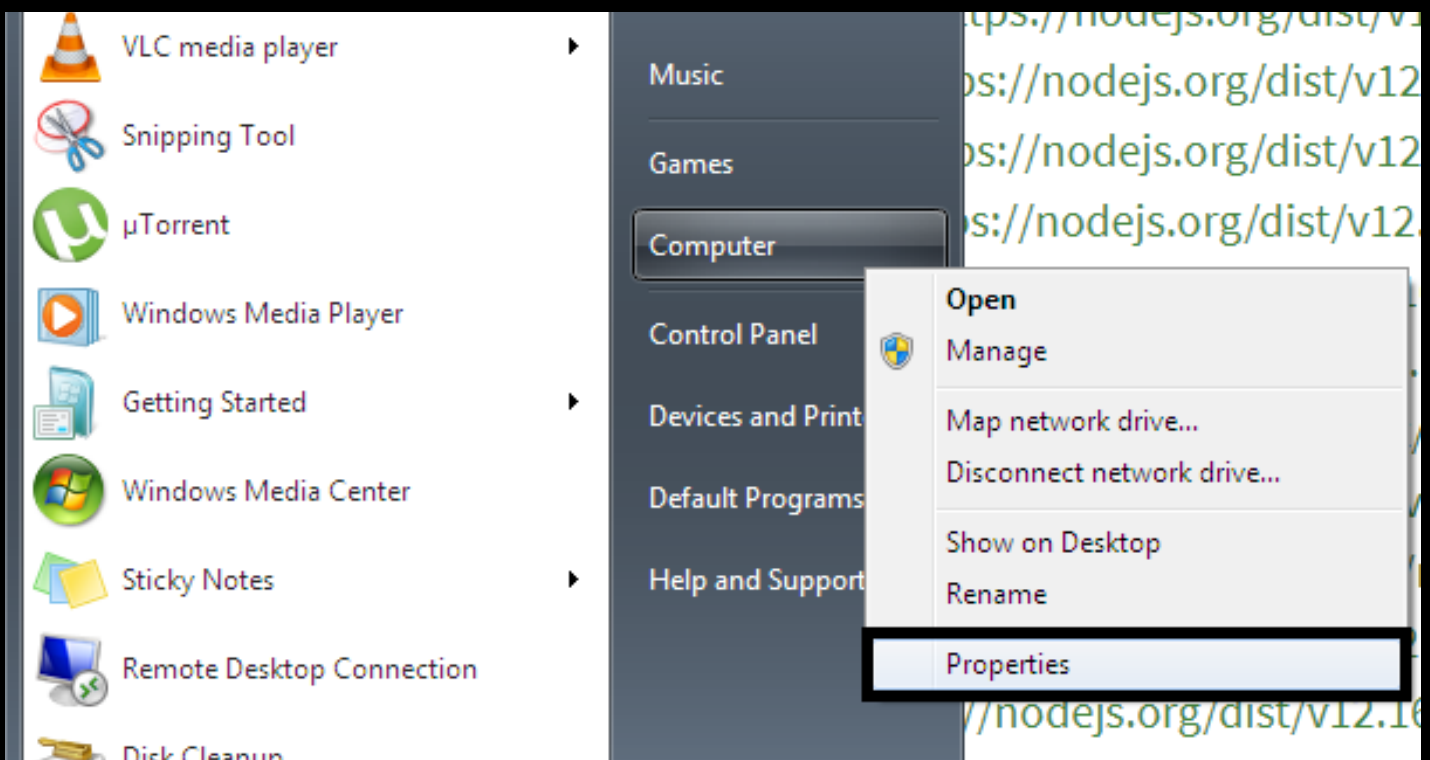
Você deve, com o seu mouse, ir para o menu Iniciar da sua máquina (neste caso, Windows) para abrir esta janela:



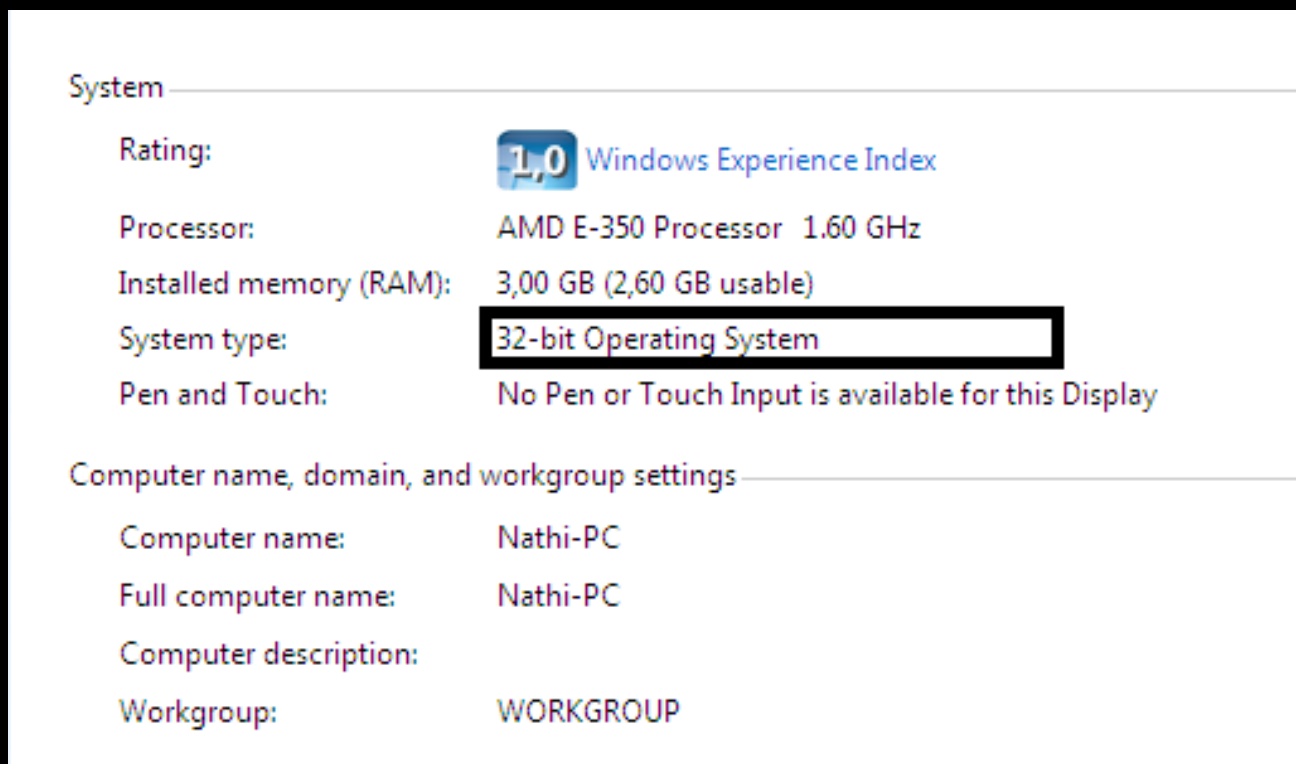
Depois, apertar com o botão direito do mouse em "Computador" (em inglês: "Computer") :



Quando fizer isso, vai aparecer essa janela. Nela, você seleciona com o botão esquerdo "Propriedades" (em inglês: "Properties")



Logo a seguir, aparecerá esta tela, mostrando qual é seu sistema operacional:



O sistema operacional neste exemplo é 32-bit. Seguindo essa lógica, será baixado uma versão 32-bit.

Sabendo disso, selecione o download para o seu sistema operacional (neste exemplo: 32-bit para o sistema operacional de 32-bit)

- [065a32f064] - **Revert** "src: make --use-largepages a runtime option" (Myles Borins) #31782
- [3d5beebc62] - **Revert** "src: make large_pages node.cc include conditional" (Myles Borins) #31782
- [43d02e20e0] - **src:** keep main-thread Isolate attached to platform during Dispose (Anna Henningsen) #31795
- [7a5954ef26] - **src:** fix -Winconsistent-missing-override warning (Colin Ihrig) #30549

Windows 32-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-x86.msi>

Windows 64-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-x64.msi>

Windows 32-bit Binary: <https://nodejs.org/dist/v12.16.1/win-x86/node.exe>

Windows 64-bit Binary: <https://nodejs.org/dist/v12.16.1/win-x64/node.exe>

macOS 64-bit Installer: <https://nodejs.org/dist/v12.16.1/node-v12.16.1.pkg>

macOS 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-darwin-x64.tar.gz>

Linux 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-x64.tar.xz>

Linux PPC LE 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-ppc64le.tar.xz>

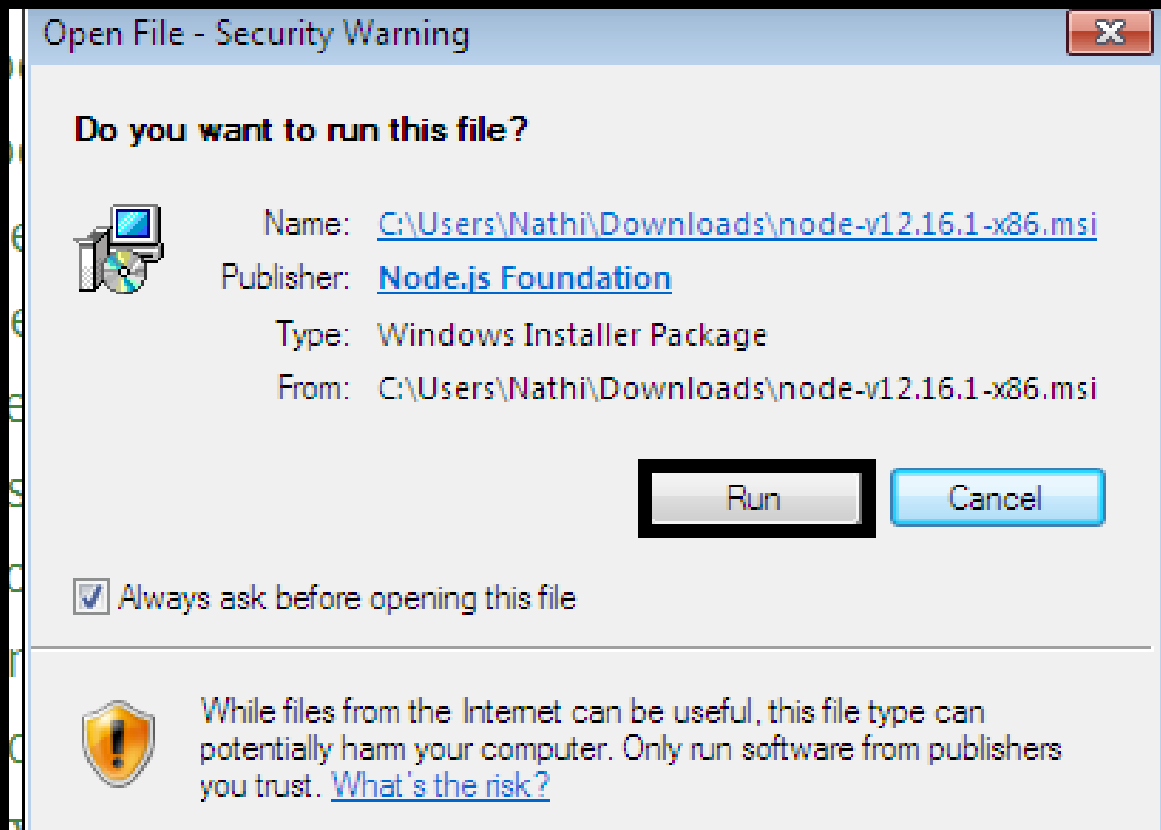
Linux s390x 64-bit Binary: <https://nodejs.org/dist/v12.16.1/node-v12.16.1-linux-s390x.tar.xz>

Assim que selecionar o download, aparecerá uma extensão abaixo da tela, onde o download será feito:

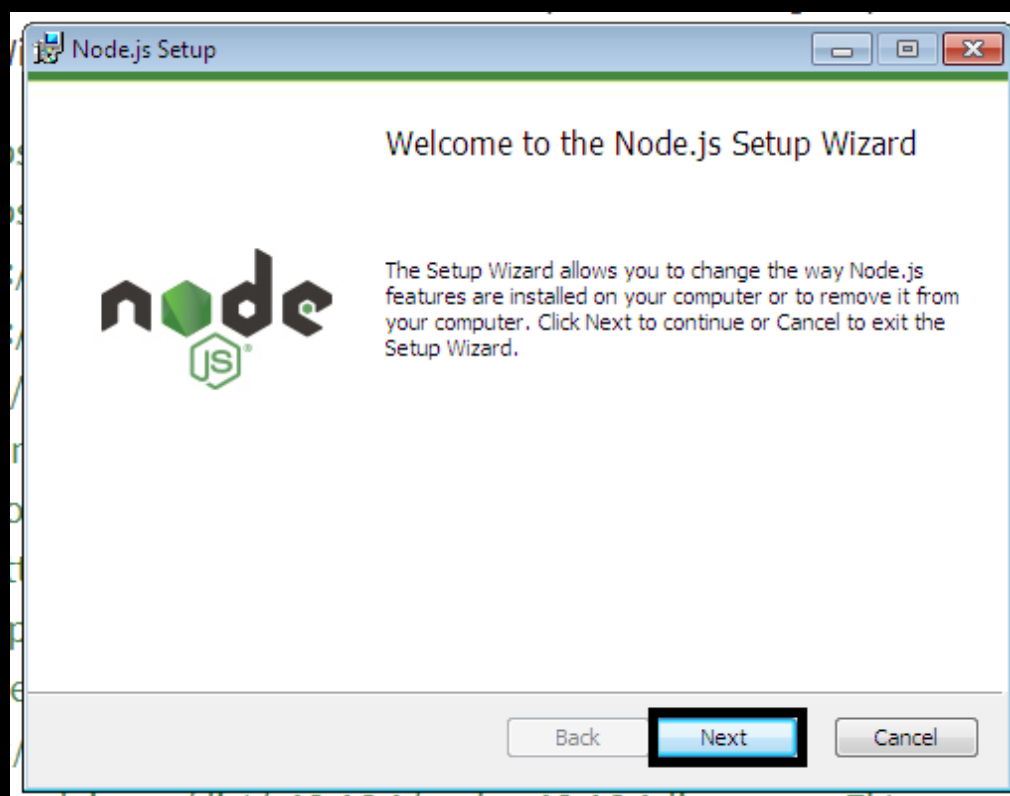


Quando o download terminar, clique com o botão esquerdo.

Quando selecionar, aparecerá esta janela, pedindo autorização para baixar o NodeJS. Vá em Run.



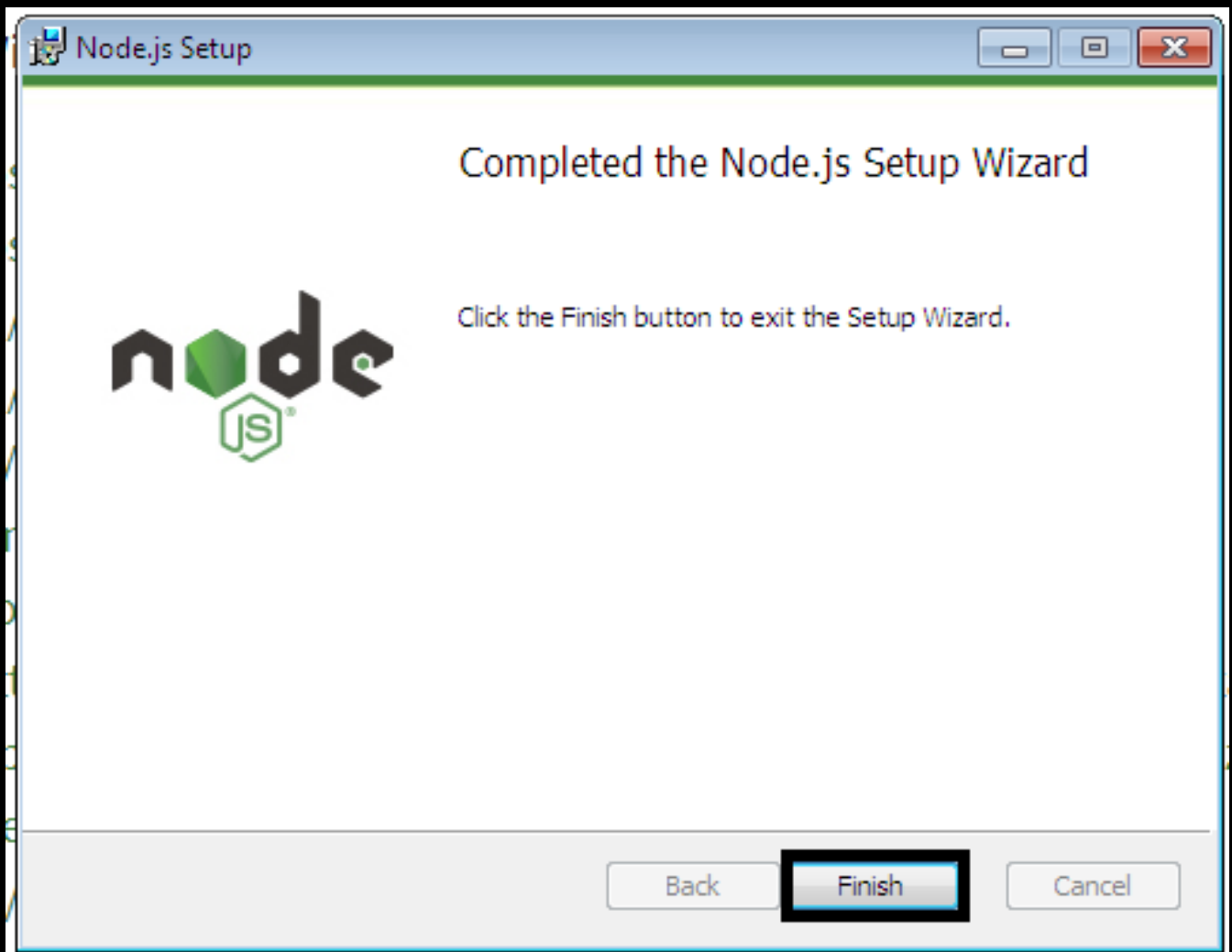
Assim que aceitar, aparecerá esta janela. Apenas clique em Next.



Agora haverá uma sequência de "Next" consecutiva, até chegar em uma página que tenha um "Install".
Clique no "Install" e prossiga.



Clicando em "Finish", você termina esta fase de instalação.



Agora você tem o NodeJS.

INSTALANDO O GIT PARA WINDOWS 7

Para baixar o Git, acesse o site abaixo:

<https://git-scm.com/downloads>

git --fast-version-control

Search entire site...

About
Documentation
Downloads
GUI Clients
Logos
Community

The entire **Pro Git book** written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Downloads

Mac OS X **Windows** Linux/Unix

Older releases are available and the Git source repository is on GitHub.

Latest source Release
2.28.0
[Release Notes](#) (2020-07-27)
[Download 2.28.0 for Windows](#)

GUI Clients

Git comes with built-in GUI tools (**git-gui**, **gitk**), but there are several third-party tools for users looking for a platform-specific experience.

[View GUI Clients →](#)

Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

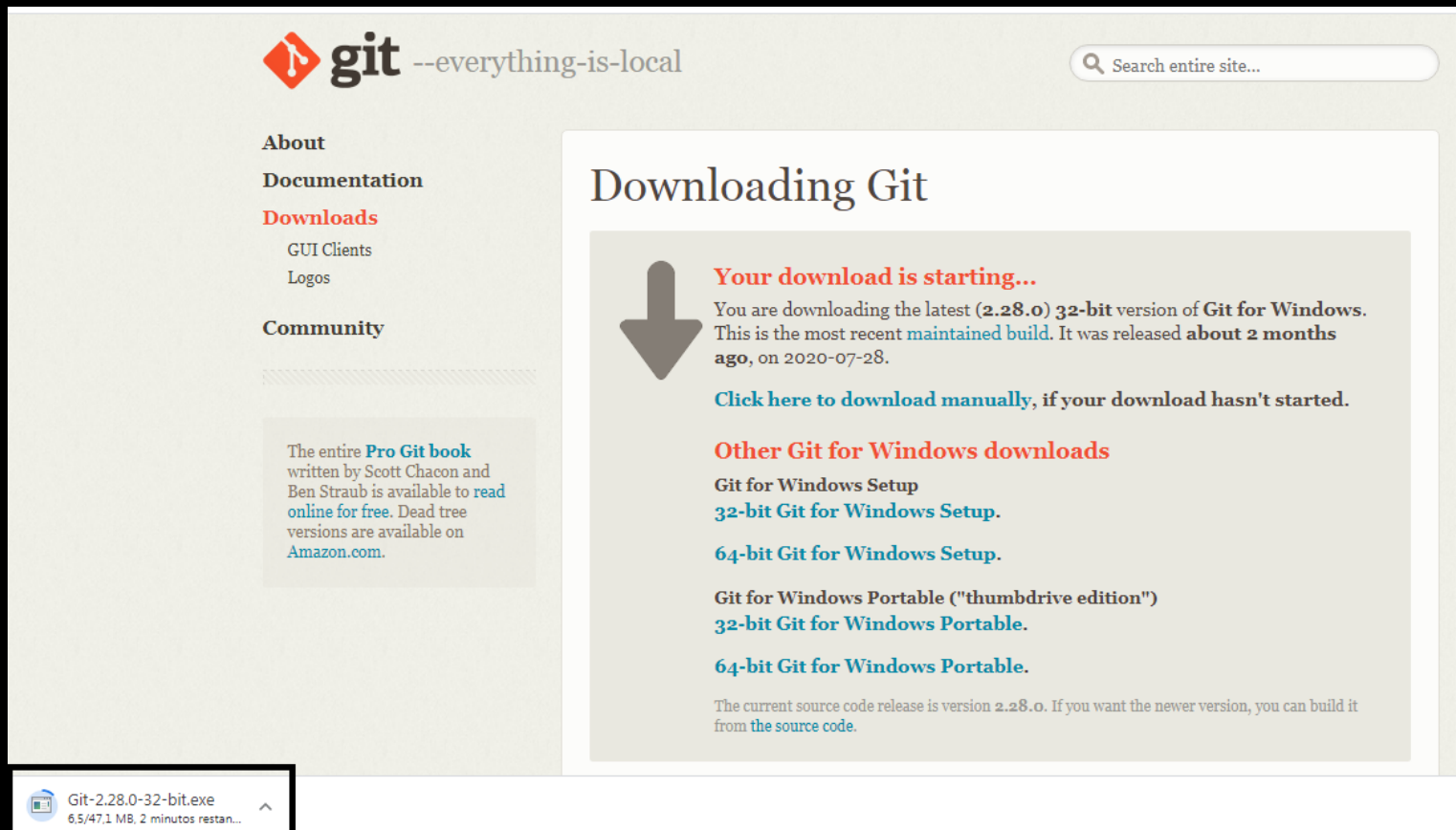
[View Logos →](#)

Git via Git

If you already have Git installed, you can get the latest development version via Git itself:

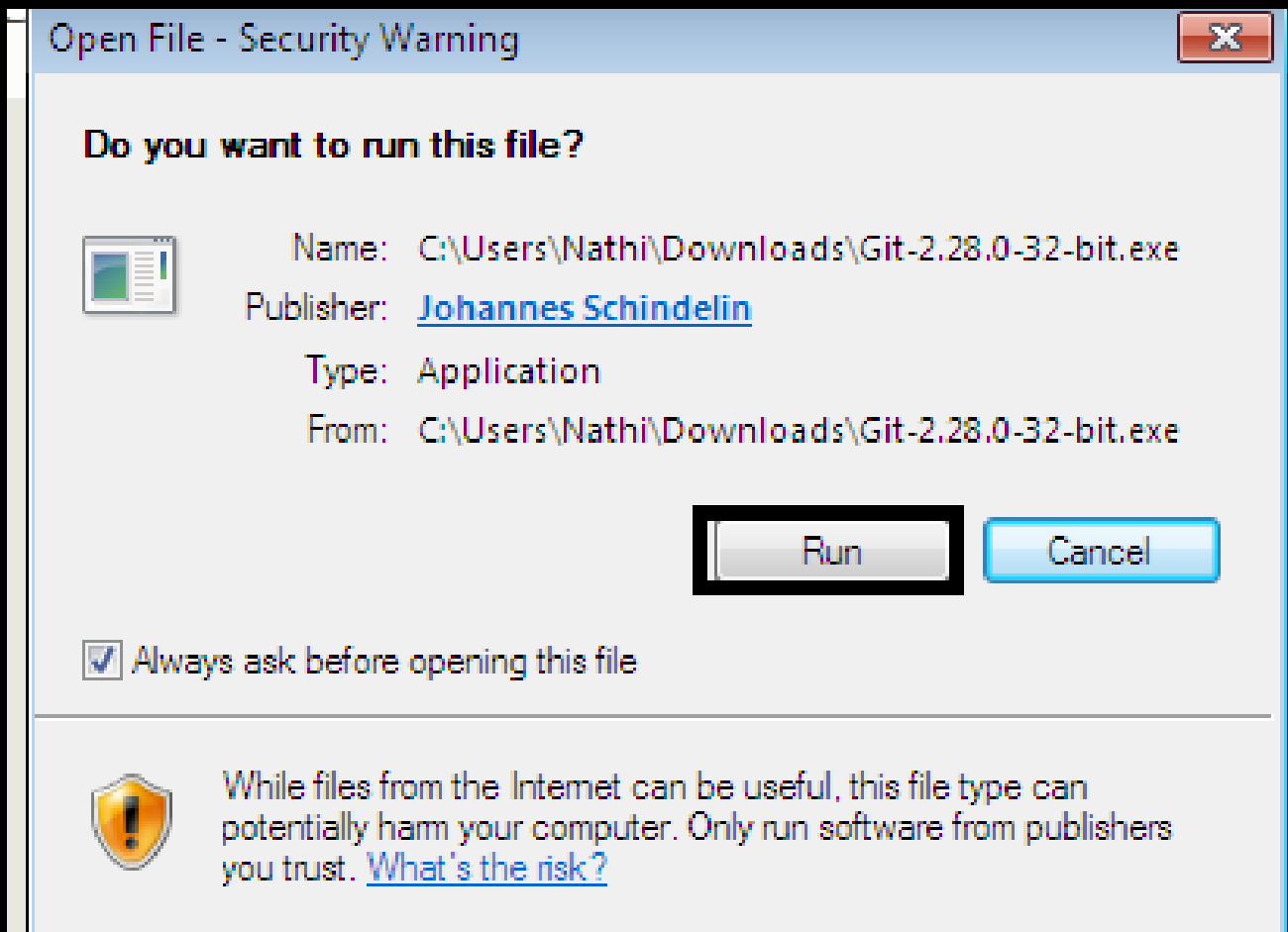
E selecione o Windows, como na imagem.

Assim que você entrar, o download se iniciará automaticamente.



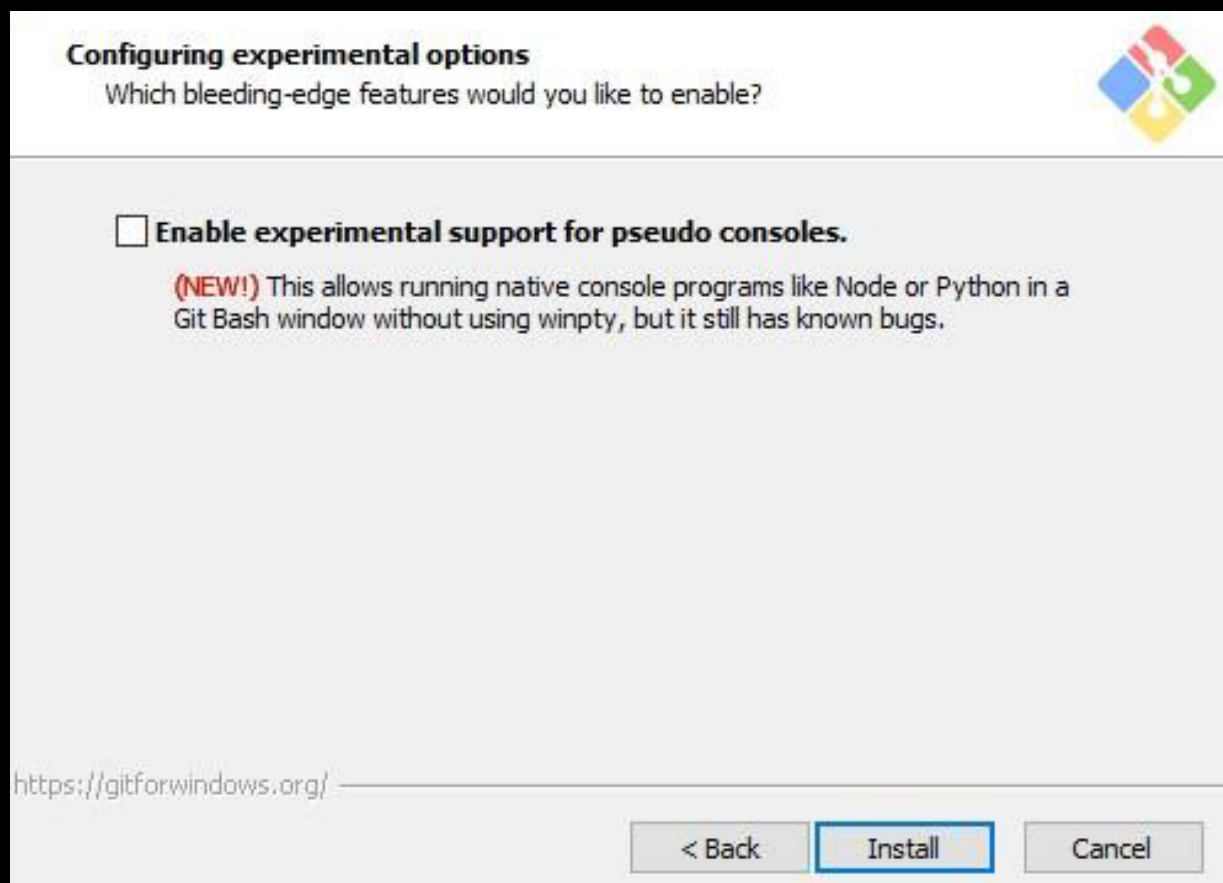
The screenshot shows the Git website with the tagline "--everything-is-local". The left sidebar contains links for "About", "Documentation", "Downloads" (highlighted), "GUI Clients", "Logos", and "Community". The main content area is titled "Downloading Git" and features a large downward arrow icon. The text states: "Your download is starting..." followed by "You are downloading the latest (2.28.0) 32-bit version of Git for Windows. This is the most recent maintained build. It was released about 2 months ago, on 2020-07-28." Below this, there is a link to "Click here to download manually, if your download hasn't started." A section titled "Other Git for Windows downloads" lists links for "Git for Windows Setup", "32-bit Git for Windows Setup.", "64-bit Git for Windows Setup.", "Git for Windows Portable ('thumbdrive edition')", "32-bit Git for Windows Portable.", and "64-bit Git for Windows Portable." At the bottom, it mentions "The current source code release is version 2.28.0. If you want the newer version, you can build it from the source code." A taskbar notification at the bottom left shows "Git-2.28.0-32-bit.exe" with a progress bar and the text "6,5/47,1 MB, 2 minutos restan..."

Após o término do download, clique com o botão direito para abrir esta janela e vá em Run:





Logo em seguida, dê "Next" até chegar nesta janela. Assim, vá em "Install"

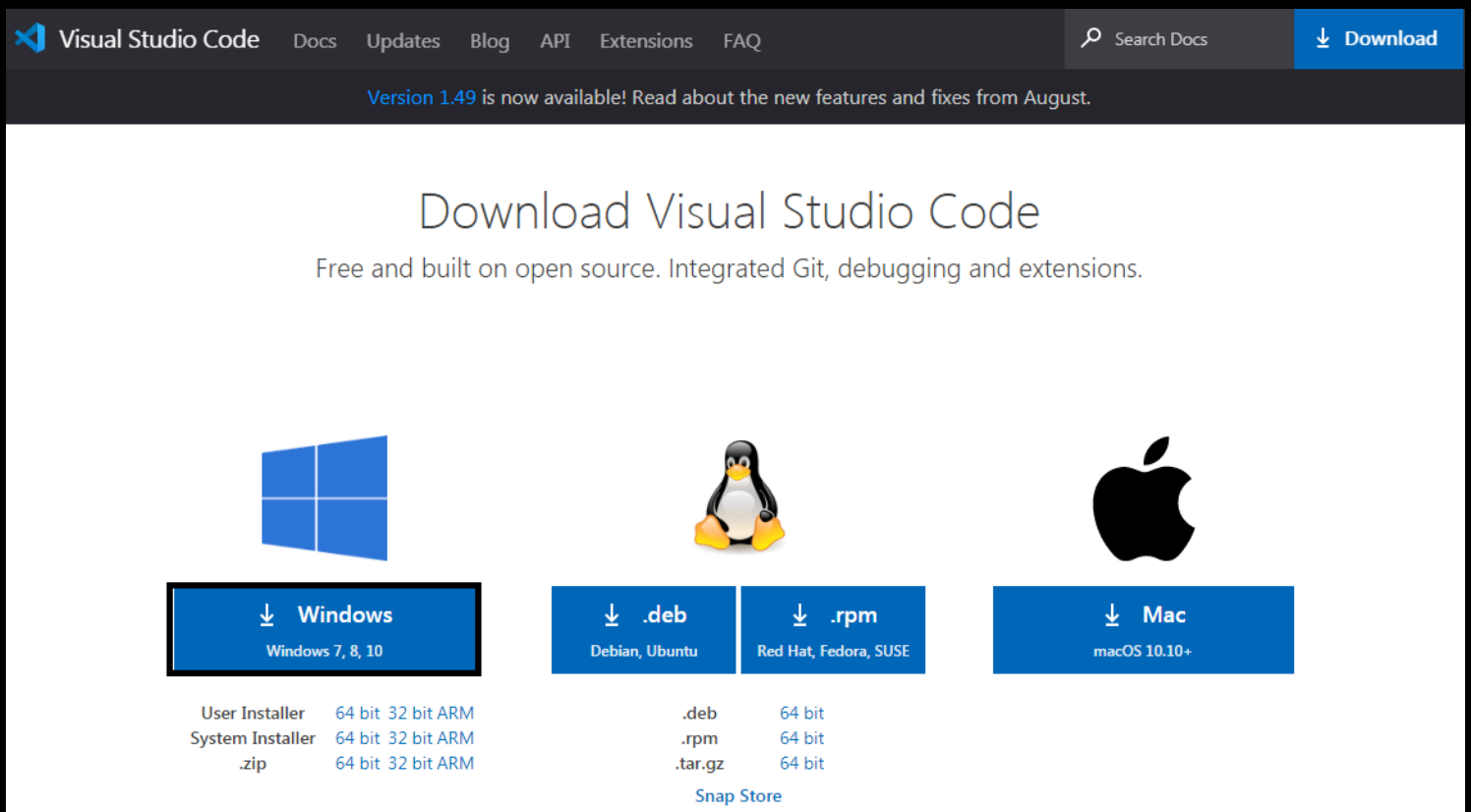


INSTALANDO O VISUAL STUDIO CODE PARA WINDOWS 7

Para instalar o Visual Studio Code, você deve
acessar o site a seguir:

<https://code.visualstudio.com/download>

E selecione a opção do Windows;




The screenshot shows the Visual Studio Code download page. At the top, there is a navigation bar with links for Visual Studio Code, Docs, Updates, Blog, API, Extensions, and FAQ. A search bar labeled 'Search Docs' and a 'Download' button are also present. Below the navigation bar, a banner announces 'Version 1.49 is now available! Read about the new features and fixes from August.' The main heading is 'Download Visual Studio Code', followed by the tagline 'Free and built on open source. Integrated Git, debugging and extensions.' The page is divided into three main sections for different operating systems: Windows, Linux, and Mac. The Windows section is highlighted with a blue border. It features the Windows logo and a blue button labeled 'Windows' with 'Windows 7, 8, 10' below it. Underneath, there are links for 'User Installer', 'System Installer', and '.zip', each with '64 bit' and '32 bit ARM' options. The Linux section features the Tux penguin logo and two blue buttons: '.deb' for 'Debian, Ubuntu' and '.rpm' for 'Red Hat, Fedora, SUSE'. Below these are links for '.deb', '.rpm', and '.tar.gz', each with '64 bit' and '32 bit ARM' options. The Mac section features the Apple logo and a blue button labeled 'Mac' with 'macOS 10.10+' below it. At the bottom of the Linux section, there is a link for 'Snap Store'.

Visual Studio Code Docs Updates Blog API Extensions FAQ Search Docs Download

Version 1.49 is now available! Read about the new features and fixes from August.


Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



↓ Windows
Windows 7, 8, 10

User Installer 64 bit 32 bit ARM
System Installer 64 bit 32 bit ARM
.zip 64 bit 32 bit ARM




↓ .deb
Debian, Ubuntu

↓ .rpm
Red Hat, Fedora, SUSE

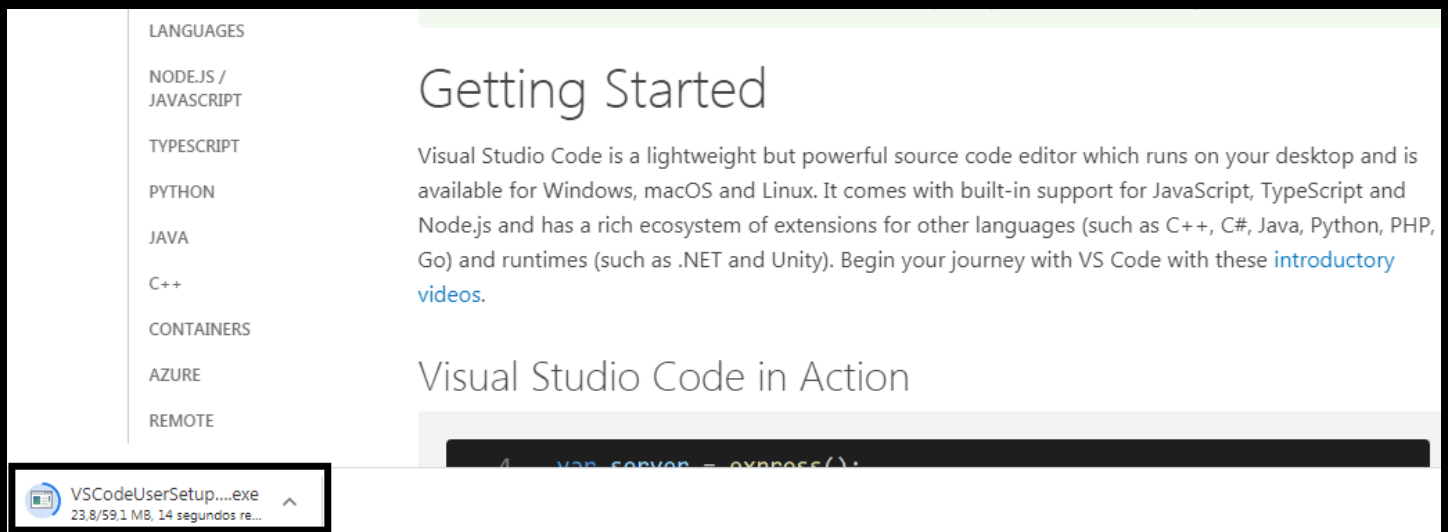
.deb 64 bit
.rpm 64 bit
.tar.gz 64 bit

Snap Store

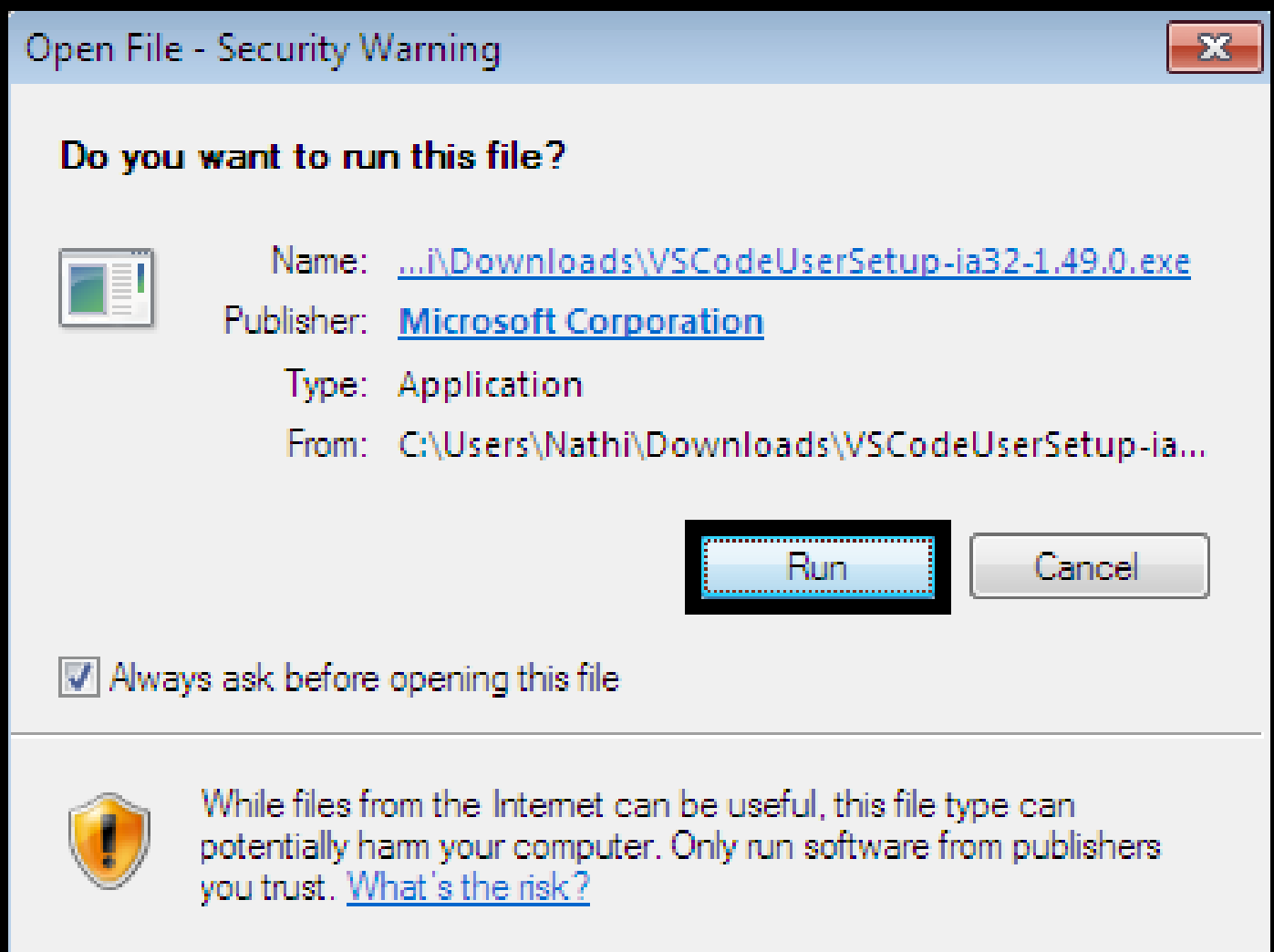


↓ Mac
macOS 10.10+

O download será iniciado automaticamente.
Apenas aguarde o término.



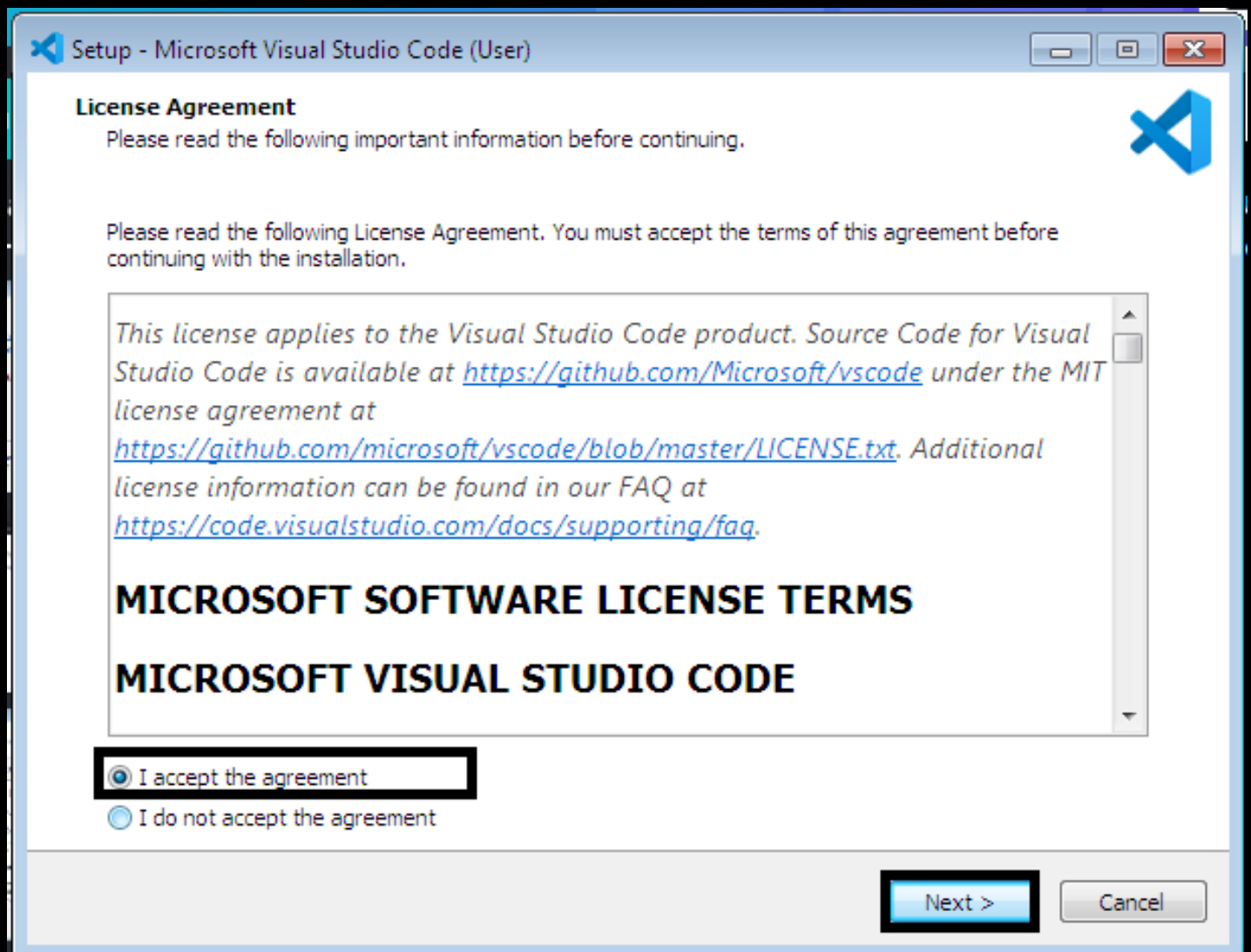
Quando terminar, abra o arquivo para
aparecer esta janela:



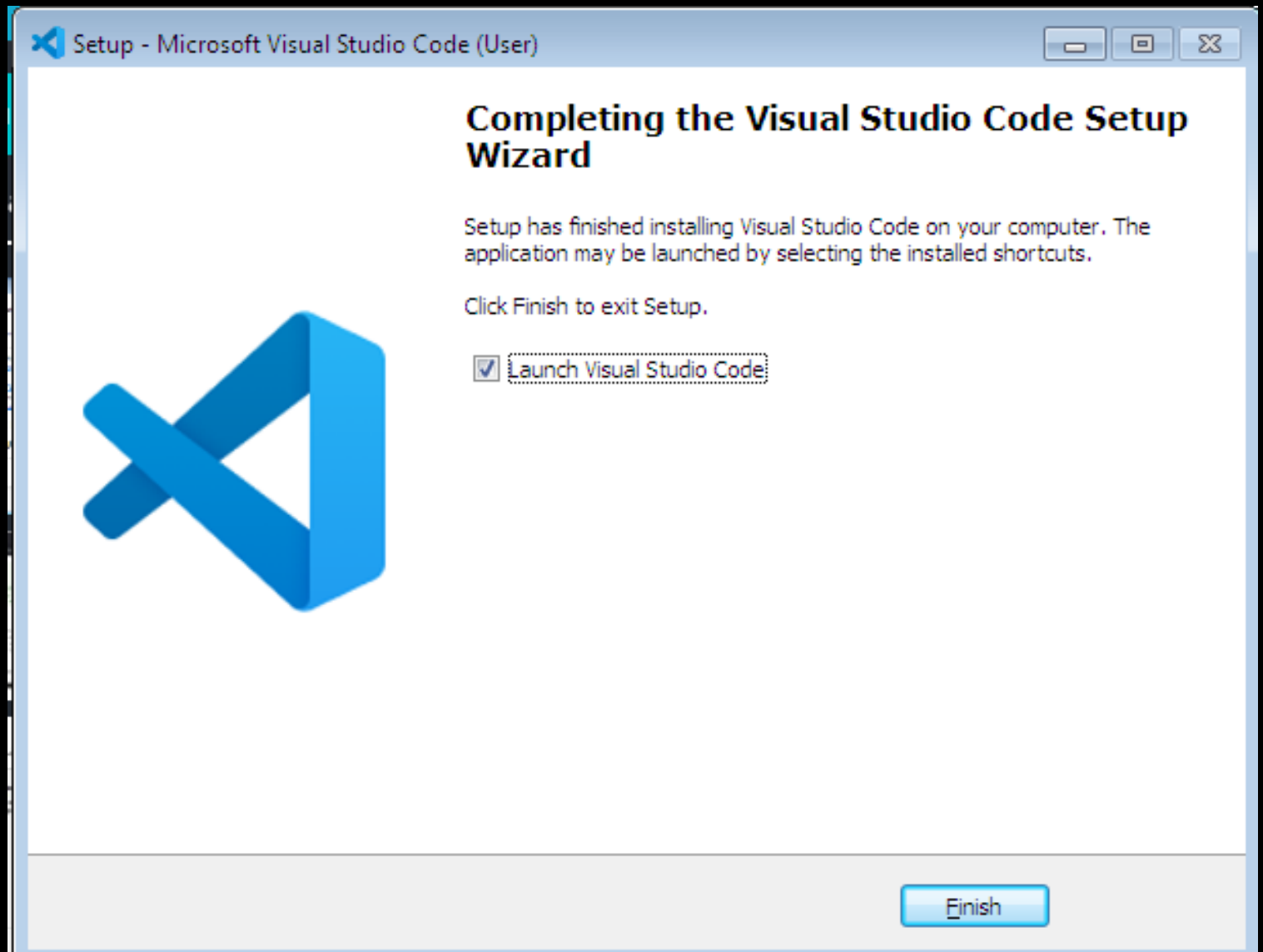
Assim que esta janela abrir, vá em Run.

Logo depois, aparecerá essa janela e, para prosseguir, deve ativar a opção "I accept the agreement".

Depois disso, vá em Next nas próximas opções até chegar em "Install"



Para encerrar, vá em "Finish".



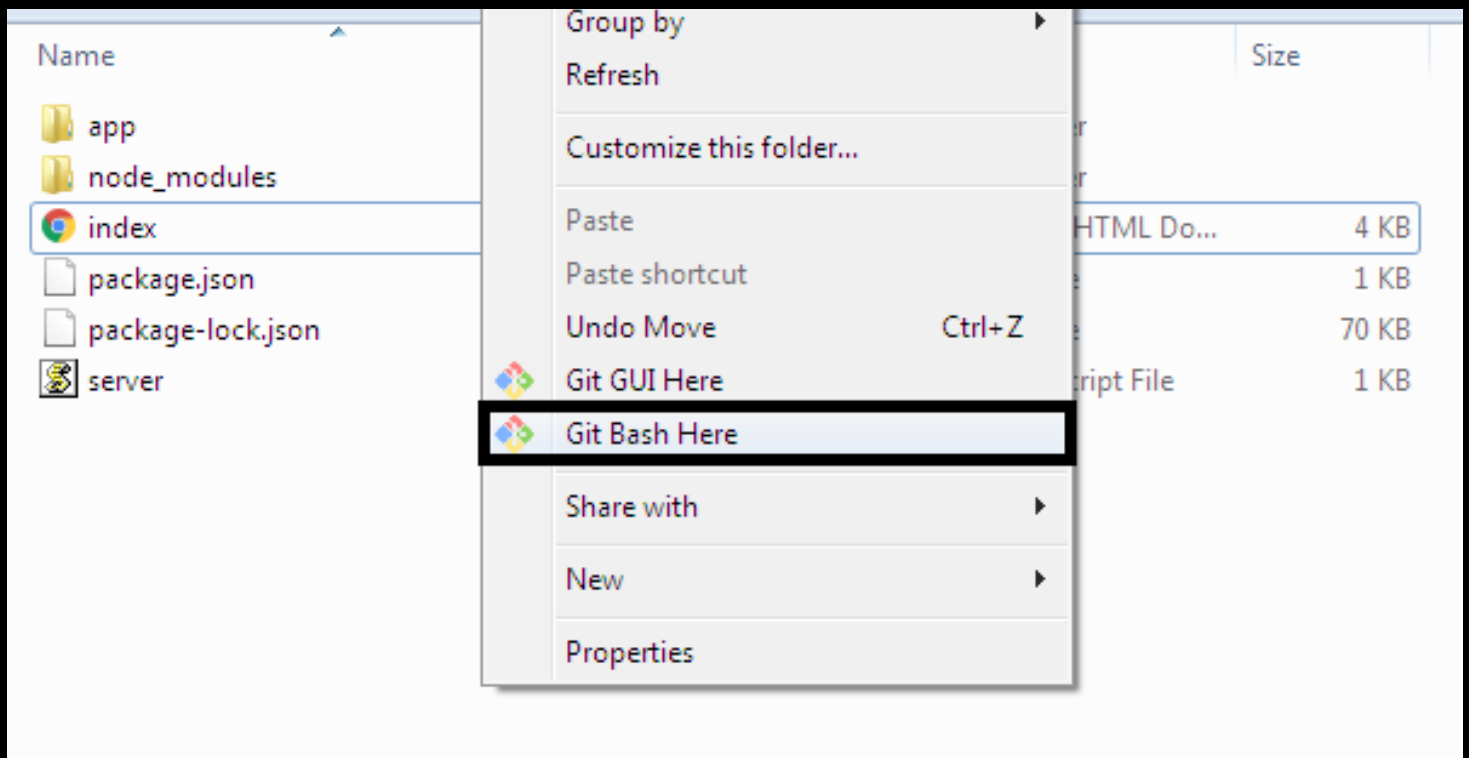
Agora você tem o Visual Studio Code.

PASSO A PASSO DA API

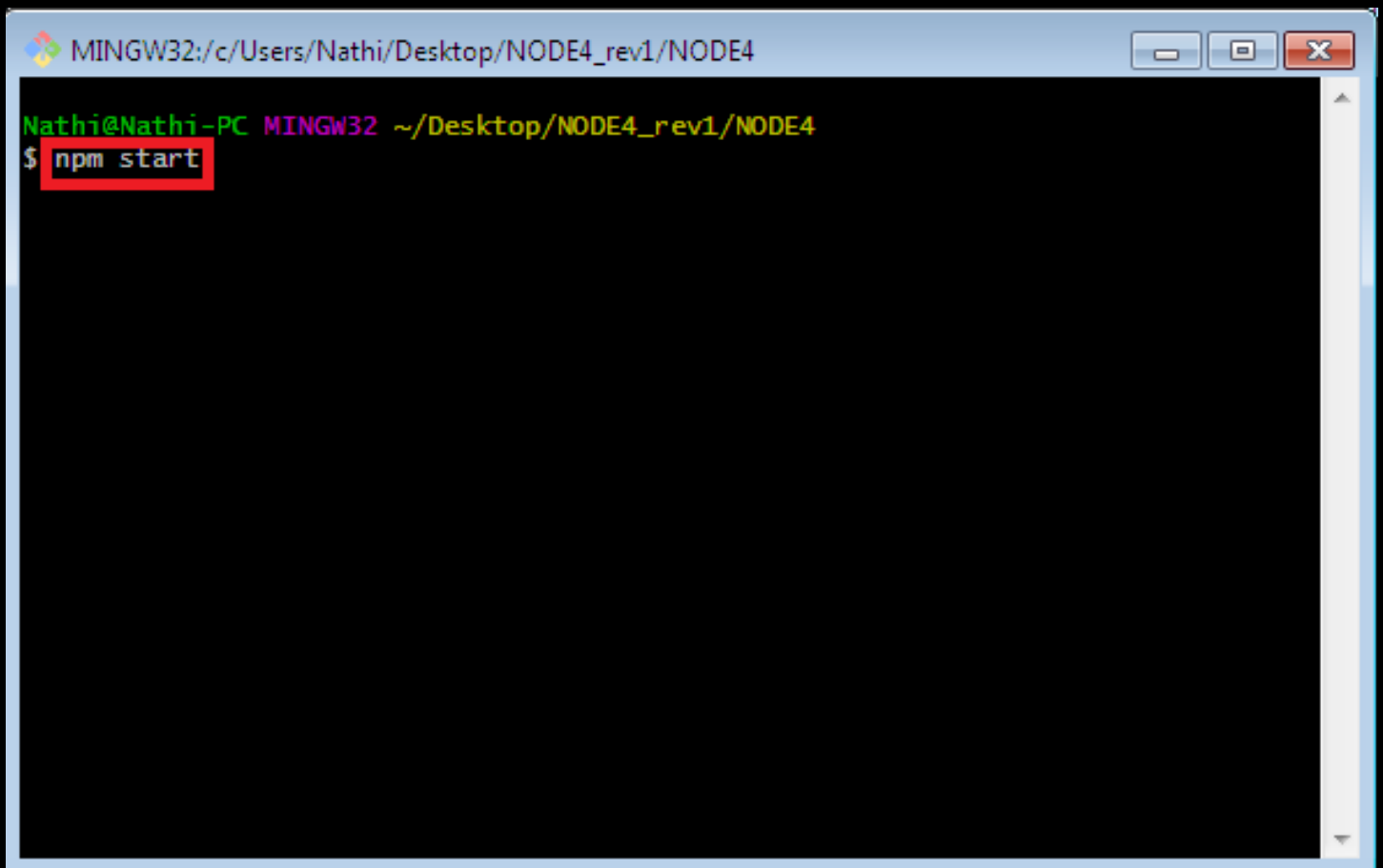
Agora, baixe este arquivo:

<http://moodle.bandtec.com.br/mod/resource/view.php?id=37319>

Após o download do arquivo, extraia para a área de trabalho e vá para a pasta extraída aperte com o botão direito na pasta e selecione "Git Bash Here"

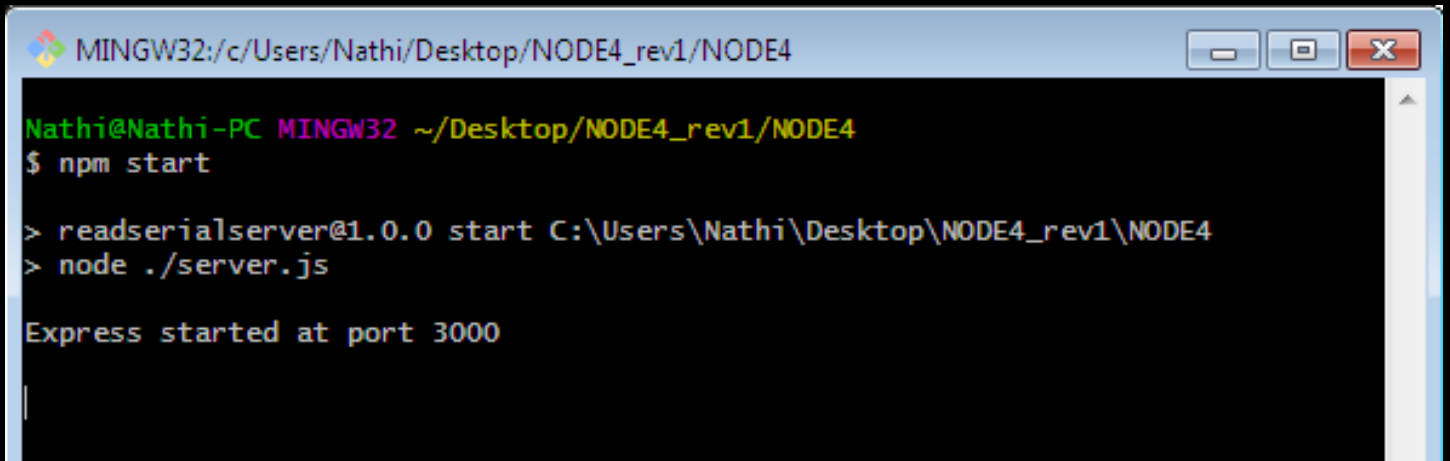


Quando selecionar, abrirá esta janela do cmd (prompt de comando). Espere carregar e aparecer as letras coloridas e, depois, escreva "npm start" e aperte ENTER para começar.



```
MINGW32:/c/Users/Nathi/Desktop/NODE4_rev1/NODE4
Nathi@Nathi-PC MINGW32 ~/Desktop/NODE4_rev1/NODE4
$ npm start
```

Após esse comando, aparecerá isso:



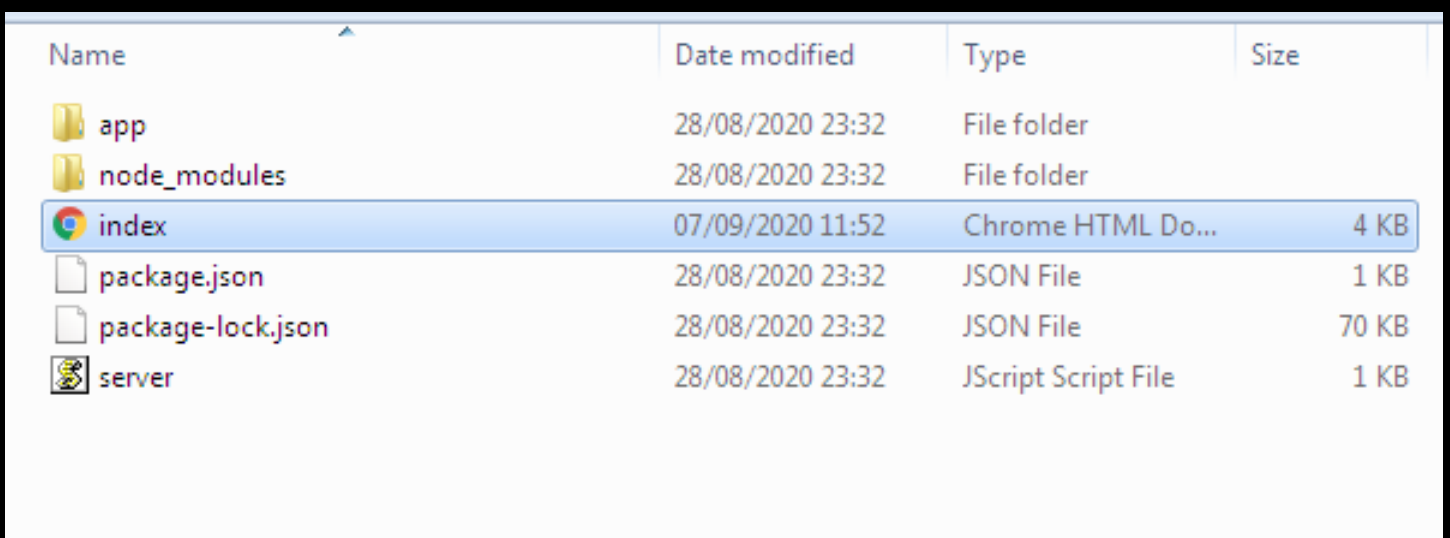
```
MINGW32:/c:/Users/Nathi/Desktop/NODE4_rev1/NODE4
Nathi@Nathi-PC MINGW32 ~/Desktop/NODE4_rev1/NODE4
$ npm start

> readserialserver@1.0.0 start C:\Users\Nathi\Desktop\NODE4_rev1\NODE4
> node ./server.js

Express started at port 3000
```

(ATENÇÃO: NÃO FECHE o cmd [prompt de comando] enquanto este processo estiver ativo, pois poderá causar complicações na sua máquina!)

O programa já está rodando, e pode ser verificado. Para verificar, volte a pasta NODE4 e clique duas vezes com o botão esquerdo no "index" para abrí-lo.

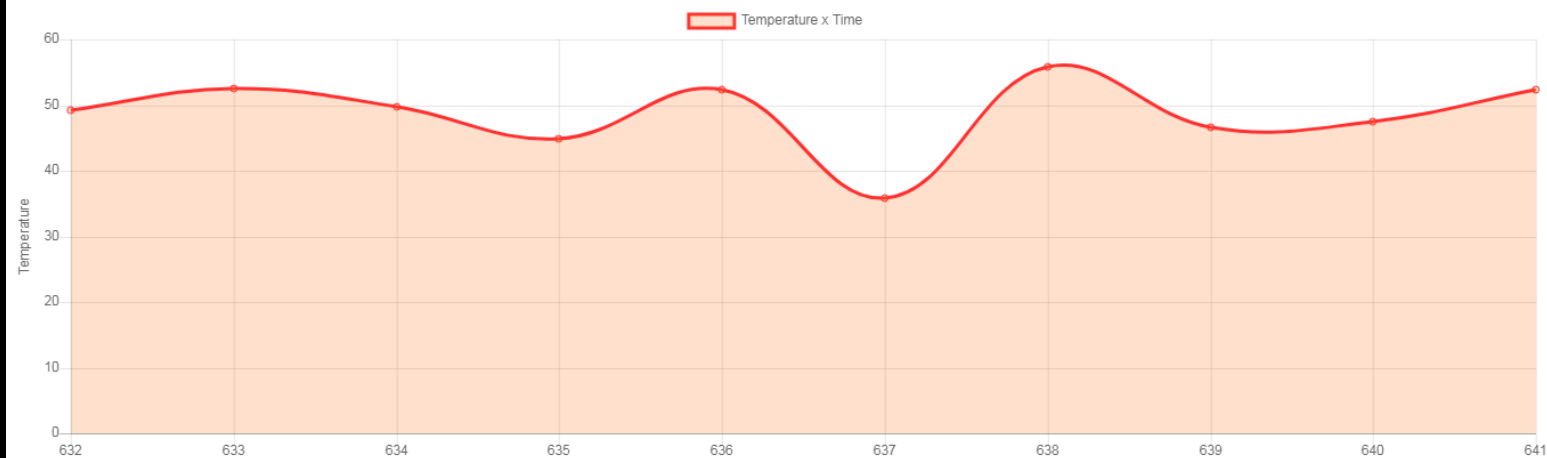


Name	Date modified	Type	Size
app	28/08/2020 23:32	File folder	
node_modules	28/08/2020 23:32	File folder	
index	07/09/2020 11:52	Chrome HTML Do...	4 KB
package.json	28/08/2020 23:32	JSON File	1 KB
package-lock.json	28/08/2020 23:32	JSON File	70 KB
server	28/08/2020 23:32	JScript Script File	1 KB

Assim que você abrir o index, abrirá esta página com um gráfico se movimentando. Isso demonstra que todo o processo funcionou plenamente.

Média: 47.01

Média Hora: 0



Agora, para encerrar, volte ao cmd e use "Ctrl C" para cessar definitivamente a API. Após esse comando, pode fechar tudo.

```
Nathi@Nathi-PC MINGW32 ~/Desktop/NODE4_rev1/NODE4
$ npm start

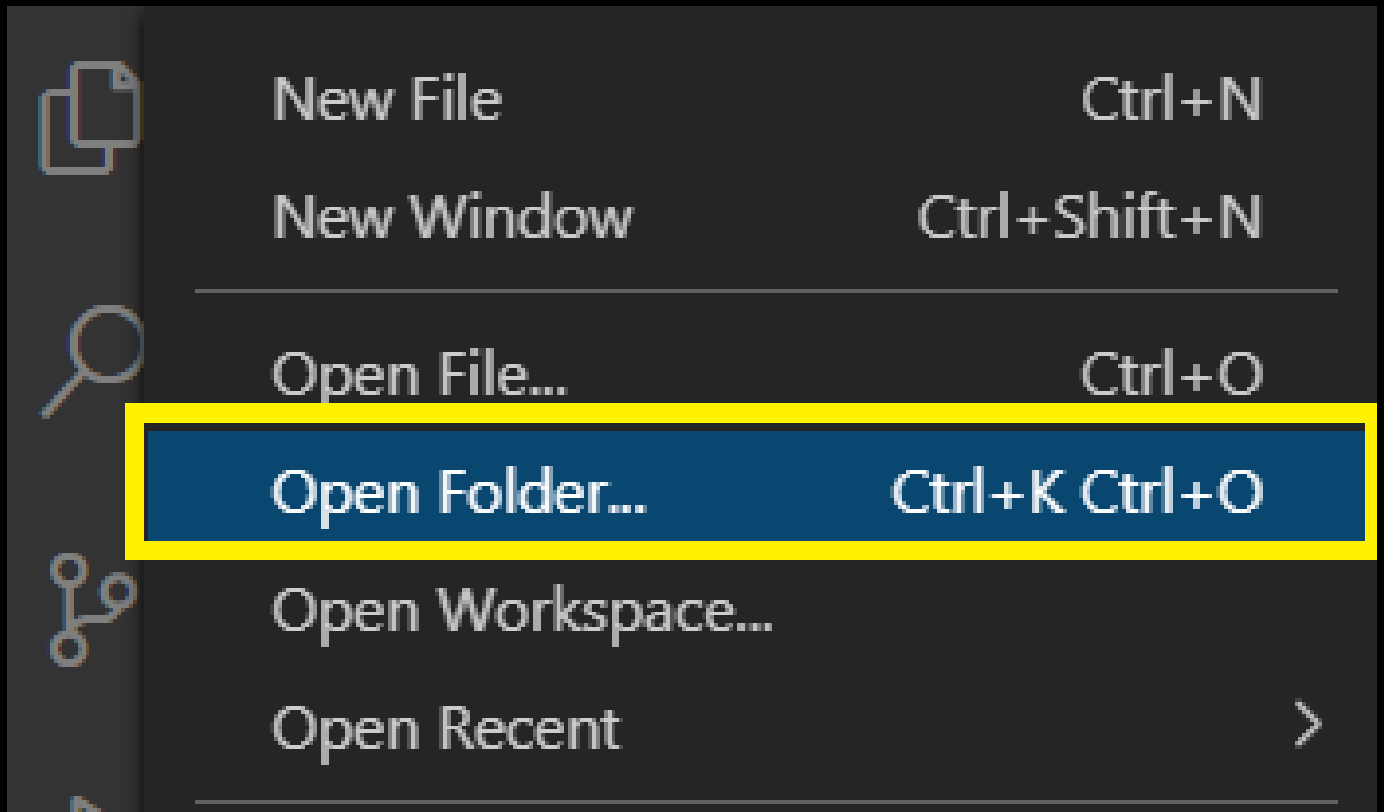
> readserialserver@1.0.0 start C:\Users\Nathi\Desktop\NODE4_rev1\NODE4
> node ./server.js

Express started at port 3000
^Cnpm ERR! code ELIFECYCLE
npm ERR! errno 3221225786
npm ERR! readserialserver@1.0.0 start: `node ./server.js`
npm ERR! Exit status 3221225786
npm ERR!
npm ERR! Failed at the readserialserver@1.0.0 start script.
npm ERR! This is probably not a problem with npm. There is likely additional log
ging output above.

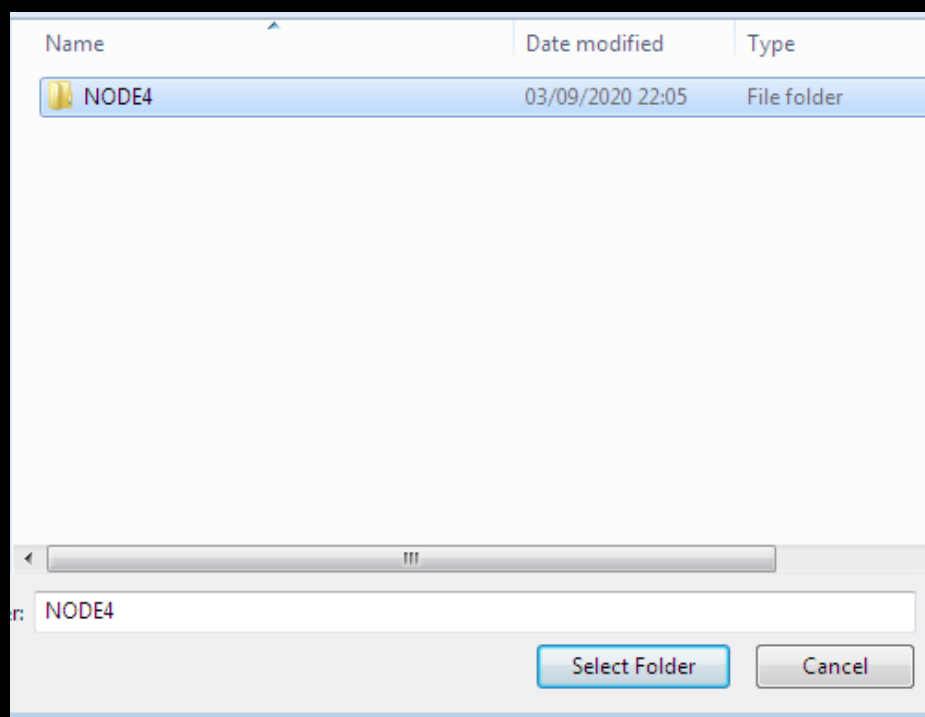
npm ERR! A complete log of this run can be found in:
npm ERR! C:\Users\Nathi\AppData\Roaming\npm-cache\_logs\2020-09-15T01_04_07_
538Z-debug.log

Nathi@Nathi-PC MINGW32 ~/Desktop/NODE4_rev1/NODE4
$ |
```

Também é possível personalizar o index pelo código utilizando o Visual Studio Code. Abra o seu Visual Studio Code e vá em "File". Em seguida, vá em "Open Folder".



À seguir, selecione a pasta NODE4 e aguarde abrir.



```
EXPLORER  ...  < index.html X

> OPEN EDITORS
  index.html > html > body > section > section > script > configuration > options > scales

  NODE4
  app
  JS controller.js
  JS index.js
  JS newserial.js
  JS sensors.js
  node_modules
  index.html
  package-lock.json
  package.json
  JS server.js

  OUTLINE

18
19 <body>
20   <section>
21     <h2>Média: <label id='average'>0.00</label></h2>
22     <h2>Média Hora: <label id='averageHour'>0.00</label></h2>
23   </section>
24   <section style="width:100%">
25     <canvas id="chart"></canvas>
26   </section>
27   <script>
28
29     var context = document.getElementById("chart").getContext("2d");
30     context.canvas.width = 1000; //altera largura do gráfico
31     context.canvas.height = 300; //altera altura do gráfico
32
33     var configuration = {
34       type: 'line', //alteração do tipo de gráfico (barra, linhas, pizza...)
35       data: {
36         datasets: [{
37           label: "Temperature x Time",
38           type: 'line',
39           backgroundColor: ['rgba(255, 99, 0, 0.2)'], //altera a cor de fundo do gráfico
40           borderColor: ['#ff3232'], // altera a cor da linha do gráfico
41         }]
42       },
43       options: {
44         scales: {
45           xAxes: [{
46             //type: 'value',
47             distribution: 'series',
48             ticks: {
49               beginAtZero:true
```

Você poderá modificar os dados exibidos no gráfico a partir daqui, até mesmo personalizar o seu gráfico, mudando as cores e sua legenda.

FIM

***Muito obrigado pelo seu
tempo.***