



# Java

## Configuração de Ambiente de Desenvolvimento - aula 01

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# Instalando o Java JDK



## Configuração Ambiente de Desenvolvimento - Instalação Java JDK

- Instalação Java JDK
- Verifique se existe o Java JDK instalado, através do prompt de comando.
- Digite os comandos abaixo:

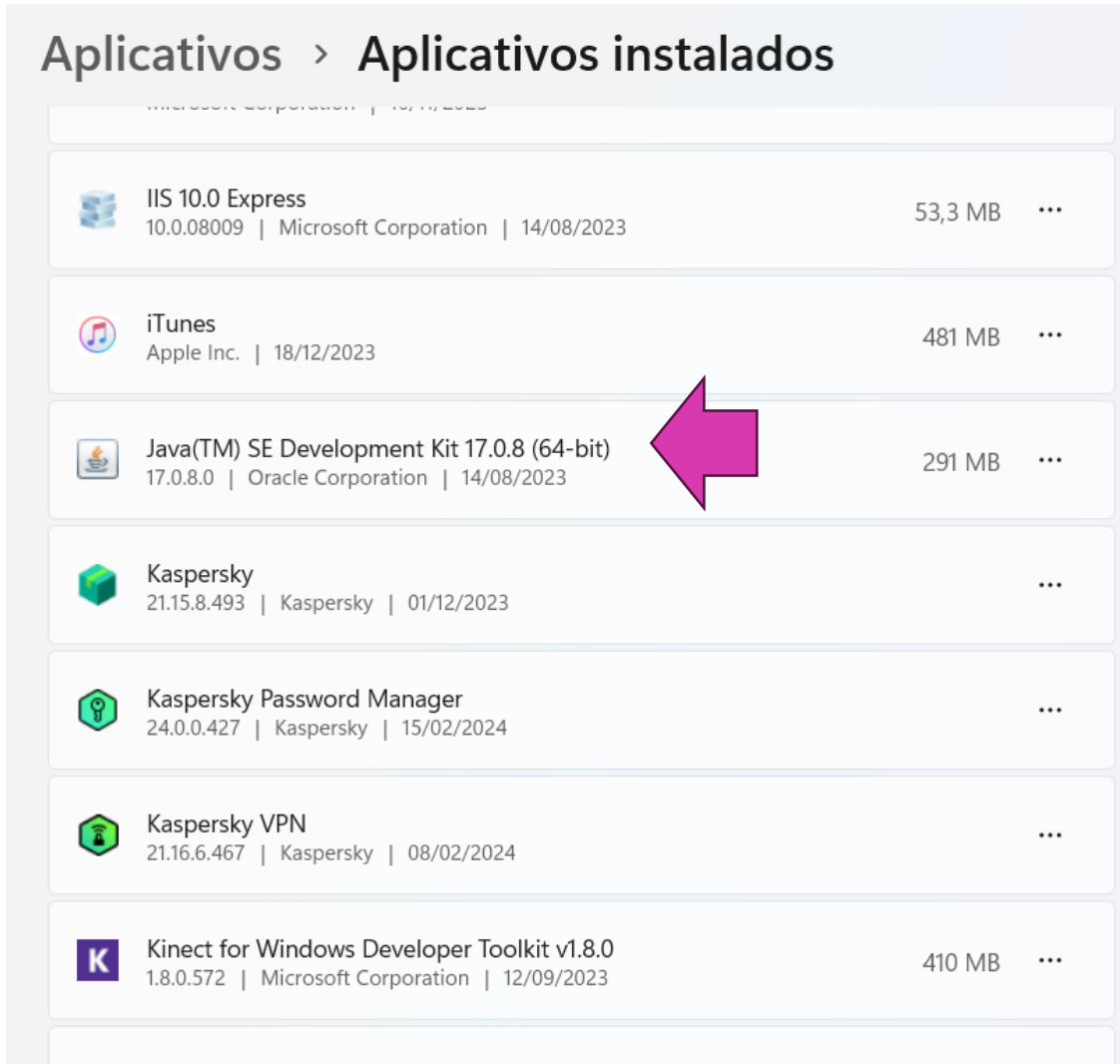
```
C:\Users\jeffe>java -version
java version "17.0.8" 2023-07-18 LTS
Java(TM) SE Runtime Environment (build 17.0.8+9-LTS-211)
Java HotSpot(TM) 64-Bit Server VM (build 17.0.8+9-LTS-211, mixed mode, sharing)

C:\Users\jeffe>javac -version
javac 17.0.8
```

- Para garantir a compatibilidade em nossas aulas vamos desinstalar as versões anteriores do Java JDK

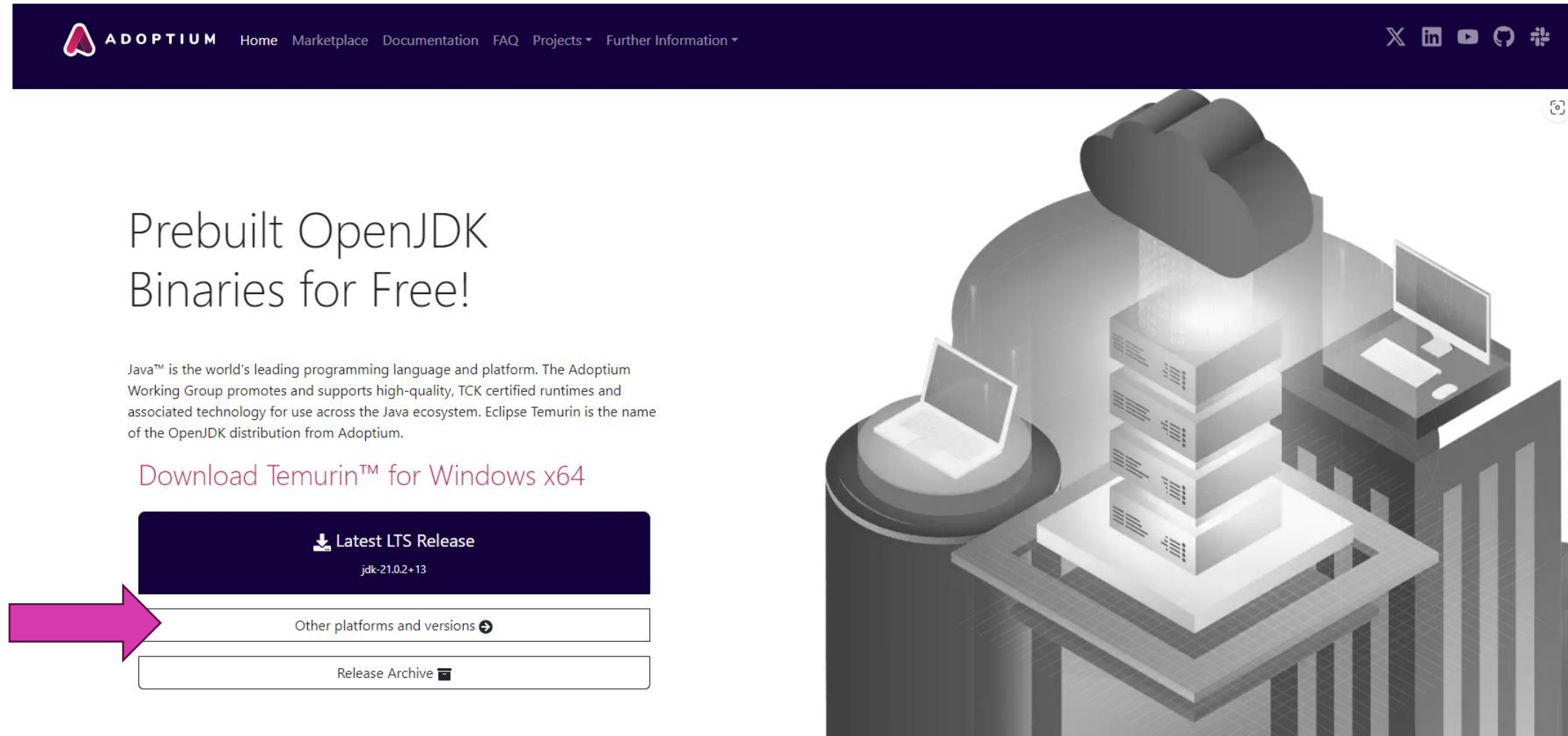
## Configuração Ambiente de Desenvolvimento - Instalação Java JDK

- Instalação Java JDK
- Faça a desinstalação das versões anteriores do Java JDK



## Configuração Ambiente de Desenvolvimento - Instalação Java JDK

- Download Java JDK - [www.adoptium.net](https://www.adoptium.net)
- Para garantir compatibilidade em nosso curso vamos fazer o download da versão 17 do Java JDK



The screenshot shows the Adoptium website's download page. At the top is a dark blue navigation bar with the Adoptium logo and links for Home, Marketplace, Documentation, FAQ, Projects, and Further Information. On the right are social media icons for X, LinkedIn, YouTube, GitHub, and a community icon. The main heading reads "Prebuilt OpenJDK Binaries for Free!". Below this is a paragraph about Java and the Adoptium Working Group. A section titled "Download Temurin™ for Windows x64" features three buttons: "Latest LTS Release" (highlighted with a pink arrow and showing "jdk-21.0.2+13"), "Other platforms and versions", and "Release Archive". The background of the page features a stylized illustration of a stack of server racks with a laptop on top, and a cloud icon above it.

ADOPTIUM Home Marketplace Documentation FAQ Projects Further Information

Prebuilt OpenJDK Binaries for Free!

Java™ is the world's leading programming language and platform. The Adoptium Working Group promotes and supports high-quality, TCK certified runtimes and associated technology for use across the Java ecosystem. Eclipse Temurin is the name of the OpenJDK distribution from Adoptium.

Download Temurin™ for Windows x64

Latest LTS Release  
jdk-21.0.2+13

Other platforms and versions

Release Archive

## Configuração Ambiente de Desenvolvimento - Instalação Java JDK

- Download Java JDK - [www.adoptium.net](https://www.adoptium.net)
- Para garantir compatibilidade em nosso curso vamos fazer o download da versão 17 do Java JDK

### Eclipse Temurin™ Latest Releases


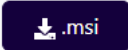
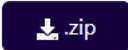


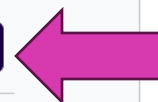
Eclipse Temurin is the open source Java SE build based upon OpenJDK. Temurin is available for a [wide range of platforms](#) and Java SE versions. The latest releases recommended for use in production are listed below, and are regularly [updated and supported](#) by the Adoptium community. Migration help, container images and package installation guides are available in the [documentation section](#).

Use the drop-down boxes below to filter the list of current releases.

Operating System	Architecture	Package Type	Version
Windows	x64	JDK	17 - LTS

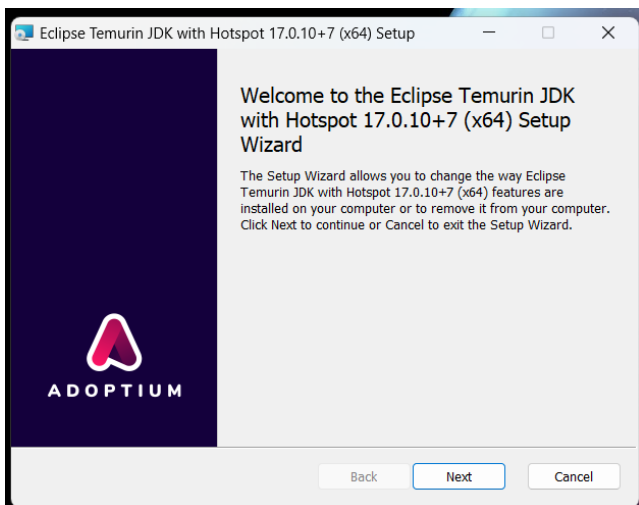
  

<b>17.0.10+7</b> Temurin  January 18, 2024	Windows	x64	JDK - 168 MB <a href="#">Checksum</a> JDK - 190 MB <a href="#">Checksum</a>  
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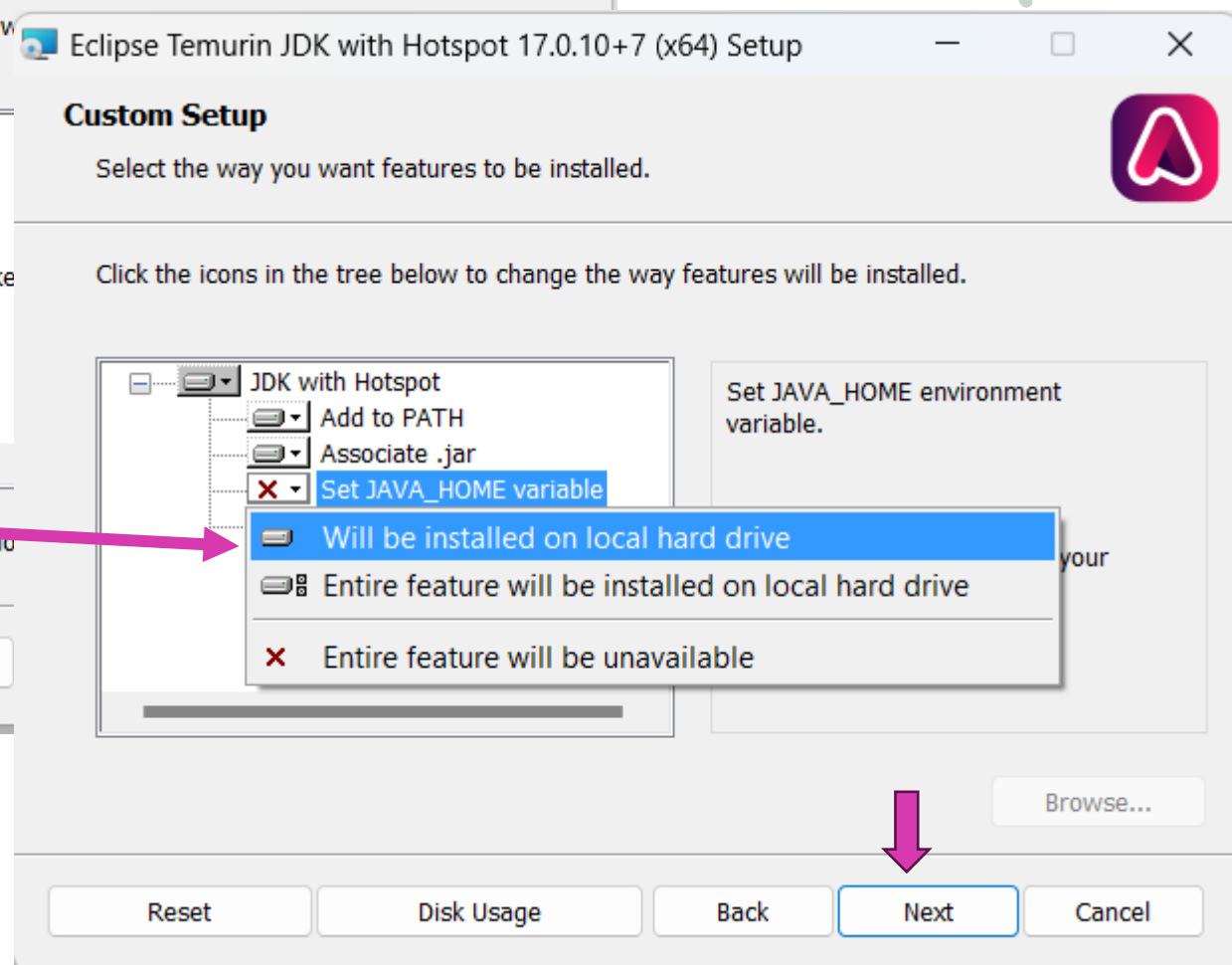
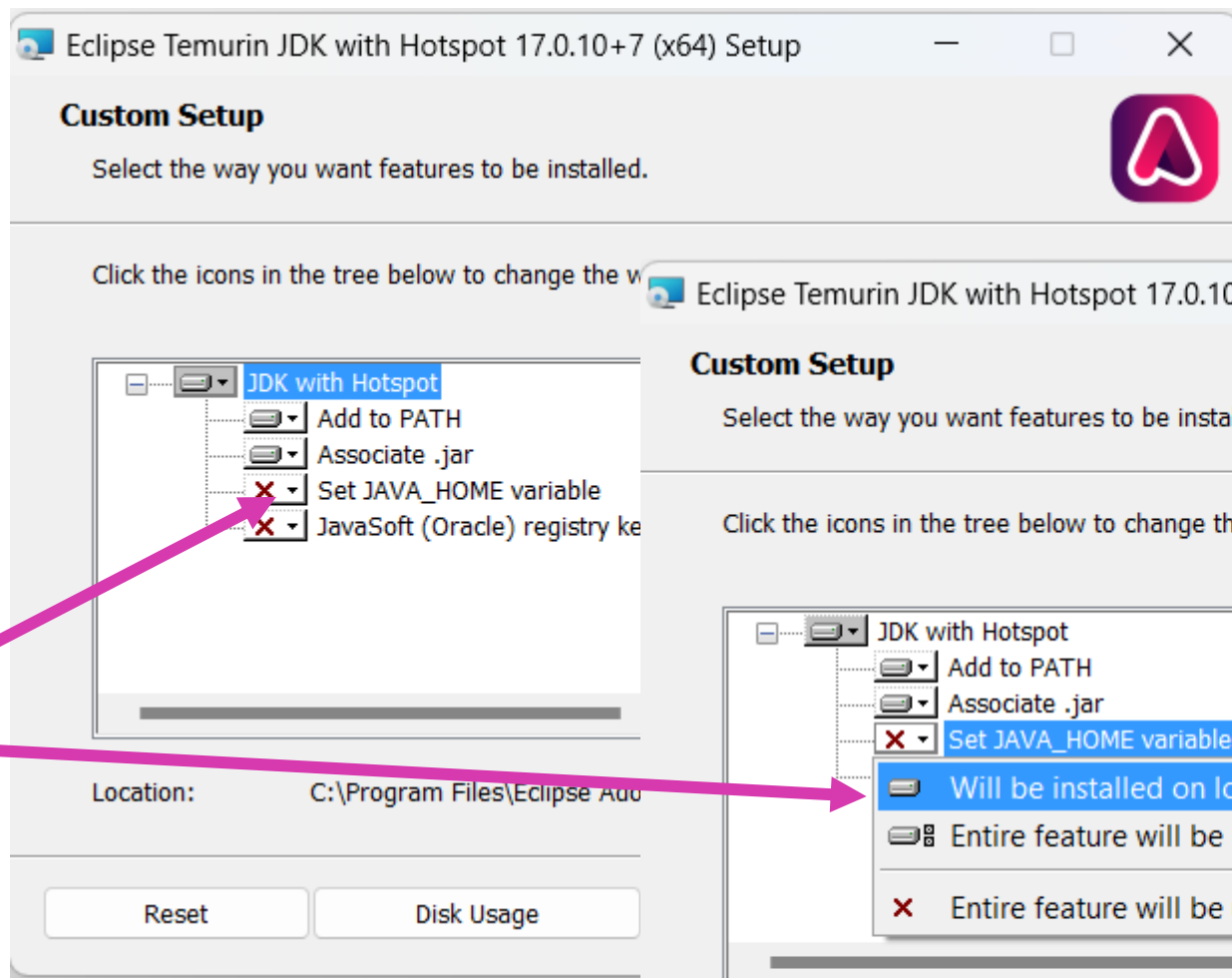


Previous releases are available in the Temurin archive.

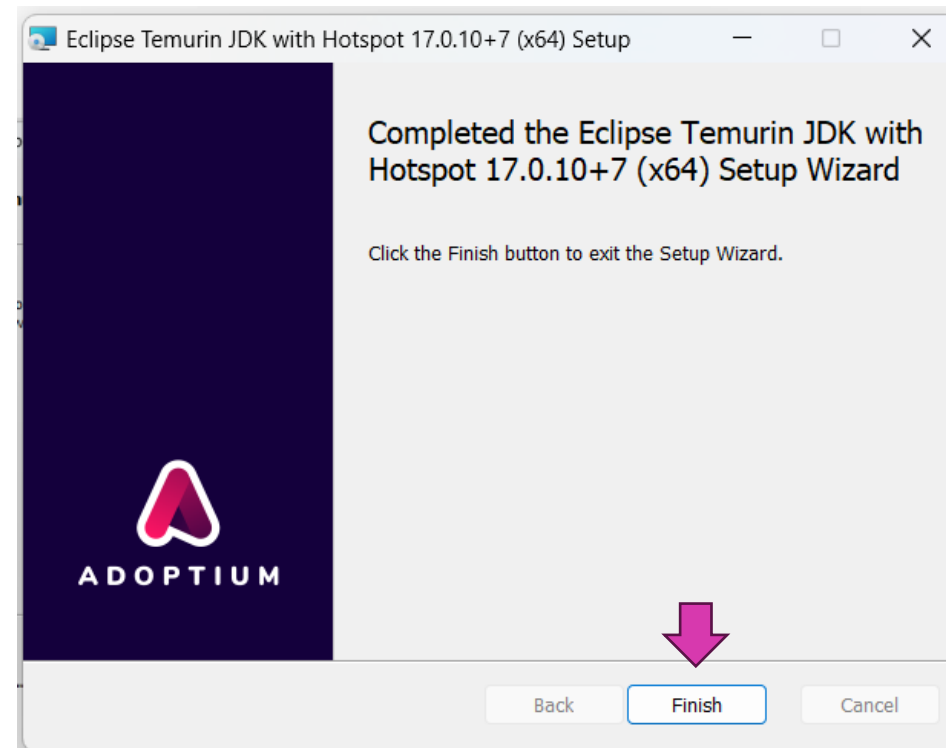
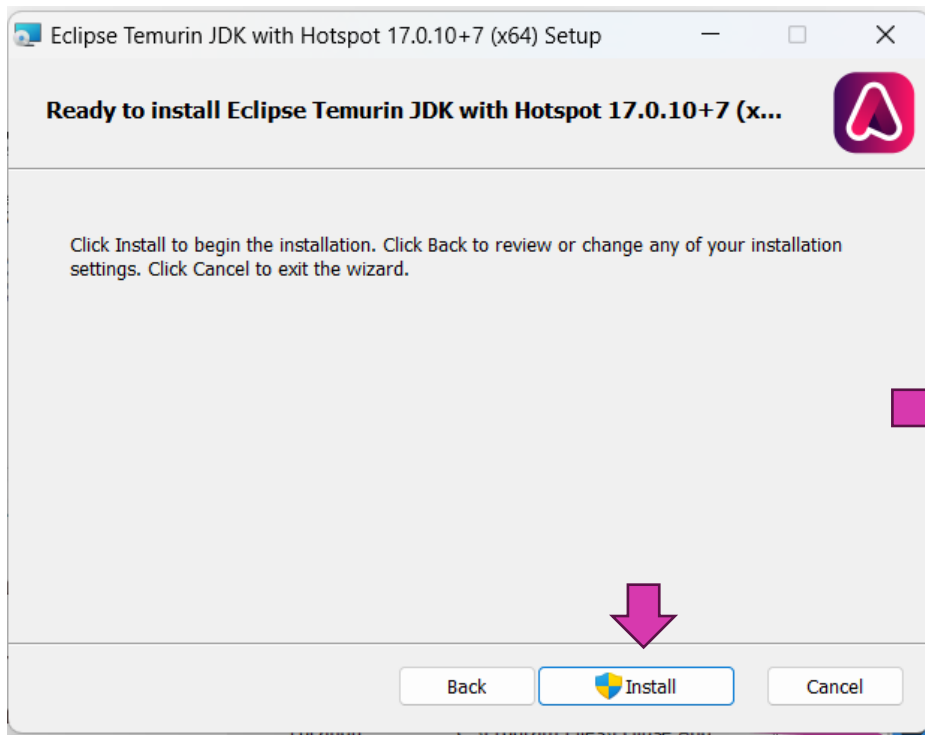
## Configuração Ambiente de Desenvolvimento - Instalação Java JDK



- Instalação Java JDK
- Em Set JAVA\_HOME Variable, faça a configuração.
- Assim o instalador já irá configurar a variável JAVA\_HOME em sua máquina.



## Configuração Ambiente de Desenvolvimento - Instalação Java JDK



- Finalize a instalação e realize os testes no prompt de comando.
- O java e o compilador javac irão responder.

```
C:\Users\jeffe>java -version
openjdk version "17.0.10" 2024-01-16
OpenJDK Runtime Environment Temurin-17.0.10+7 (build 17.0.10+7)
OpenJDK 64-Bit Server VM Temurin-17.0.10+7 (build 17.0.10+7, mixed mode, sharing)

C:\Users\jeffe>javac -version
javac 17.0.10
```





# Java Server Pages (JSP)

## Configurações



# Instalando o Servidor Web - Tomcat

## Configuração Ambiente de Desenvolvimento - Instalação Java JDK

- Download Apache Tomcat – [www.tomcat.apache.org](http://www.tomcat.apache.org)
- Para garantir compatibilidade em nosso curso vamos fazer o download da versão 9 do Apache Tomcat

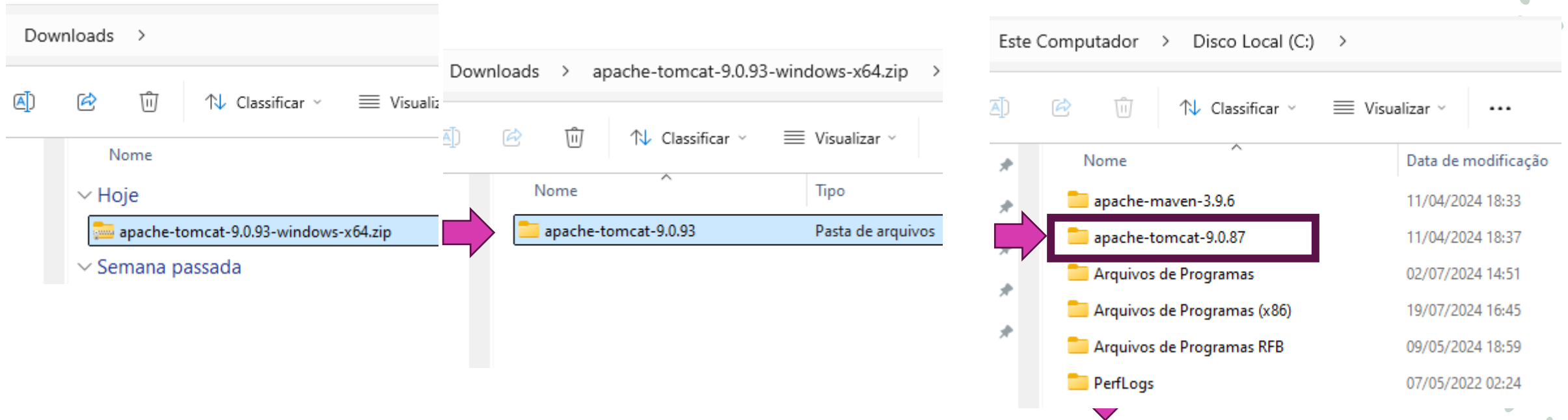
The image shows a composite of three screenshots illustrating the process of downloading Apache Tomcat 9.0.93.

**Left Screenshot (Apache Tomcat Website):** The Apache Tomcat homepage is shown. In the left sidebar, under the 'Download' section, 'Tomcat 9' is highlighted with a red box and a red arrow pointing to it.

**Middle Screenshot (Tomcat 9 Software Downloads):** The 'Tomcat 9 Software Downloads' page is shown. Under the 'Binary Distributions' section, the link '64-bit Windows zip (pgp, sha512)' is highlighted with a red box and a red arrow pointing to it.

**Right Screenshot (Download Confirmation Dialog):** A browser download confirmation dialog is shown. It lists the file 'apache-tomcat-9.0.93-windows-x64.zip' (13,3 MB) as 'Concluído' (Completed). A red arrow points from the highlighted link in the middle screenshot to this dialog.

## Configuração Ambiente de Desenvolvimento – Instalação Java JDK



- Na pasta downloads extraia a pasta do Tomcat no arquivo compactado no seu Disco Local (C).

**Atenção: Não instale o Tomcat 10 ou superior devido incompatibilidades com o Java Server Pages.**

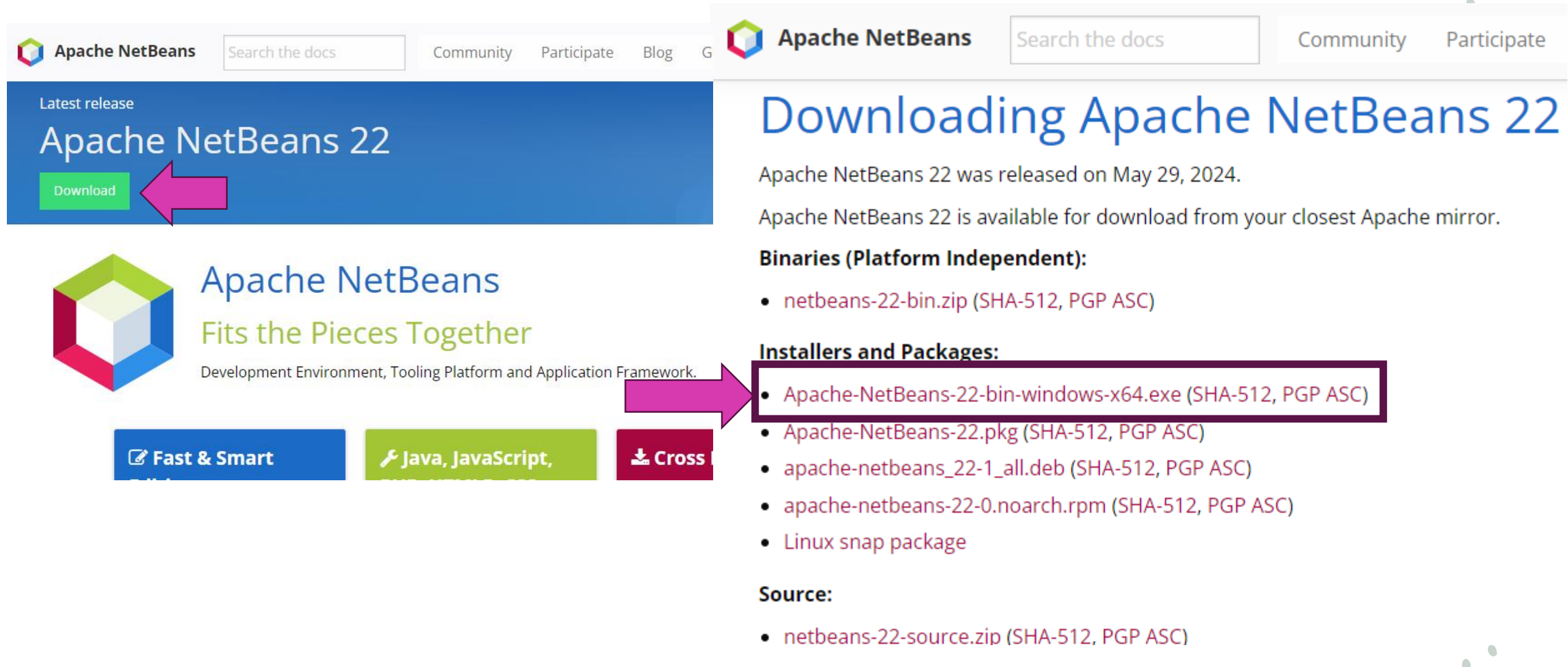




# Instalando e Configurando o Apache Netbeans

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

- Download Apache Netbeans - <https://netbeans.apache.org/front/main/index.html>
- Podemos fazer download da versão mais atual da IDE



Apache NetBeans

Search the docs

Community Participate Blog

Latest release

# Apache NetBeans 22

Download

Apache NetBeans

Fits the Pieces Together

Development Environment, Tooling Platform and Application Framework.

Fast & Smart

Java, JavaScript,

Cross

## Downloading Apache NetBeans 22

Apache NetBeans 22 was released on May 29, 2024.

Apache NetBeans 22 is available for download from your closest Apache mirror.

**Binaries (Platform Independent):**

- [netbeans-22-bin.zip](#) (SHA-512, PGP ASC)

**Installers and Packages:**

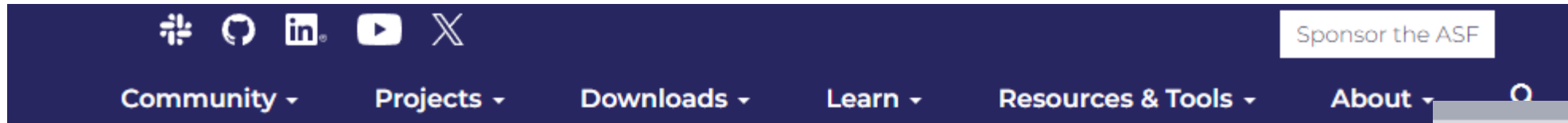
- [Apache-NetBeans-22-bin-windows-x64.exe](#) (SHA-512, PGP ASC)
- [Apache-NetBeans-22.pkg](#) (SHA-512, PGP ASC)
- [apache-netbeans\\_22-1\\_all.deb](#) (SHA-512, PGP ASC)
- [apache-netbeans-22-0.noarch.rpm](#) (SHA-512, PGP ASC)
- [Linux snap package](#)

**Source:**

- [netbeans-22-source.zip](#) (SHA-512, PGP ASC)

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

- Download Apache Netbeans - <https://netbeans.apache.org/front/main/index.html>
- Podemos fazer download da versão mais atual da IDE



We suggest the following location for your download:

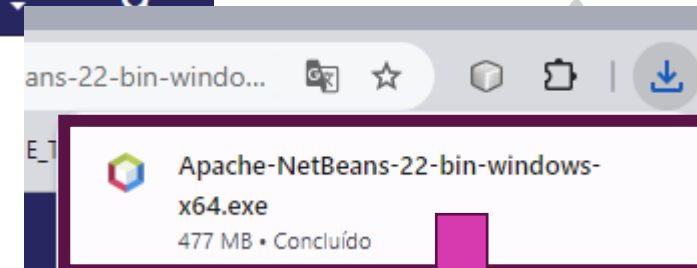
<https://dlcdn.apache.org/netbeans/netbeans-installers/22/Apache-NetBeans-22-bin-windows-x64.exe>

Alternate download locations are suggested below.

It is essential that you verify the integrity of the downloaded file using the PGP signature ( `.asc` file) or a hash ( `.md5` or `.sha*` file).

# HTTP

<https://dlcdn.apache.org/netbeans/netbeans-installers/22/Apache-NetBeans-22-bin-windows-x64.exe>



- **Na pasta downloads execute o instalador do Apache Netbeans.**

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

The image displays three sequential screenshots of the Apache NetBeans IDE 22 Installer, illustrating the initial steps of the installation process.

**Step 1:** The first screenshot shows the "Welcome to the Apache NetBeans IDE 22 Installer" window. It lists the default packs and runtimes: Base IDE, Java SE, Java EE, HTML5/JavaScript, and PHP. A pink circle with the number "1" and an arrow points to the "Customize..." button at the bottom left. Another arrow points from this button to the "Customize Installation" dialog box.

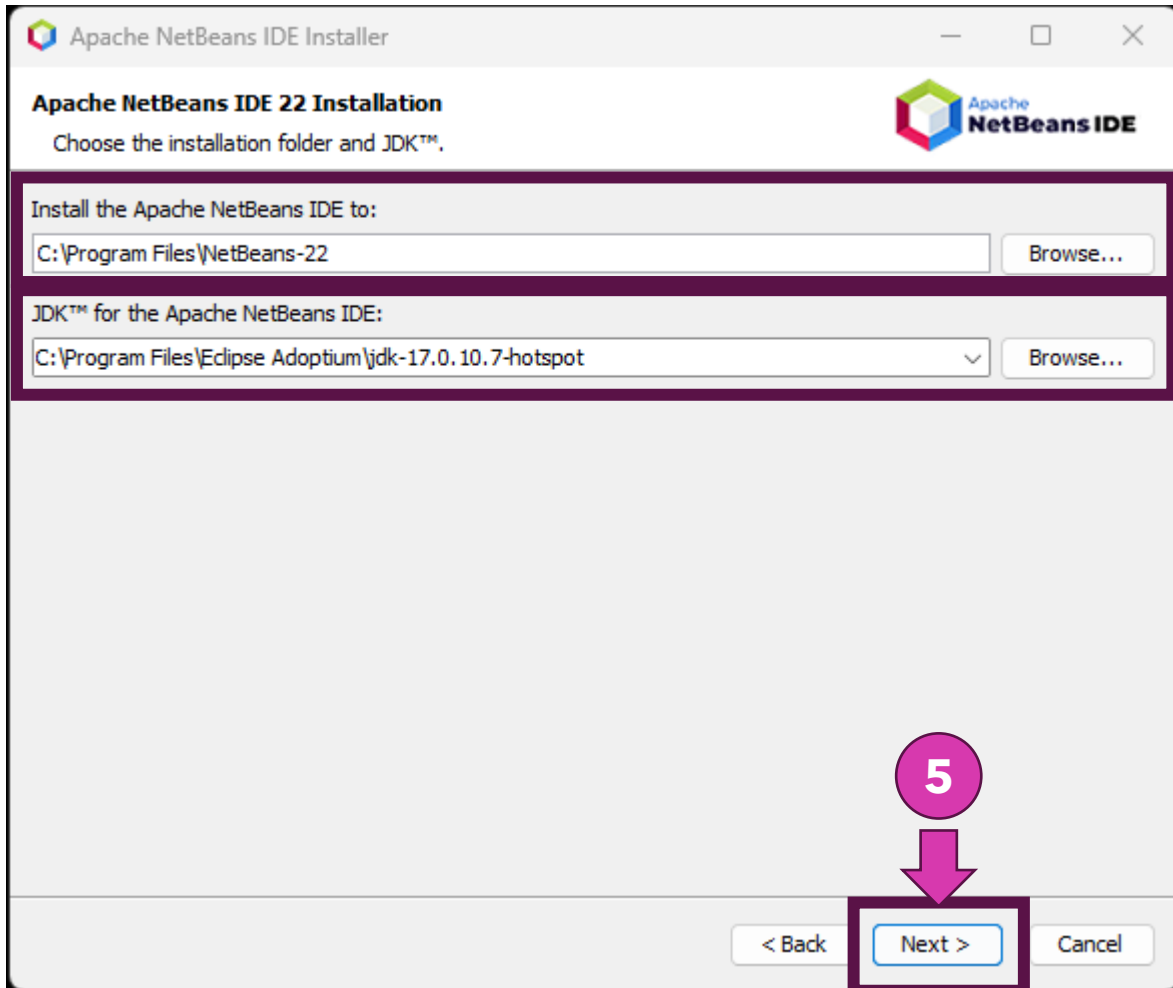
**Customize Installation Dialog:** This dialog allows users to select packs and runtimes to install. The "Base IDE" checkbox is highlighted with a pink circle and the number "1". The "OK" button at the bottom right is also highlighted with a pink box.

**Step 2:** The second screenshot shows the "License Agreement" window. It displays the Apache License Version 2.0, January 2004. A pink circle with the number "2" and an arrow points to the "I accept the terms in the license agreement" checkbox, which is checked. Another arrow points from this checkbox to the "Next >" button at the bottom right, which is highlighted with a pink box.

- **1** → Clique e customize e verifique se todas as opções estão marcadas para instalação, clique em OK para fechar a janela de customização e em seguida em Next.
- **2** → Aceite o contrato de licenciamento e clique em Next.

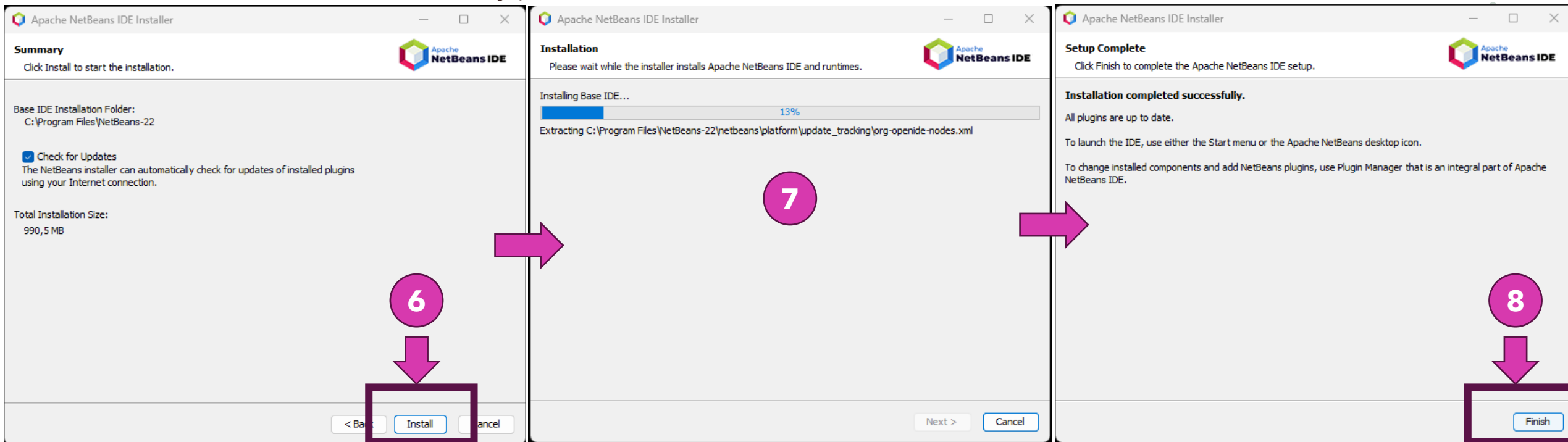


## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans



- **3** → Aqui está indicado o diretório de instalação do Netbeans
- **4** → O instalador do Netbeans irá reconhecer o local da instalação do Java JDK, se não reconhecer clique em Browse e aponte manualmente o diretório do Java JDK em sua máquina
- **5** → Clique em Next.

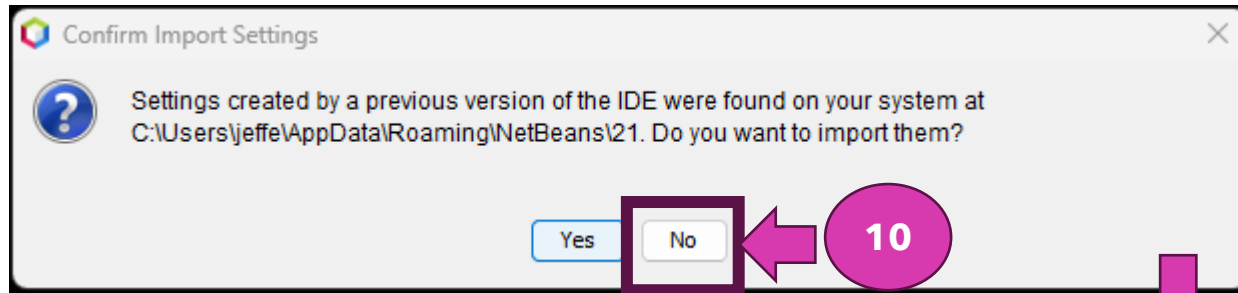
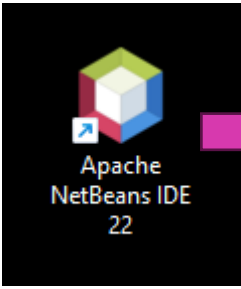
## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans



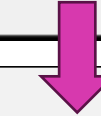
- **6** → Clique em Install
- **7** → Aguarde a instalação do software
- **8** → Clique em Finish

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

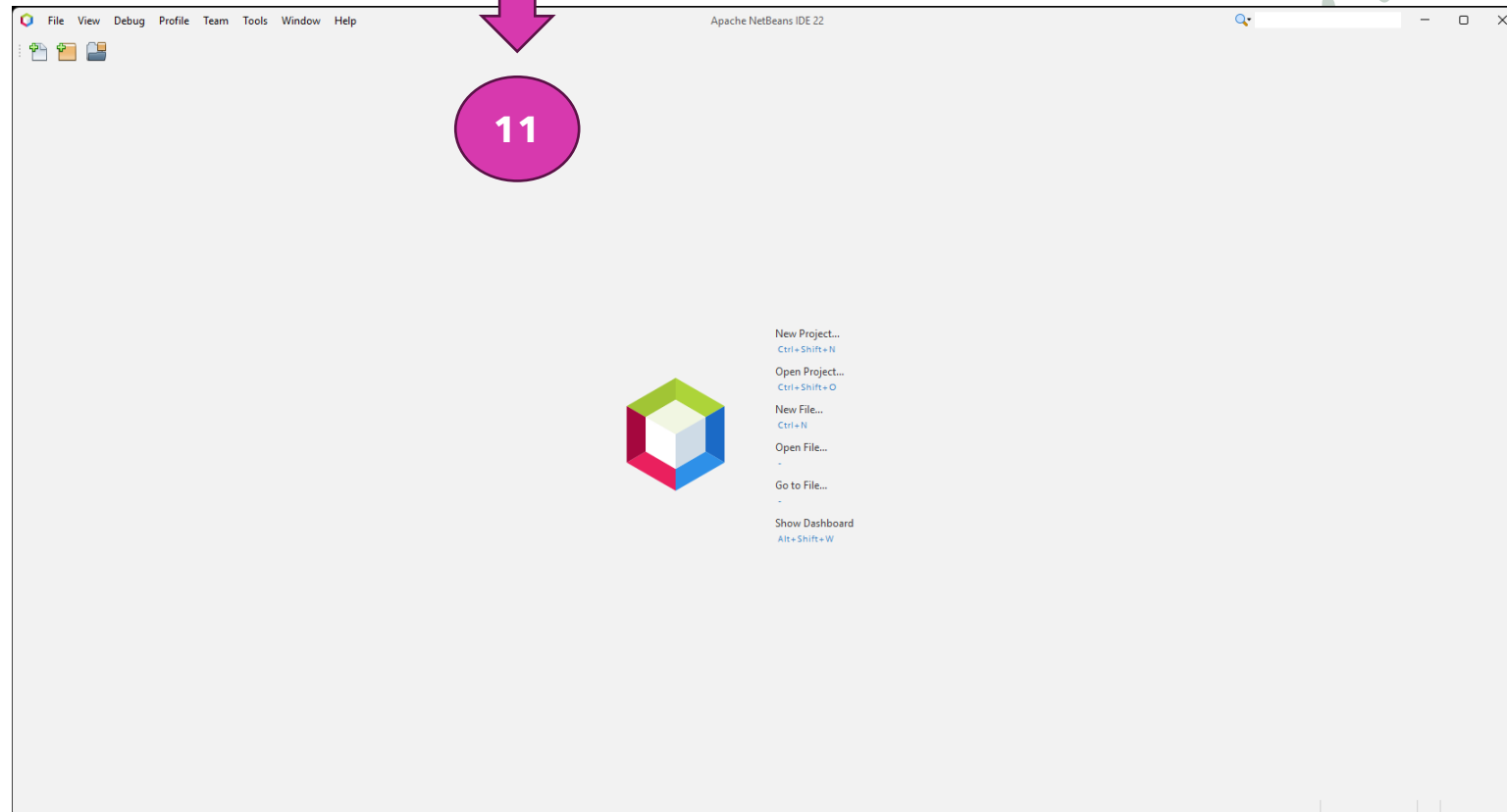
9



10

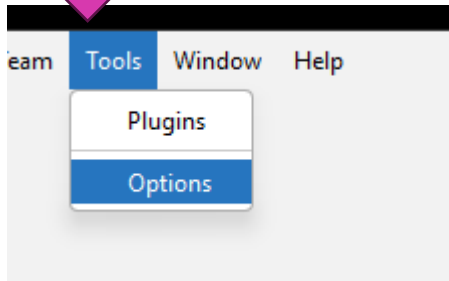


11



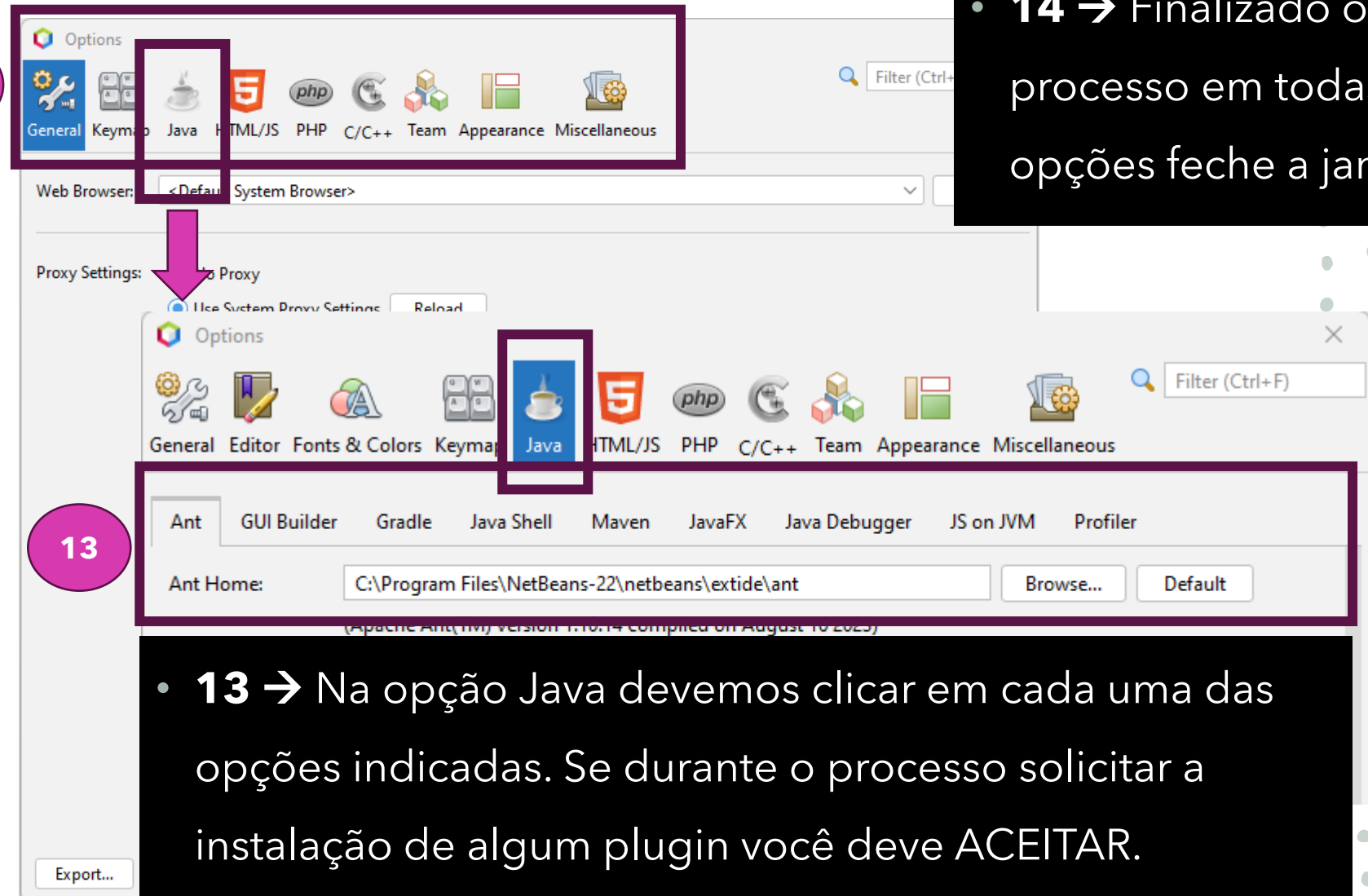
- **9** → Execute o Apache Netbeans
- **10** → Se houver uma instalação antiga no Netbeans (instalada ou que foi removida) o instalador perguntará se deseja fazer a importação das configurações anteriores. Escolha a opção **Não**.
- **11** → Tela Inicial do Netbeans

11



12

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans



13

- **14** → Finalizado o processo em todas opções feche a janela.

- **13** → Na opção Java devemos clicar em cada uma das opções indicadas. Se durante o processo solicitar a instalação de algum plugin você deve ACEITAR.

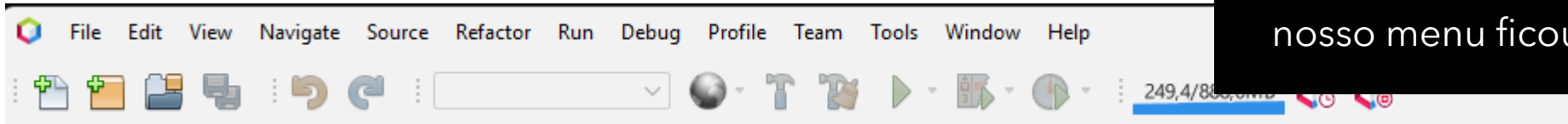
- **11** → Na Ide Netbeans escolha no menu a opção Tools → Options. Agora iremos ativar todas as opções do Netbeans.
- **12** → Para isso na Janela Options Clique em cada uma das opções destacadas aguardando sua respectiva ativação.



15

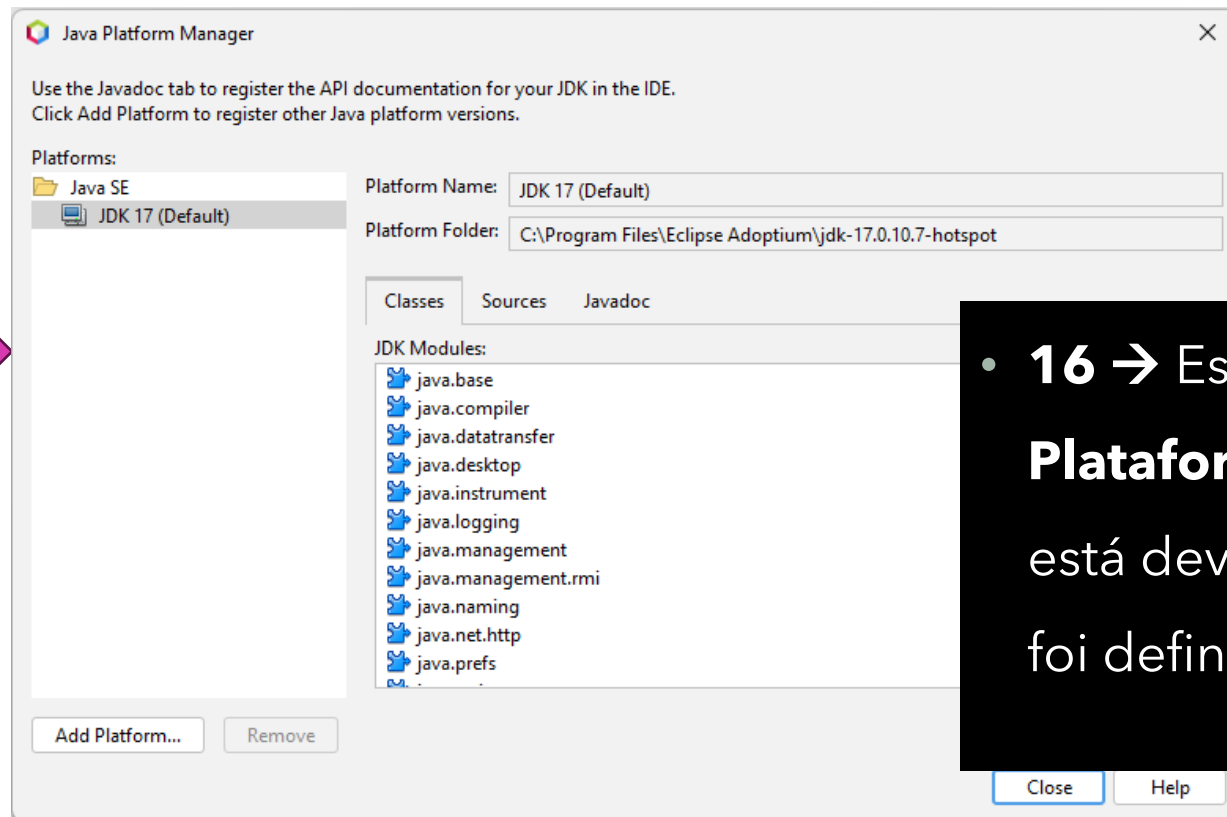
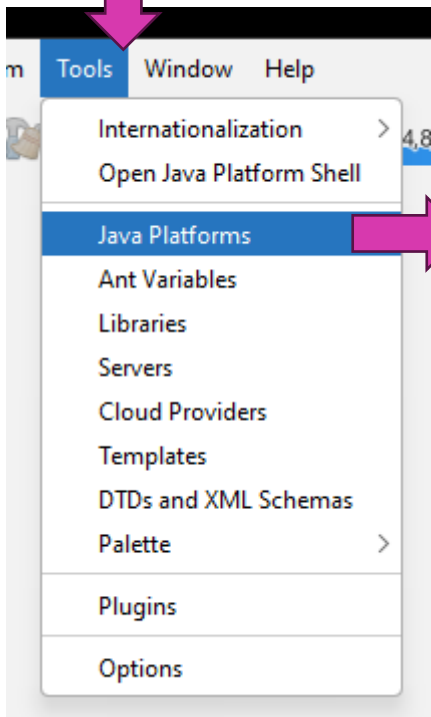
## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

- **15** → Com a ativação realizada no Netbeans nosso menu ficou com mais opções.



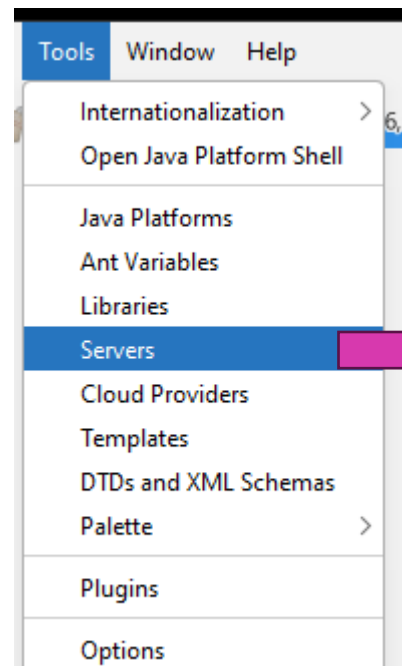
16

- **16** → Escolha a opção **Tools** → **Java Platforms** e verifique se o Java JDK está devidamente linkado na IDE como foi definido durante a instalação.



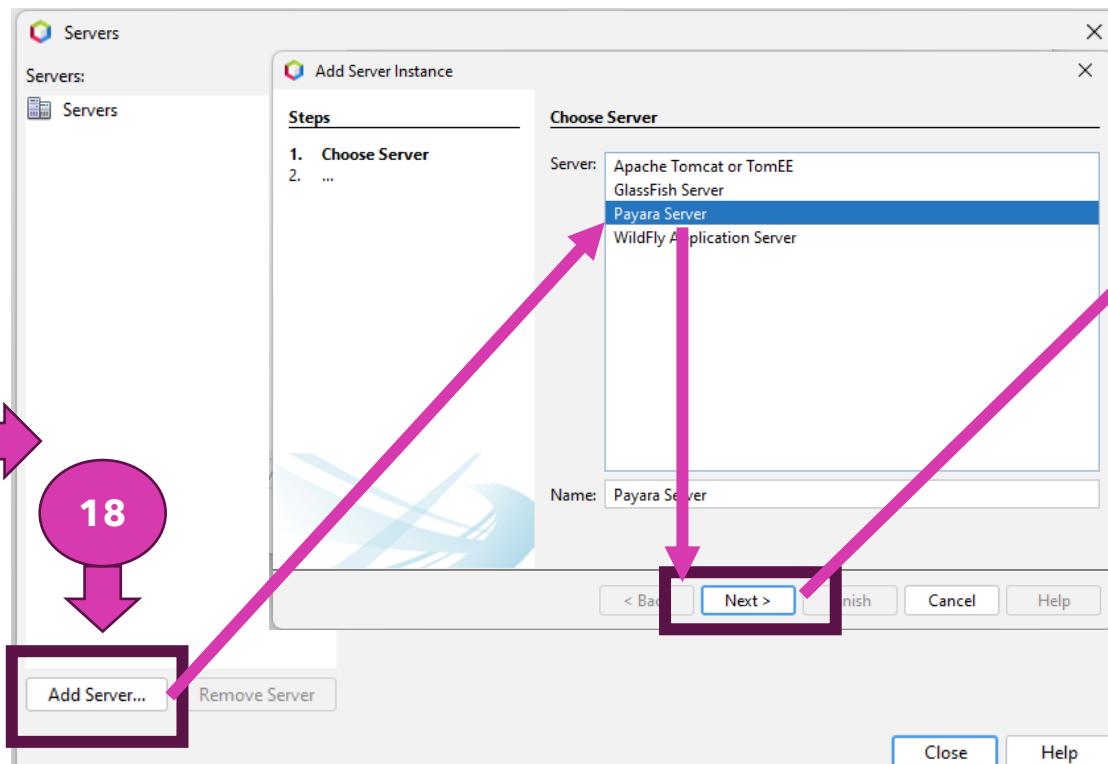
# Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

17



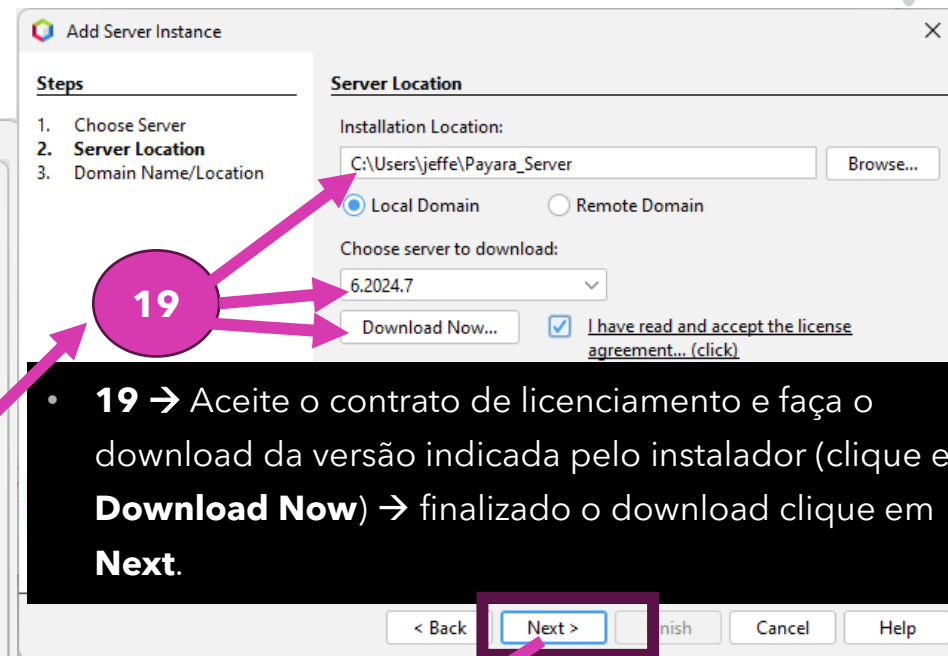
- **17** → Vamos Instalar os servidores web no Netbeans. Inicialmente não temos nenhum instalado.

18



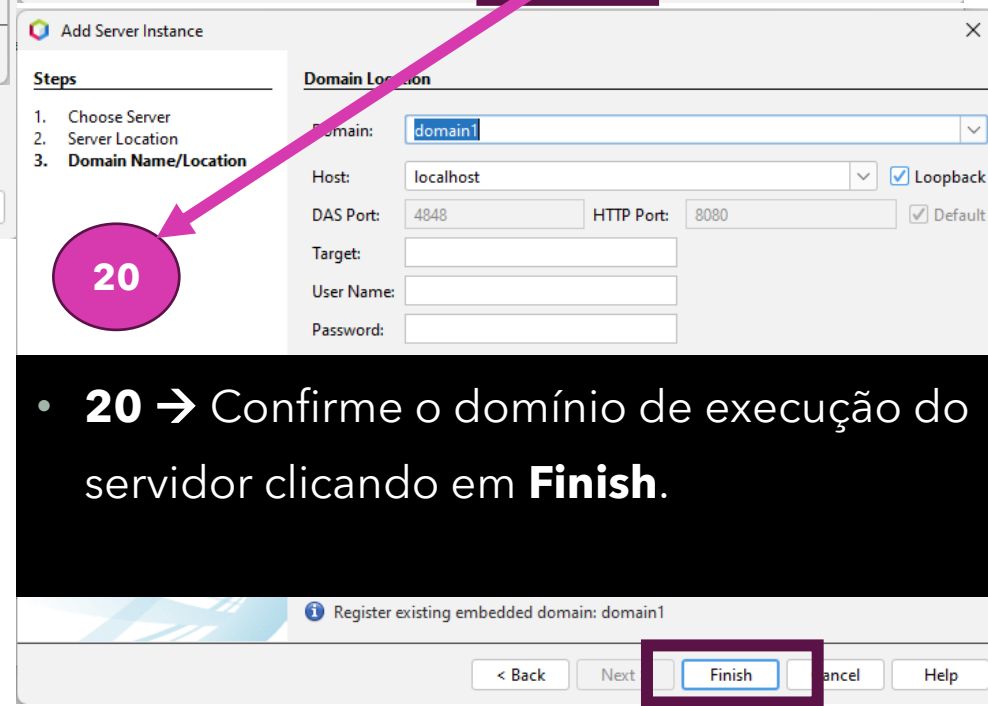
- **18** → Clique em **Add Server** e escolha o **Payara Server** e clique em **Next**. O Netbeans irá ativar os plugins para trabalhar como o Java EE.

19



- **19** → Aceite o contrato de licenciamento e faça o download da versão indicada pelo instalador (clique em **Download Now**) → finalizado o download clique em **Next**.

20



- **20** → Confirme o domínio de execução do servidor clicando em **Finish**.

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

21



Tools Window Help

Internationalization >

Open Java Platform Shell

Java Platforms

Ant Variables

Libraries

Servers

Cloud Providers

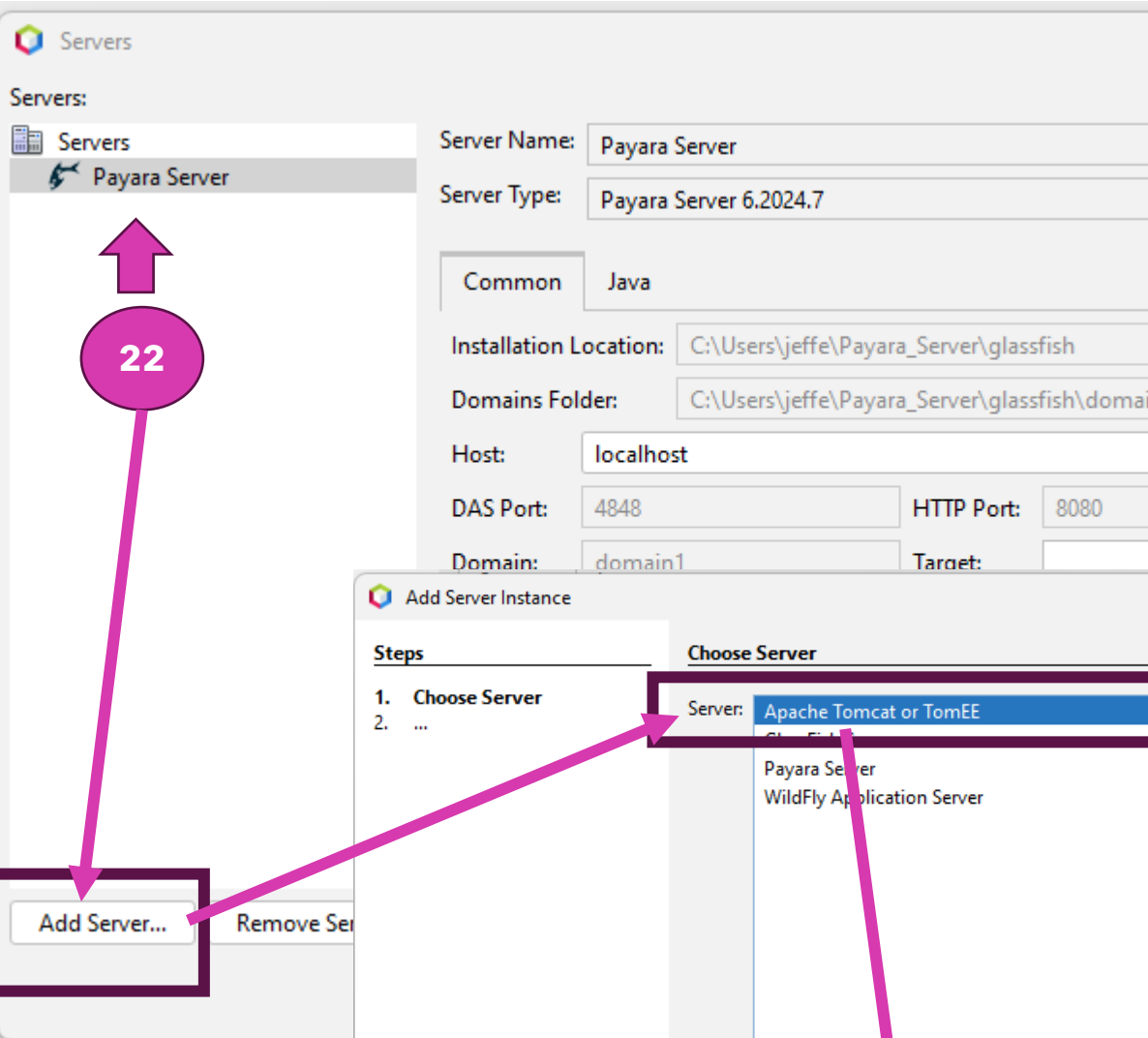
Templates

DTDs and XML Schemas

Palette >

Plugins

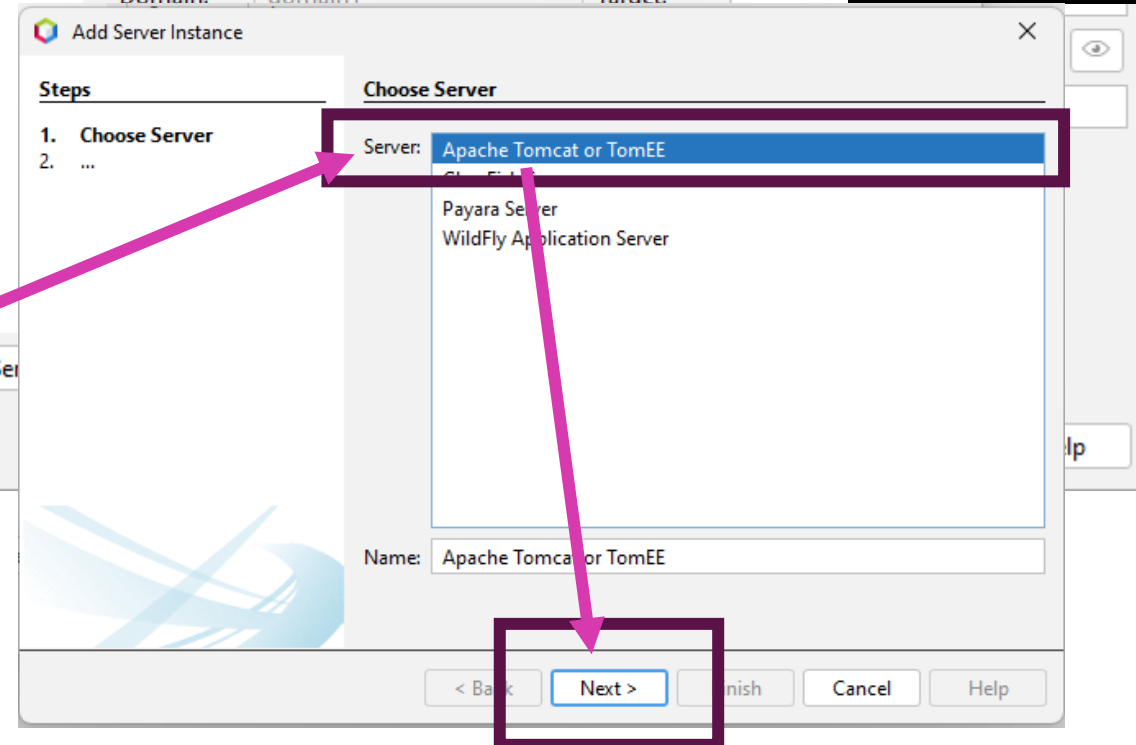
Options



22



- **22** → Neste momento temos o Payara Server instalado, para inserir um novo servidor clique em **Add Server** e escolha o **Apache Tomcat** e clique em **Next**. ○ Netbeans irá ativar os plugins para trabalhar como o Java EE.



- **21** → Novamente em Servers vamos instalar o servidor Tomcat no Netbeans.

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

23

- **23** → Clique em **Browse** e escolha a pasta que onde está o Apache Tomcat em seu Disco Local (C:). Clique em **Abrir**.

**Add Server Instance**

**Steps**

1. Choose Server
2. **Installation and Login Details**

**Installation and Login Details**

Specify the Server Location (Catalina Home) and login details

Server Location:  **Browse ...**

☐ Use Private Configuration Folder (Catalina Base)

Catalina Base:

Enter the credentials of an existing user in the manager or manager-script:

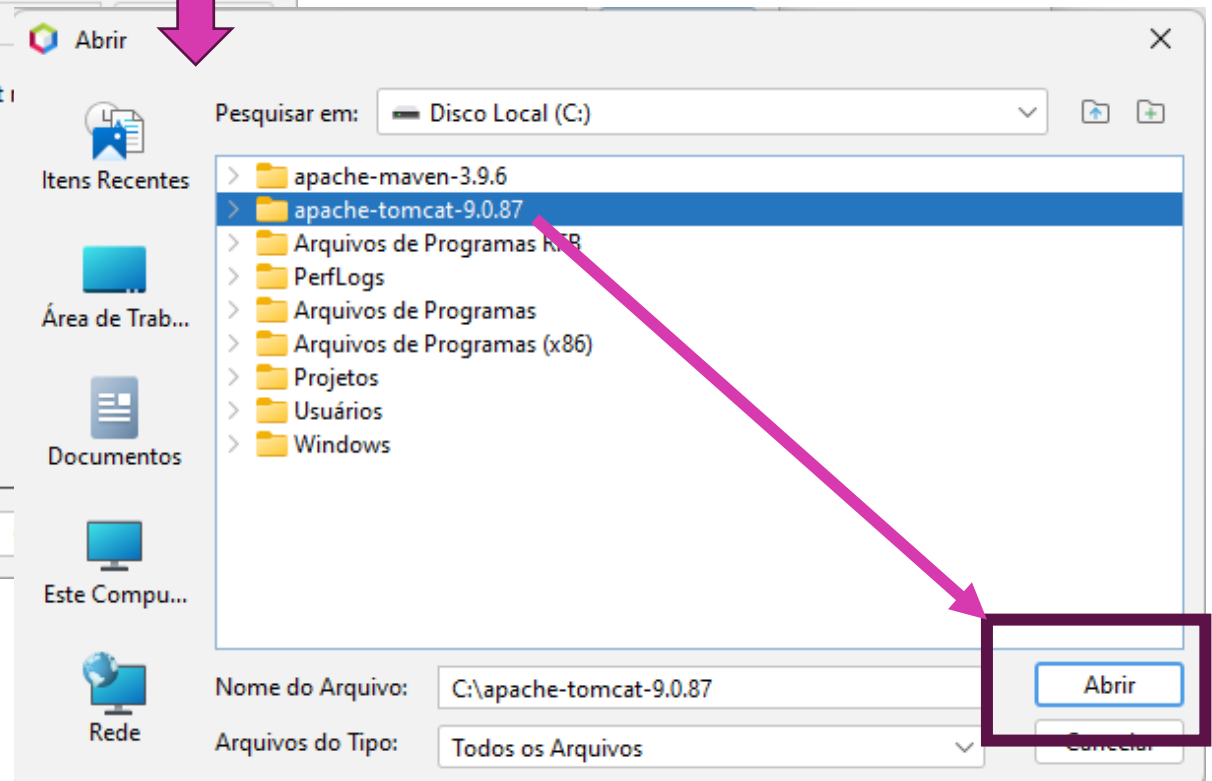
Username:

Password:

☒ Create user if it does not exist

**Specify the Server Location (Catalina Home).**

< Back Next > Finish





## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

**24**

**25**

Add Server Instance

**Steps**

1. Choose Server
2. **Installation and Login Details**

**Installation and Login Details**

Specify the Server Location (Catalina Home) and login details

Server Location: C:\apache-tomcat-9.0.87 Browse ...

☐ Use Private Configuration Folder (Catalina Base)

Catalina Base: Browse ...

Enter the credentials of an existing user in the manager or manager-script role

Username: admin

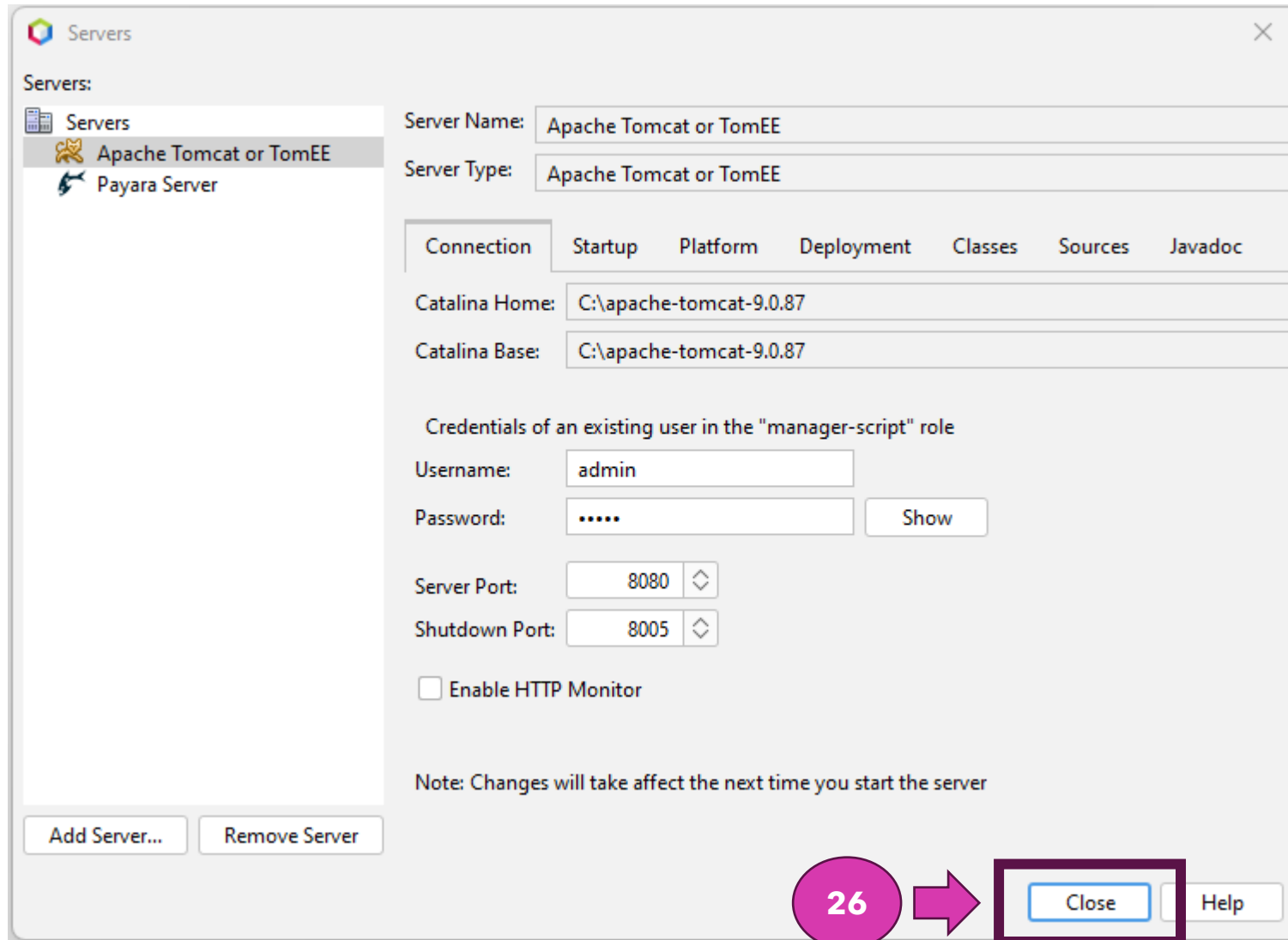
Password: ....

☒ Create user if it does not exist

< Back Next > **Finish** Cancel Help

- **24** → Especificado o caminho para o Tomcat, agora defina o usuário e a senha para o administrador do Tomcat.
- **25** → Como sugestão utilize como username: **admin** e password: **admin**
- Para finalizar clique em **Finish**.

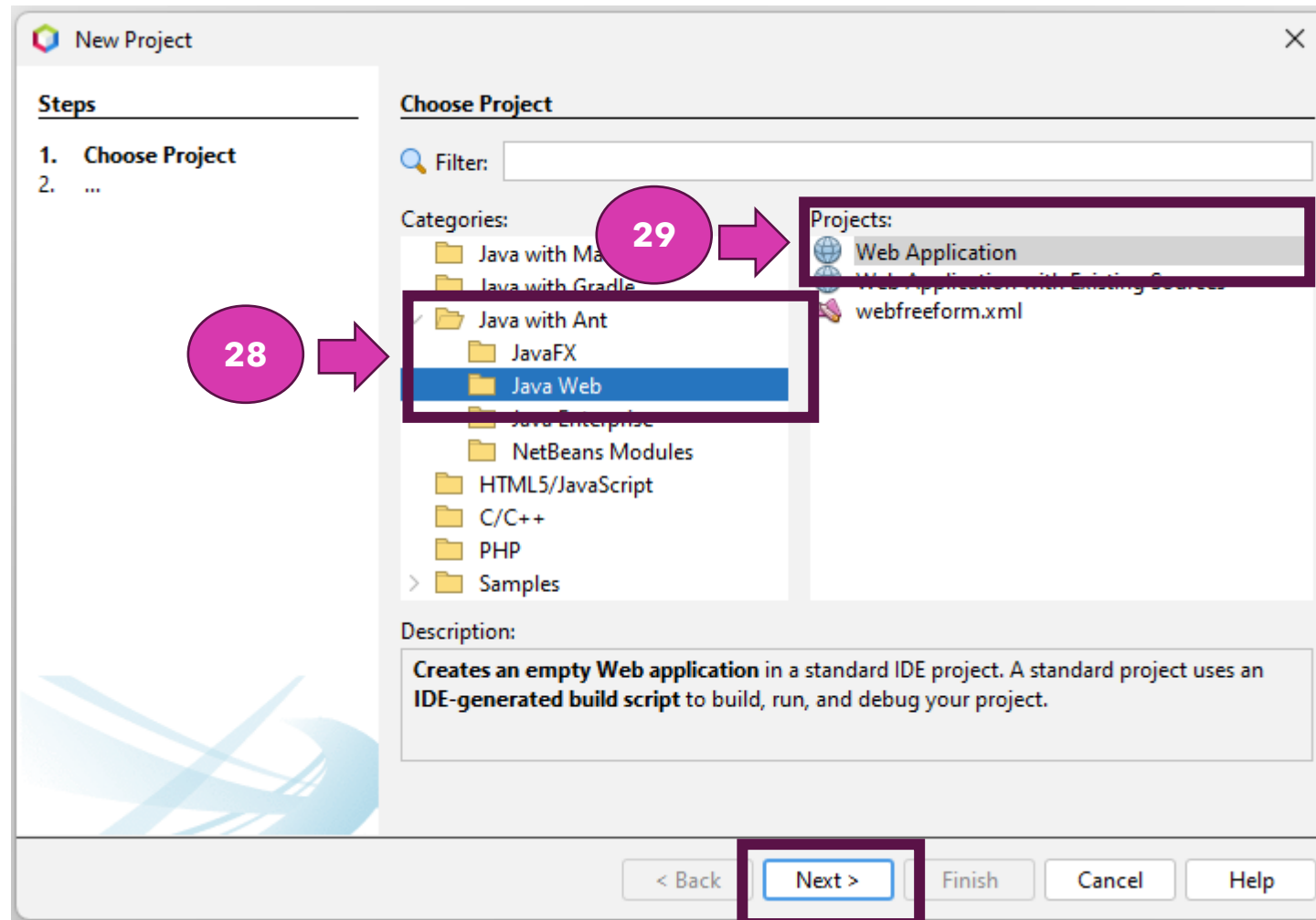
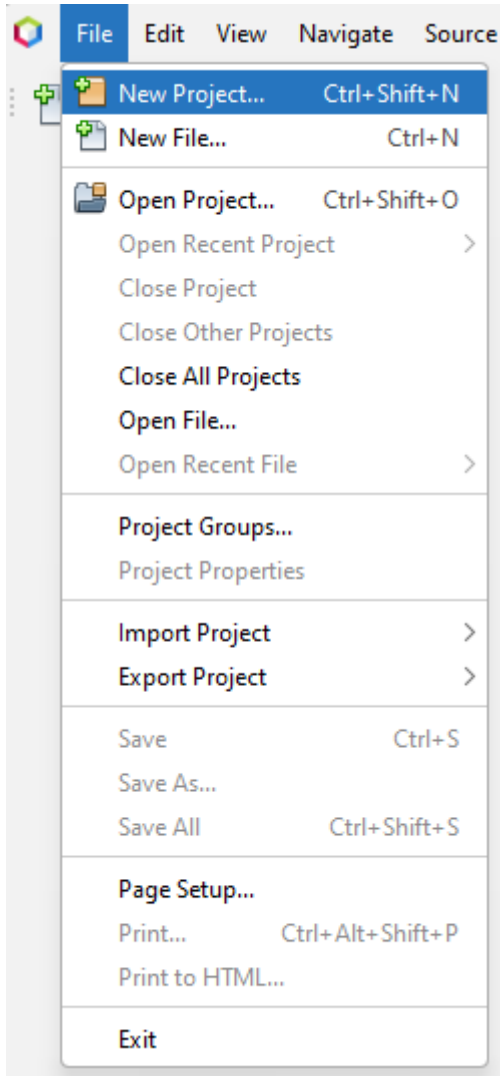
## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans



- **26** → Agora temos nossos servidores instalados. Clique em **Close**.

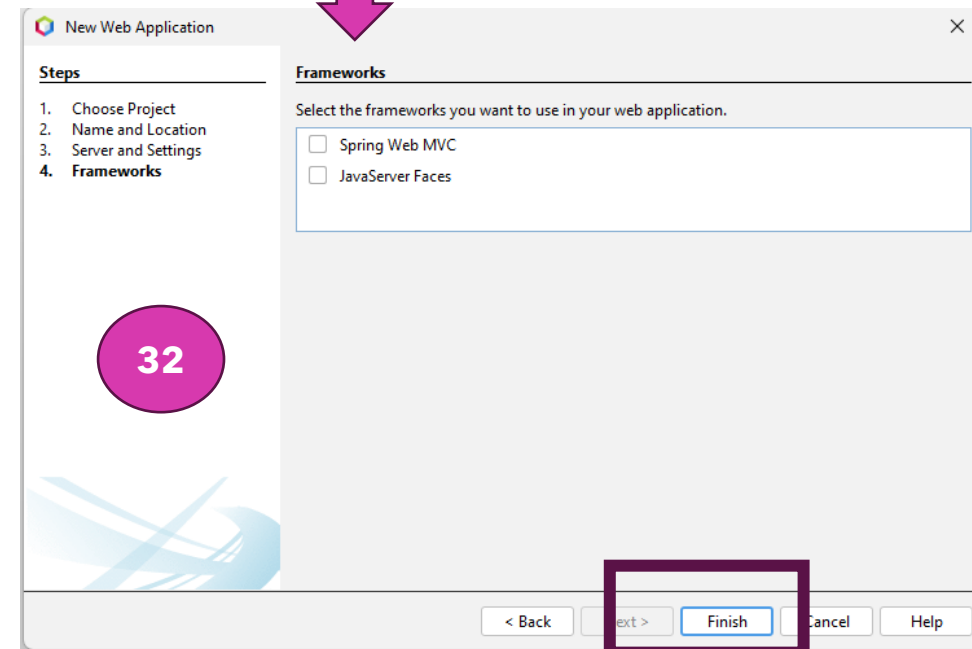
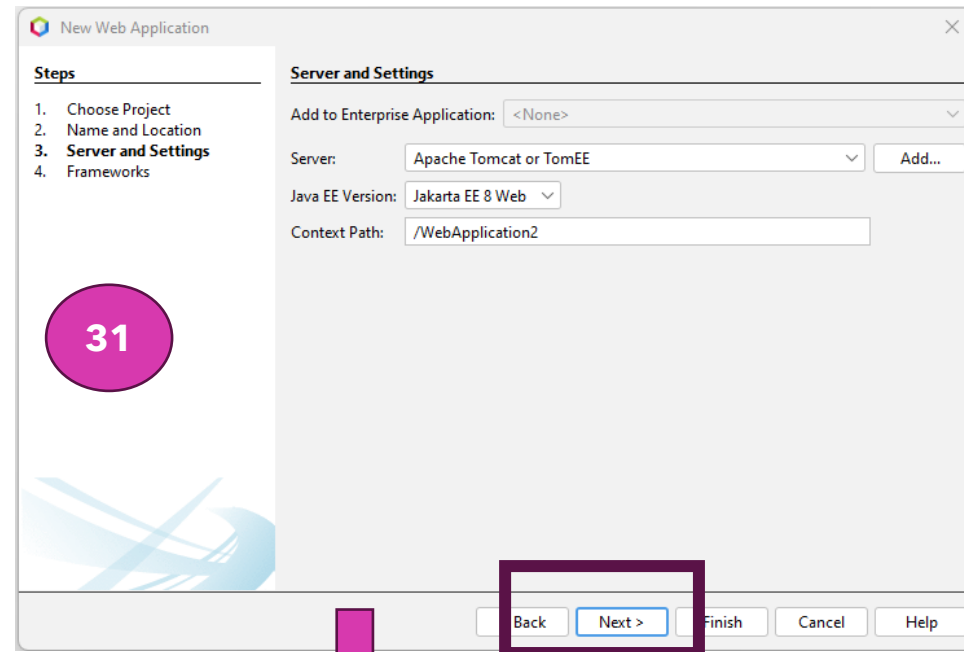
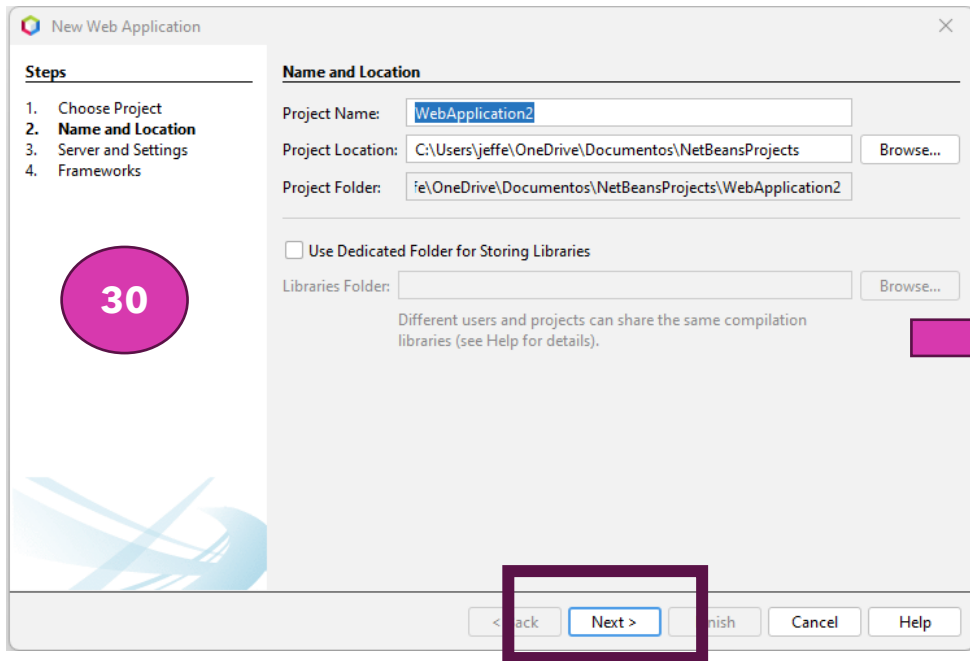
# Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

27



- **27** → Para testar a instalação crie um novo projeto.
- **28** → Escolha a opção **Java with Ant e Java Web**.
- **29** → Escolha **Web Application** e clique em **Next**.

# Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans



- 30 → Clique em **Next** novamente.
- 31 → Clique em **Next** novamente.
- 32 → Clique em **Finish**.

## Configuração Ambiente de Desenvolvimento - Instalação Apache Netbeans

33

WebApplication2 - Apache NetBeans IDE 22

Projects x Files Services

WebApplication2

- Web Pages
  - META-INF
  - WEB-INF
  - index.html
- Source Packages
- Libraries
- Configuration Files

Source History

```
1 <!DOCTYPE html>
2 <!--
3 Click n
4 Click n
5
6 <he
7
8
9
10
11 </head>
12 <body>
13 <div>TODO write content</div>
14
15 /ht
16
```

Authentication Required

Tomcat Manager Application

User Name: admin

Password: .....

OK Cancel

localhost:8080/WebApplication2/

Classroom Coleção Corretoras Doutorado DataSets e-mail Outros favoritos

TODO write content

- **33** → Com o projeto criado clique em executar no botão destacado.
- **34** → Informe o usuário e a senha do administrador do Tomcat se solicitado.
- **35** → Se tudo foi corretamente instalado a aplicação irá iniciar.





# Spring Boot Configurações



# Spring Boot Instalando o Apache Maven

# Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Instalação do gerenciador de pacotes - Apache Maven - link -> [Maven - Welcome to Apache Maven](#)



1

Maven / Welcome to Apache Maven

Download | Get Sources | Last Published: 2024-02-01

Welcome

License

ABOUT MAVEN

What is Maven?

Features

Download

Use

Release Notes

DOCUMENTATION

Maven Plugins

Maven Extensions

Index (category)

User Centre

Plugin Developer Centre

Maven Repository Centre

Maven Developer Centre

Books and Resources

Security

COMMUNITY

## Welcome to Apache Maven

Apache Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information.

If you think that Maven could help your project, you can find out more information in the "About Maven" section of the navigation. This includes an in-depth description of [what Maven is](#) and a [list of some of its main features](#).

This site is separated into the following sections, depending on how you'd like to use Maven:

Use	<a href="#">Download, Install, Configure, Run Maven</a>	<a href="#">Maven Plugins</a> and <a href="#">Maven Extensions</a>
	Information for those needing to build a project that uses Maven	Lists of plugins and extensions to help with your builds.
Extend	<a href="#">Write Maven Plugins</a>	<a href="#">Improve the Central Repository</a>
	Information for developers writing Maven plugins.	Information for those who may not use Maven, but are interested in getting project metadata into the central repository.
Contribute	<a href="#">Help Maven</a>	<a href="#">Develop</a>
	Information if you'd like to get involved. Maven is an open source community and welcomes contributions.	Information in contrib

Each guide is divided into a number of trails to get you started on a particular topic, and includes a reference are

You can access the guides at any time from the left navigation. If you are looking for a quick reference, you can t

- Escolha a opção Download.
- Faça download → "Binary zip archive".
- Descompacte o arquivo zipado.

## Files

Maven is distributed in several formats for your convenience. Simply pick a ready-made binary distribution archive and follow the [installation instructions](#). Use a source archive if you intend to build Maven yourself.

In order to guard against corrupted downloads/installations, it is highly recommended to [verify the signature](#) of the release bundles against the public [KEYS](#) used by the Apache Maven developers.

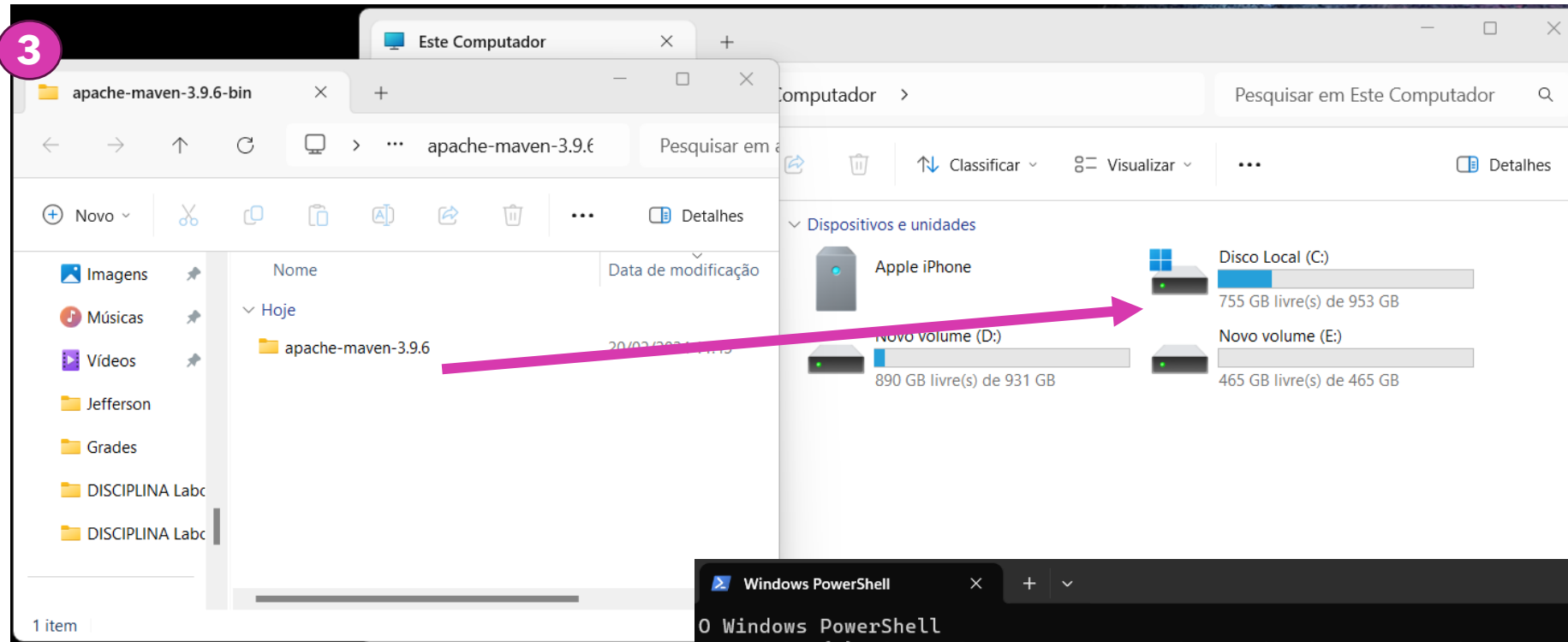
2

	Link	Checksums	Signature
Binary tar.gz archive	<a href="#">apache-maven-3.9.6-bin.tar.gz</a>	<a href="#">apache-maven-3.9.6-bin.tar.gz.sha512</a>	<a href="#">apache-maven-3.9.6-bin.tar.gz.asc</a>
Binary zip archive	<a href="#">apache-maven-3.9.6-bin.zip</a>	<a href="#">apache-maven-3.9.6-bin.zip.sha512</a>	<a href="#">apache-maven-3.9.6-bin.zip.asc</a>
Source tar.gz archive	<a href="#">apache-maven-3.9.6-src.tar.gz</a>	<a href="#">apache-maven-3.9.6-src.tar.gz.sha512</a>	<a href="#">apache-maven-3.9.6-src.tar.gz.asc</a>
Source zip archive	<a href="#">apache-maven-3.9.6-src.zip</a>	<a href="#">apache-maven-3.9.6-src.zip.sha512</a>	<a href="#">apache-maven-3.9.6-src.zip.asc</a>

- [3.9.6 Release Notes](#) and [Release Reference Documentation](#)
- [latest source code from source repository](#)
- Distributed under the [Apache License](#), version 2.0
- other:
  - [Apache Maven Website As Documentation Archive](#)
  - All current release sources (plugins, shared libraries,...) available at <https://downloads.apache.org/maven/>

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Copie a pasta descompactada na raiz do Disco Local (C:)



- Verifique se não existe outra versão do Maven instalada
- Digite o comando **mvn**

```
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos os direitos reservados.

Instale o PowerShell mais recente para obter novos recursos e aprimoramentos! https://aka.ms/PSWindows

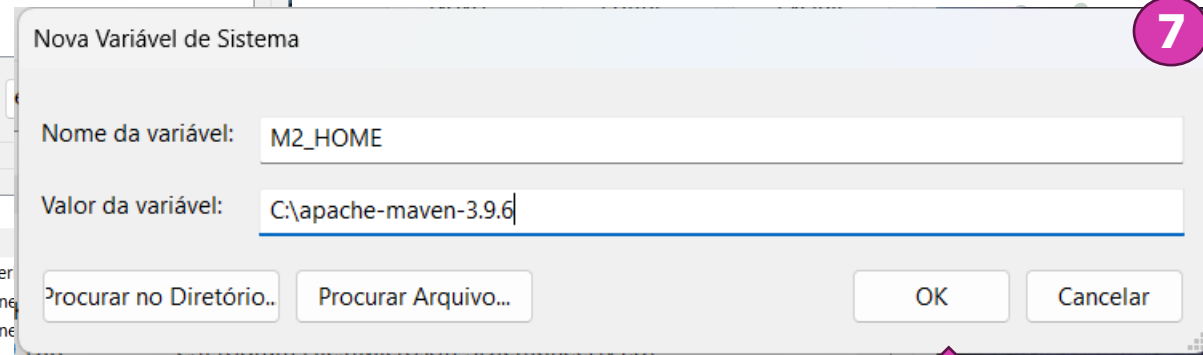
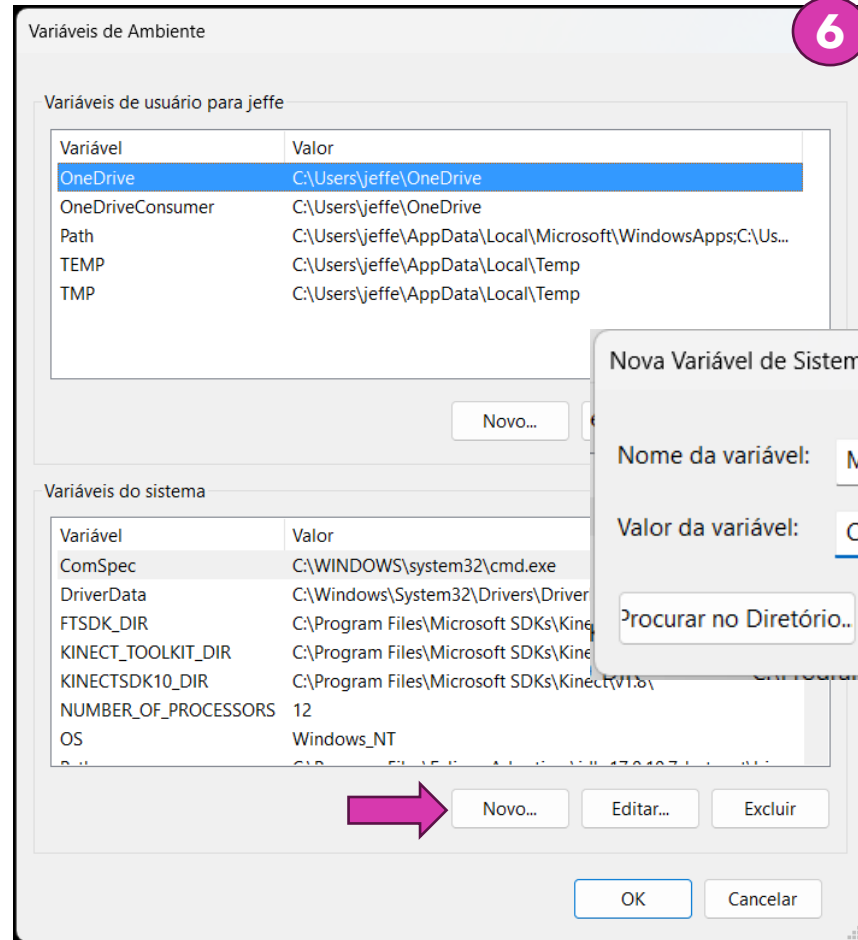
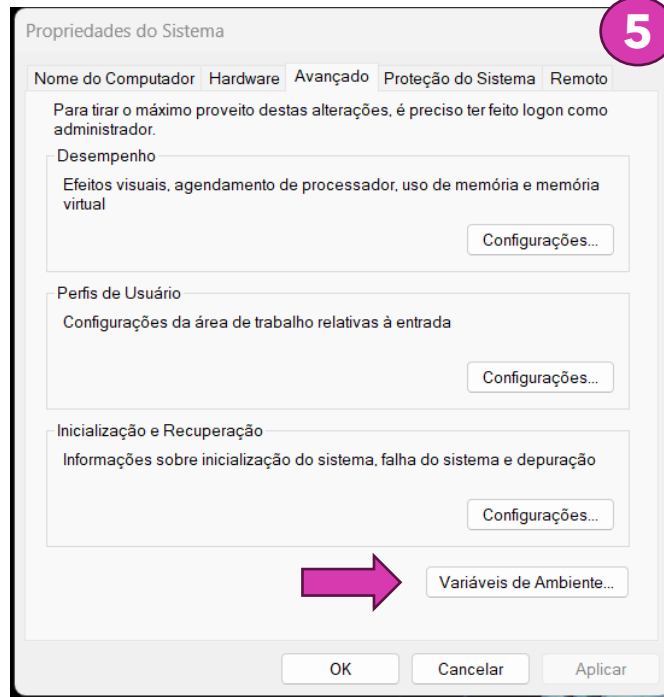
PS C:\Users\jeffe> mvn
mvn : O termo 'mvn' não é reconhecido como nome de cmdlet, função, arquivo de script ou programa operável. Verifique a
grafia do nome ou, se um caminho tiver sido incluído, veja se o caminho está correto e tente novamente.
No linha:1 caractere:1
+ ~~~
+ CategoryInfo          : ObjectNotFound: (mvn:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

PS C:\Users\jeffe> |
```



## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

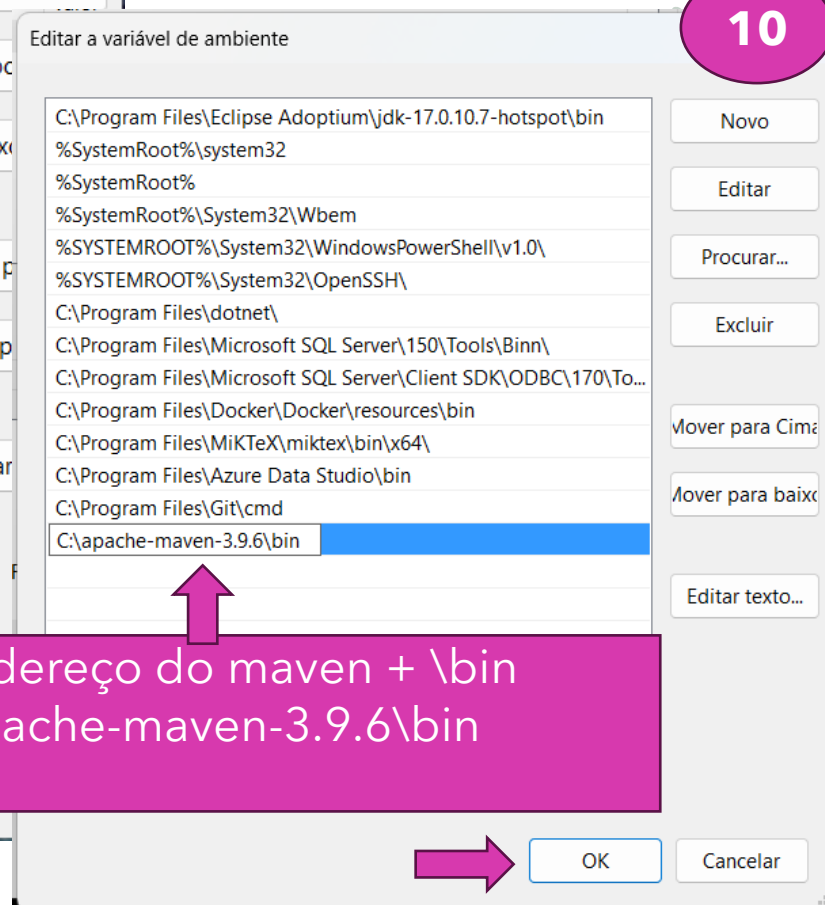
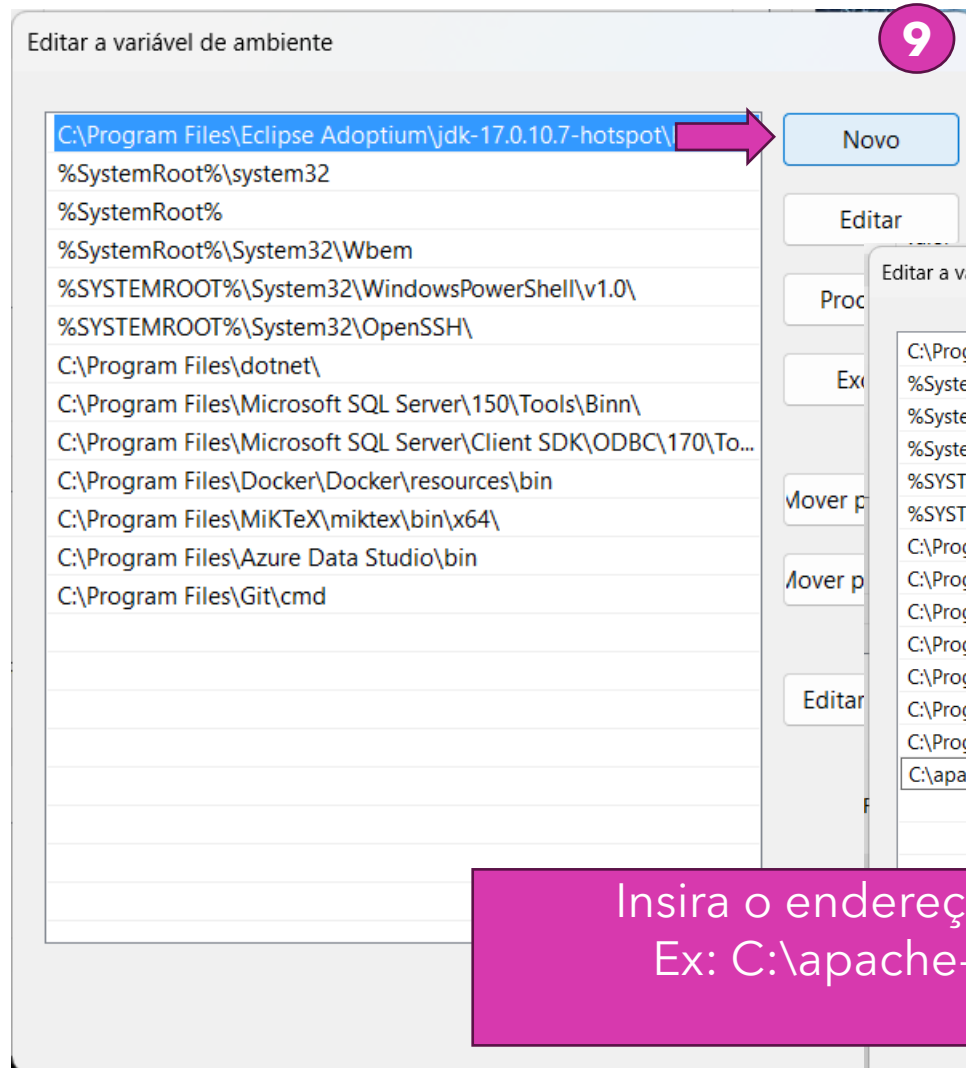
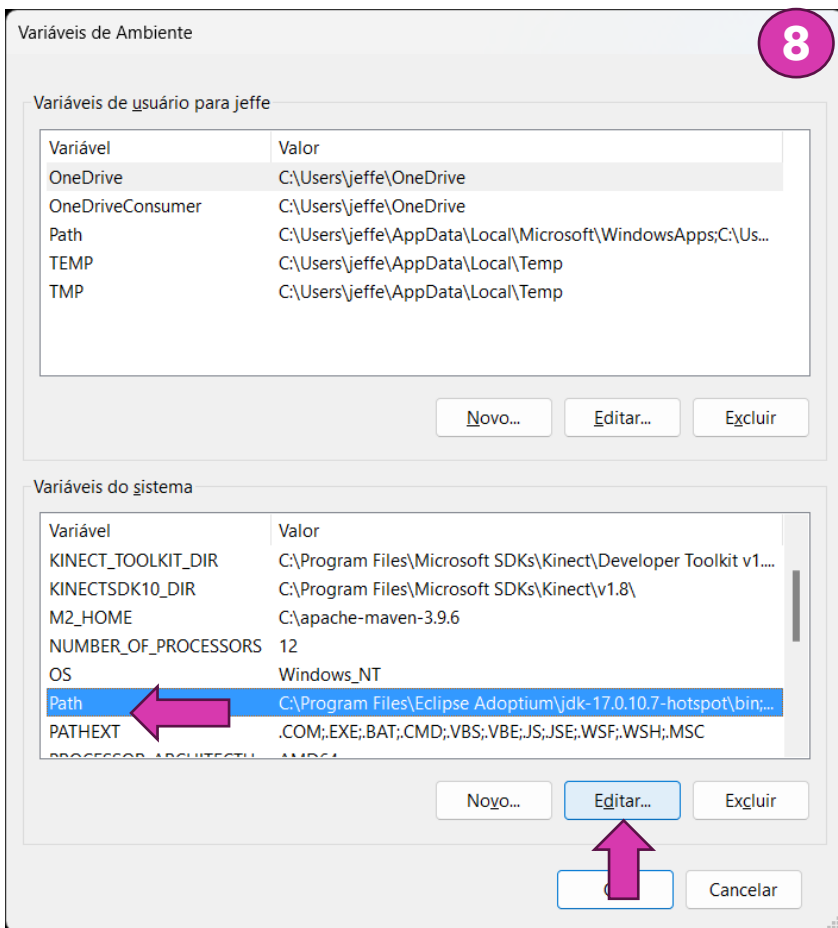
- Adicionar a variável de ambiente M2\_HOME no Windows com o endereço da pasta copiada





## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

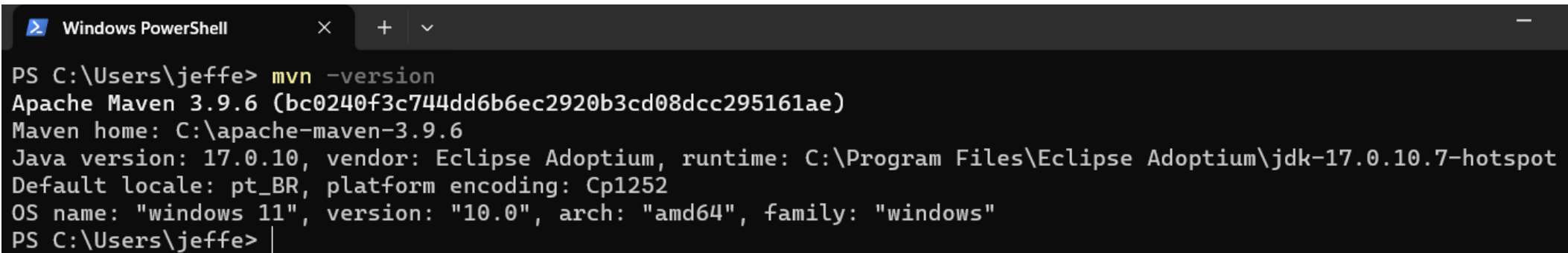
- Editar também a variável Path para inserir o caminho para o diretório do Maven



Insira o endereço do maven + \bin  
Ex: C:\apache-maven-3.9.6\bin

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Teste novamente com o comando → `mvn -version`



```
Windows PowerShell
PS C:\Users\jeffe> mvn -version
Apache Maven 3.9.6 (bc0240f3c744dd6b6ec2920b3cd08dcc295161ae)
Maven home: C:\apache-maven-3.9.6
Java version: 17.0.10, vendor: Eclipse Adoptium, runtime: C:\Program Files\Eclipse Adoptium\jdk-17.0.10.7-hotspot
Default locale: pt_BR, platform encoding: Cp1252
OS name: "windows 11", version: "10.0", arch: "amd64", family: "windows"
PS C:\Users\jeffe> |
```

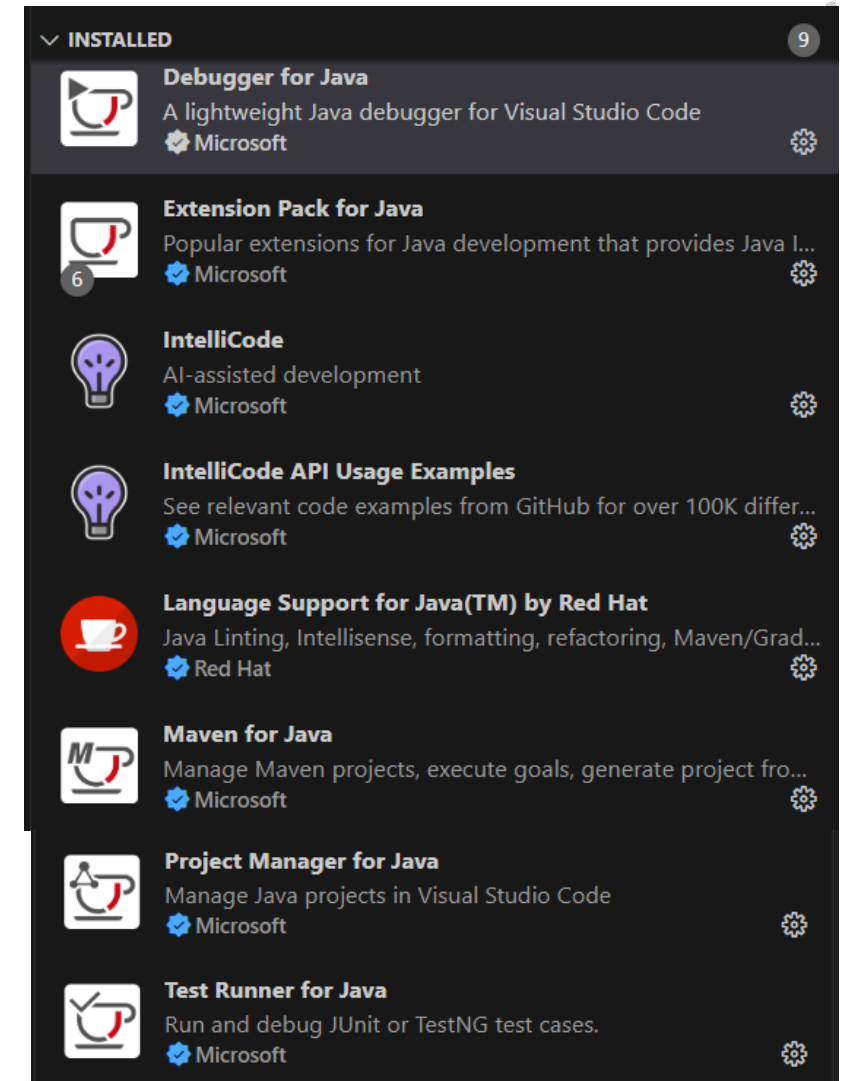
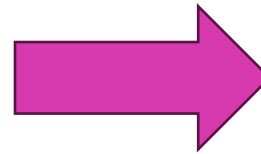
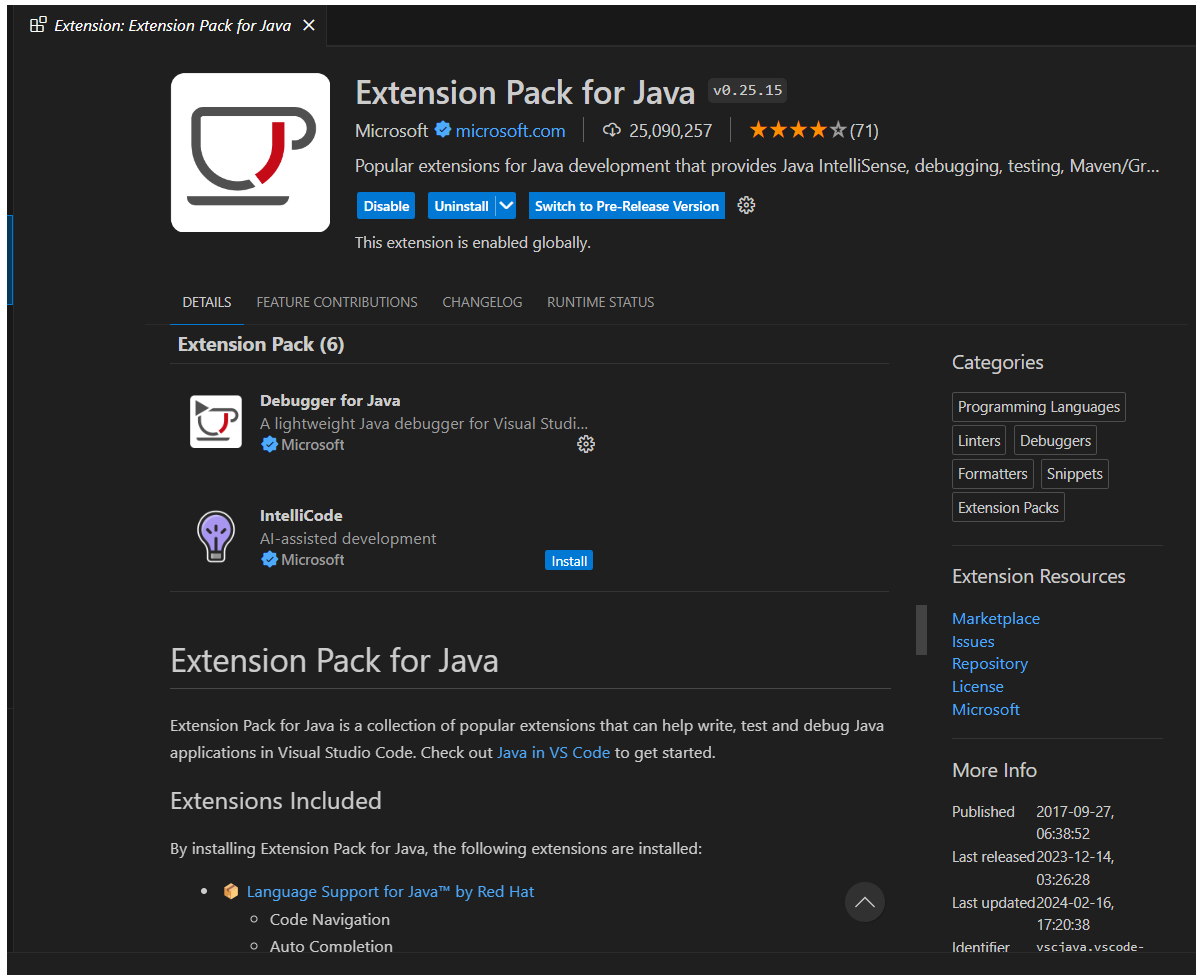


# Spring Boot

## Instalando o Java no Visual Studio Code

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

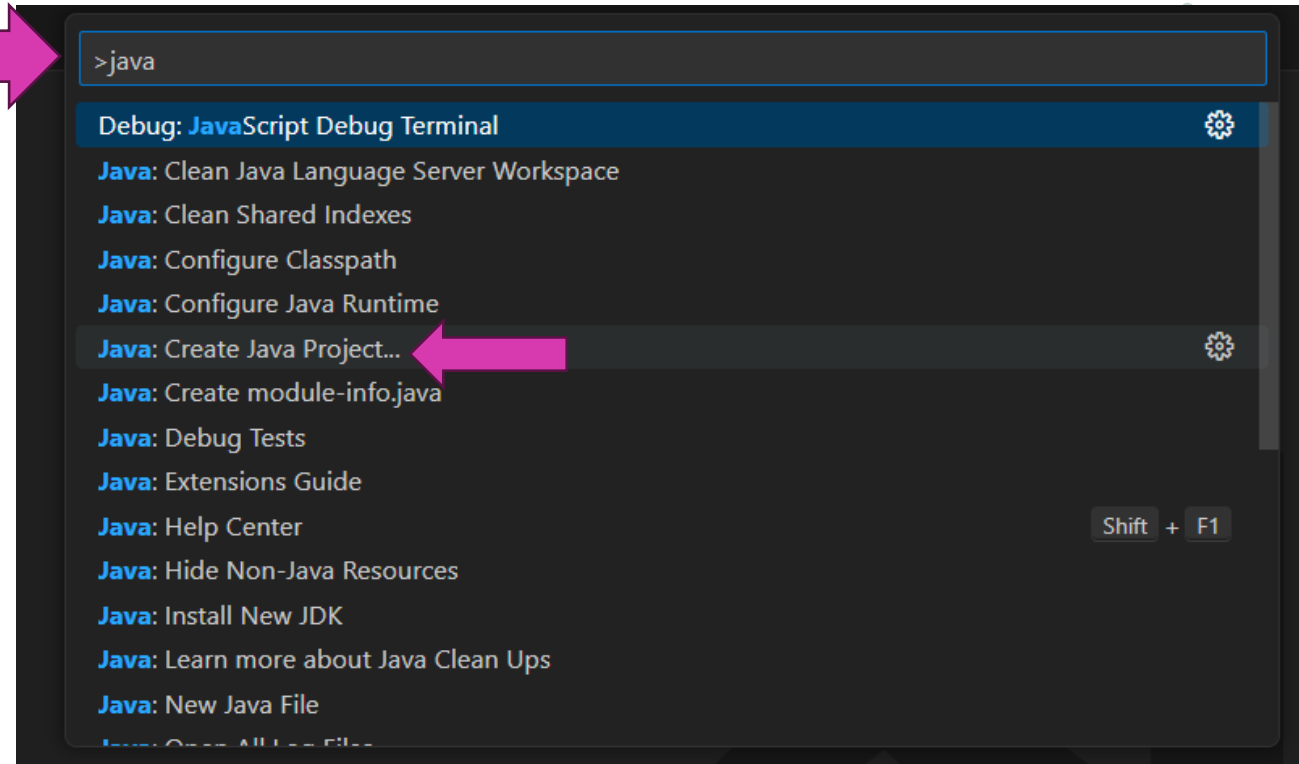
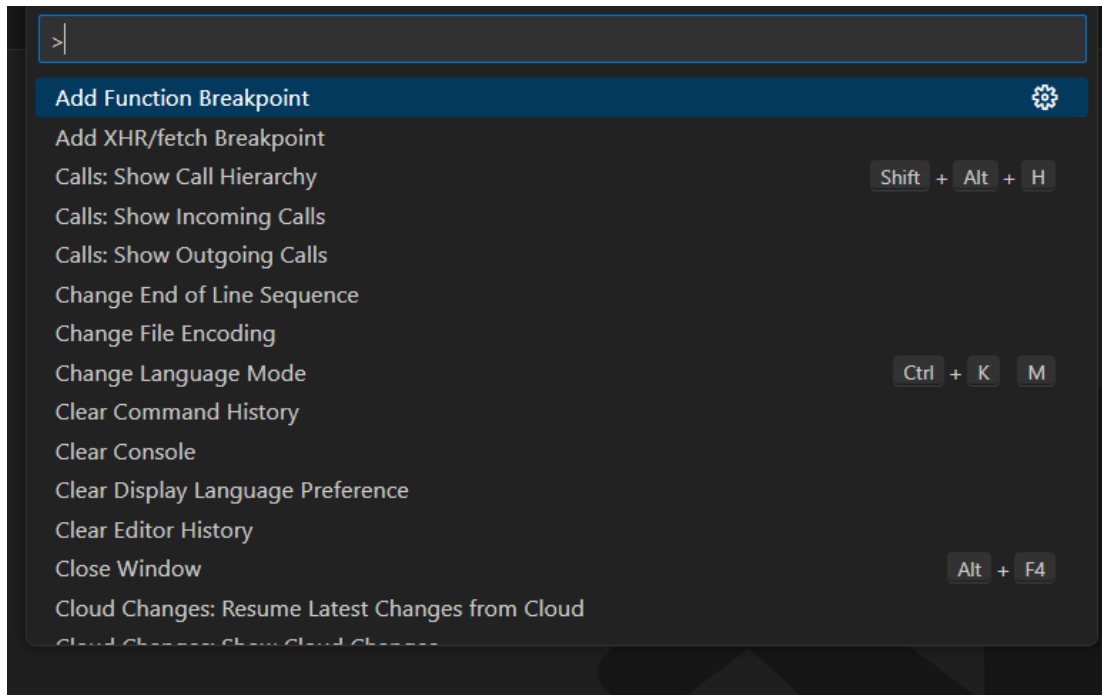
- Com o Visual Studio Code instalado abra o gerenciador de extensões (Ctrl+Shift+X)



- Verifique se as extensões foram instaladas com sucesso

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Vamos criar um programa em Java SE para testar nosso ambiente
- → Pressione **Crtl+Shift+P** para criar um novo projeto

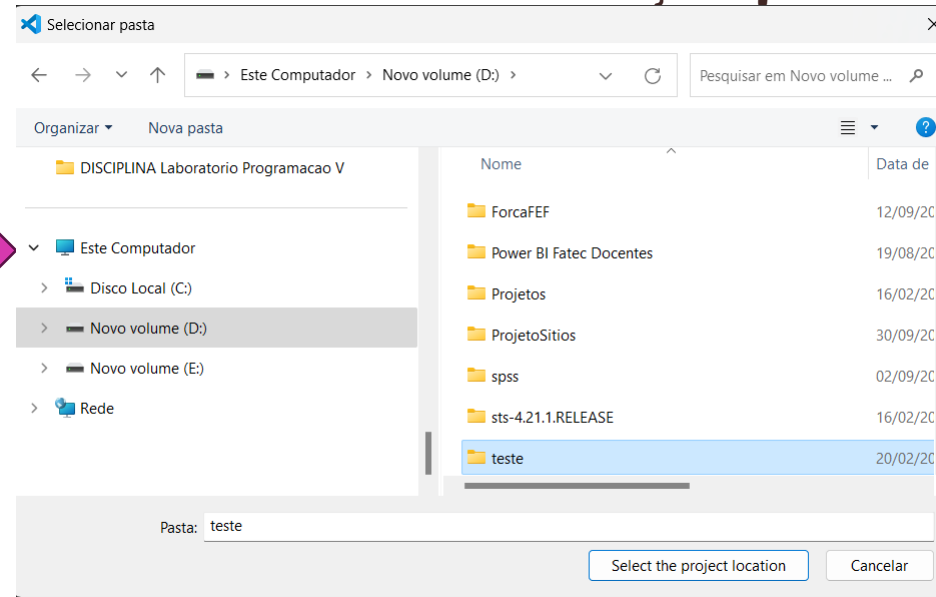
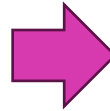
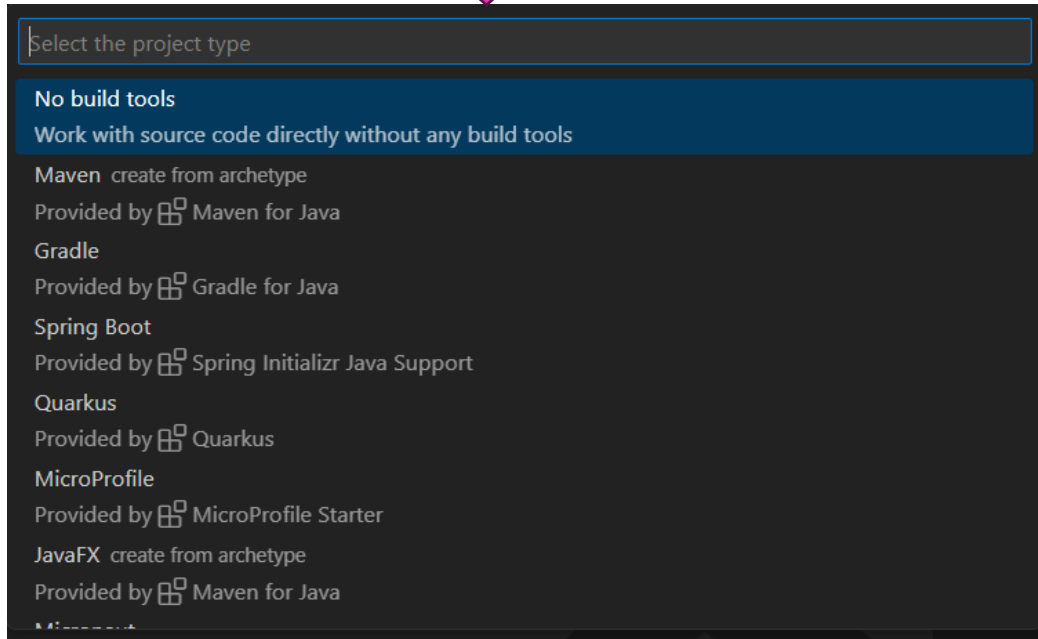


- Na caixa digite: **java** e escolha a opção **Create Java Project**

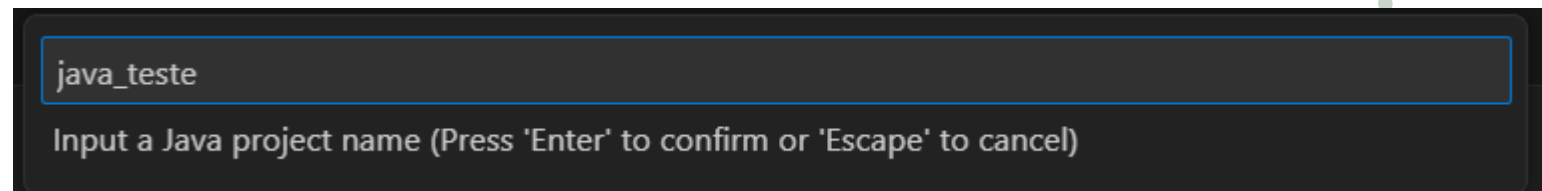


## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Escolha a opção: No Build Blocks



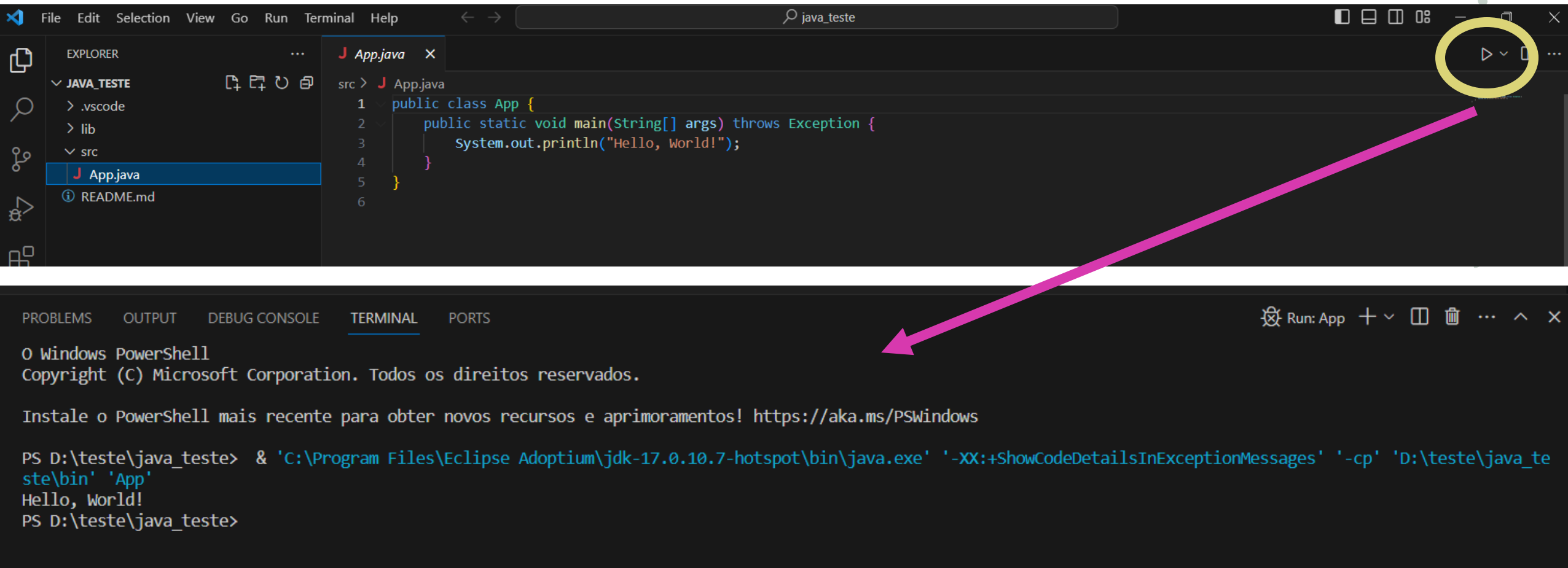
- Selecione uma pasta



- Insira no nome do projeto

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

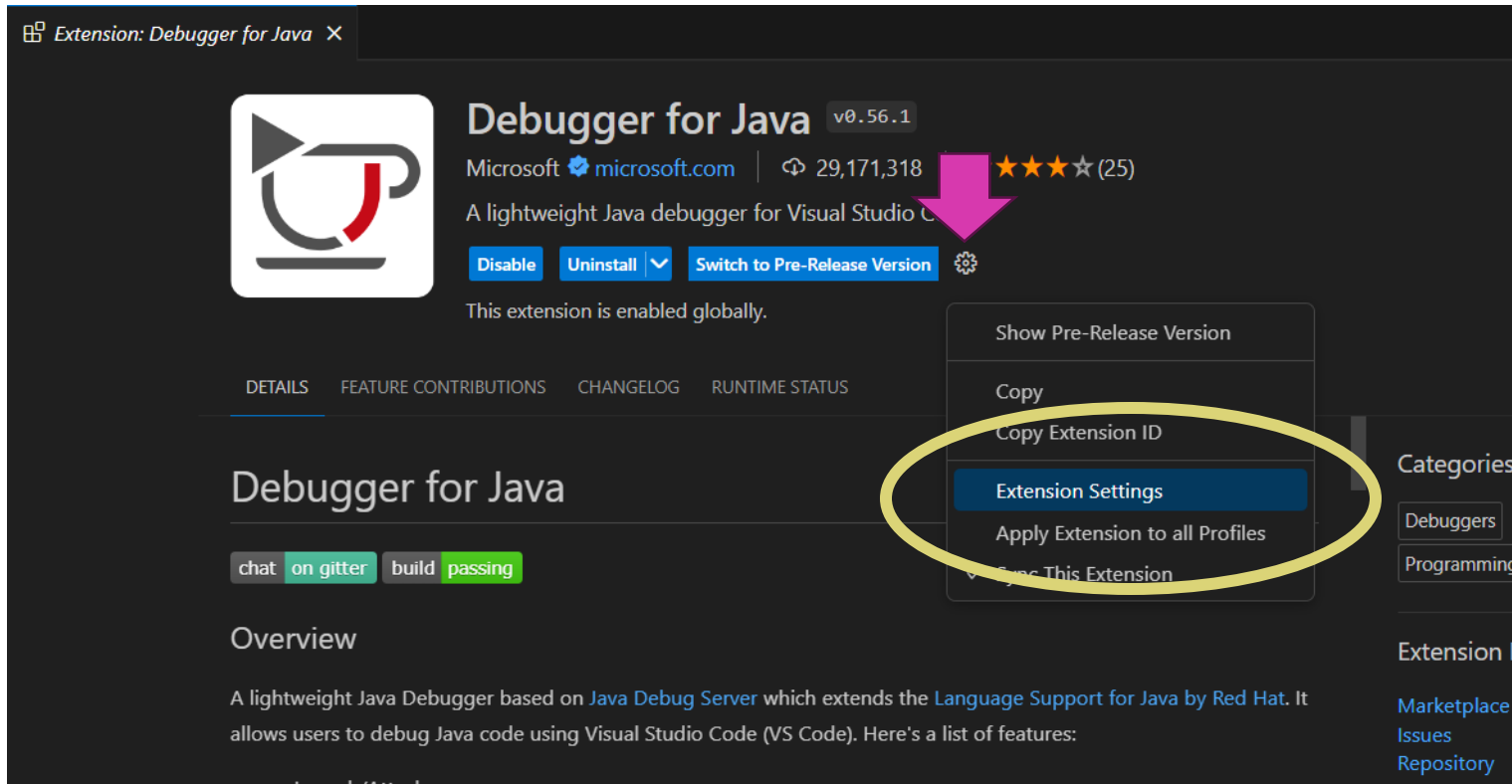
- Projeto Java SE tipo console criado.



- Projeto Hello World rodou no terminal. Vamos melhorar a visualização do terminal.

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

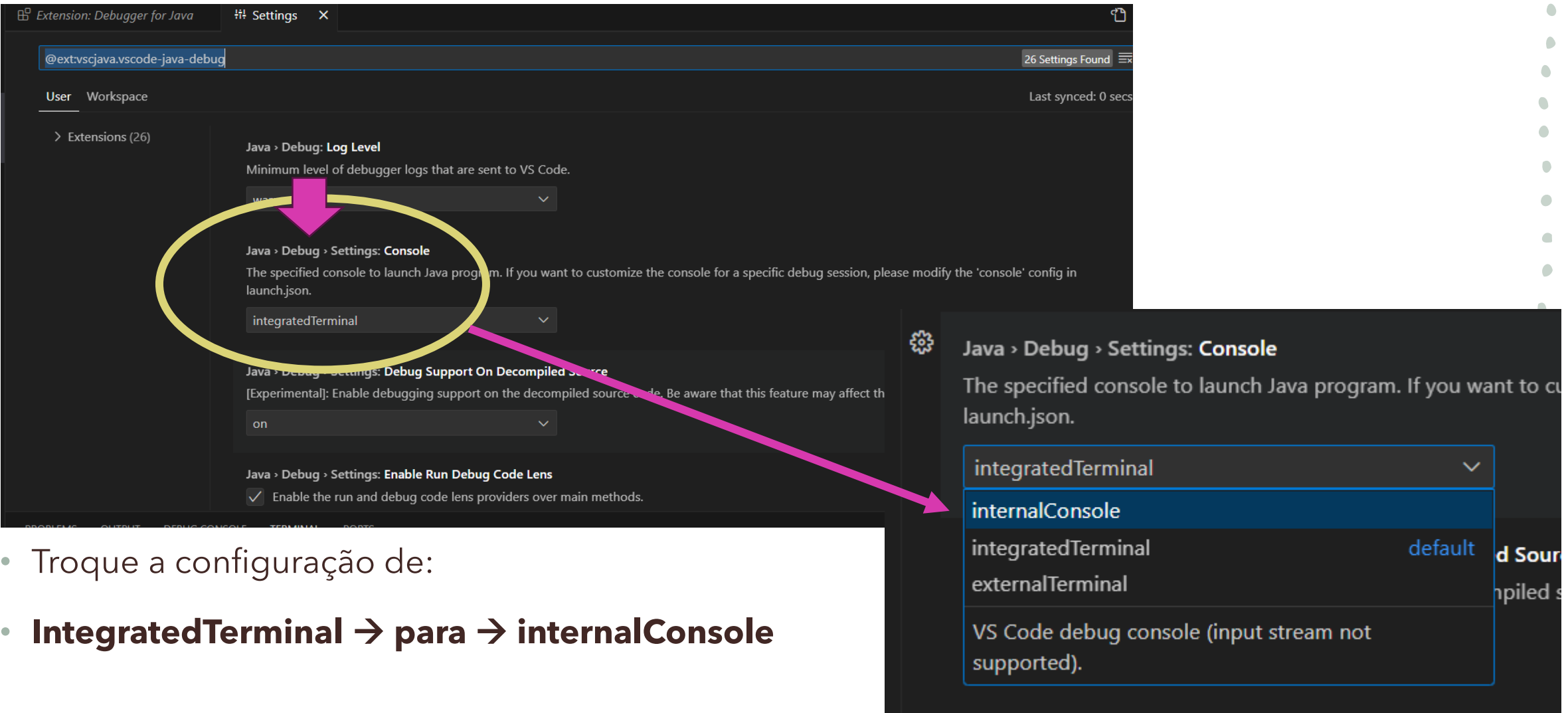
- Para isso vamos fazer uma pequena configuração no **Debugger for Java**



- Selecione o menu de configuração da extensão e escolha a opção **Extension Settings**.

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Para isso vamos fazer uma pequena configuração no **Debugger for Java**

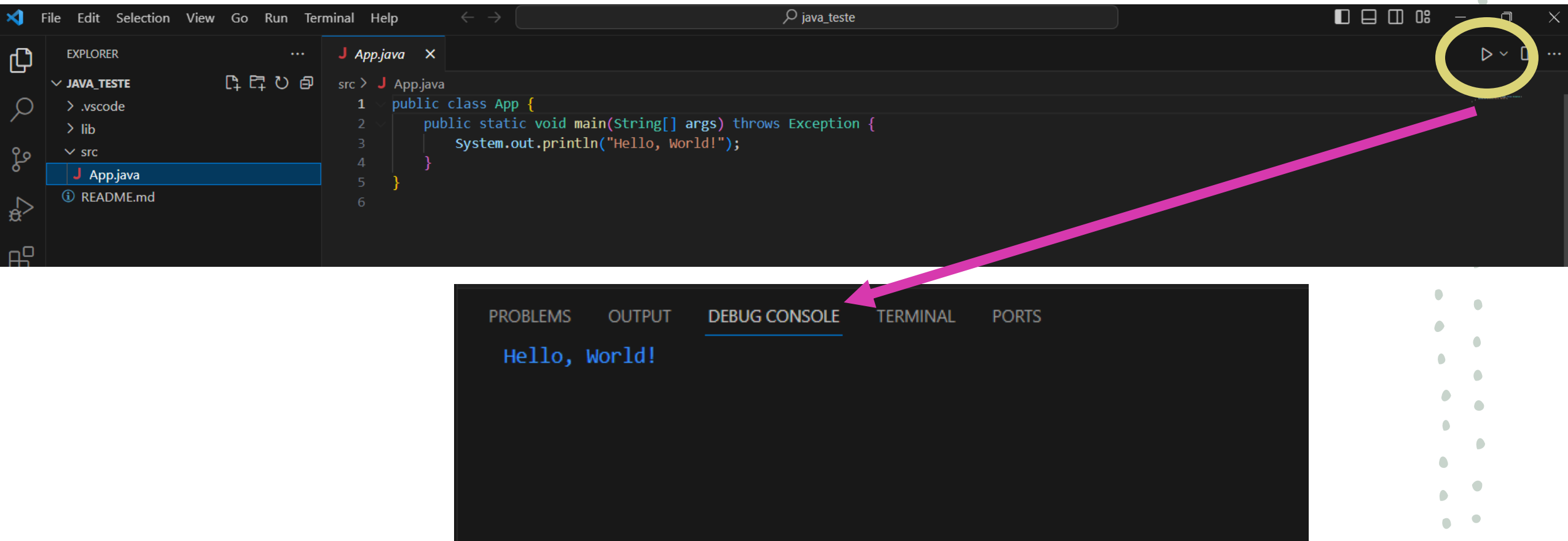


The image shows the VS Code settings interface for the 'Debugger for Java' extension. The 'Settings' tab is active, and the search bar contains '@ext:vscode-java-debug'. The 'User' settings are displayed. The 'Java > Debug > Settings: Console' setting is highlighted with a yellow circle. A pink arrow points from this setting to a zoomed-in view of the dropdown menu. The dropdown menu shows the following options: 'integratedTerminal', 'internalConsole' (highlighted in blue), 'integratedTerminal default', 'externalTerminal', and 'VS Code debug console (input stream not supported)'.

- Troque a configuração de:
- IntegratedTerminal** → para → **internalConsole**

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Projeto Java SE tipo console criado.



- Agora pode-se utilizar o **DEBUG CONSOLE** que apresenta apenas o resultado da execução do projeto

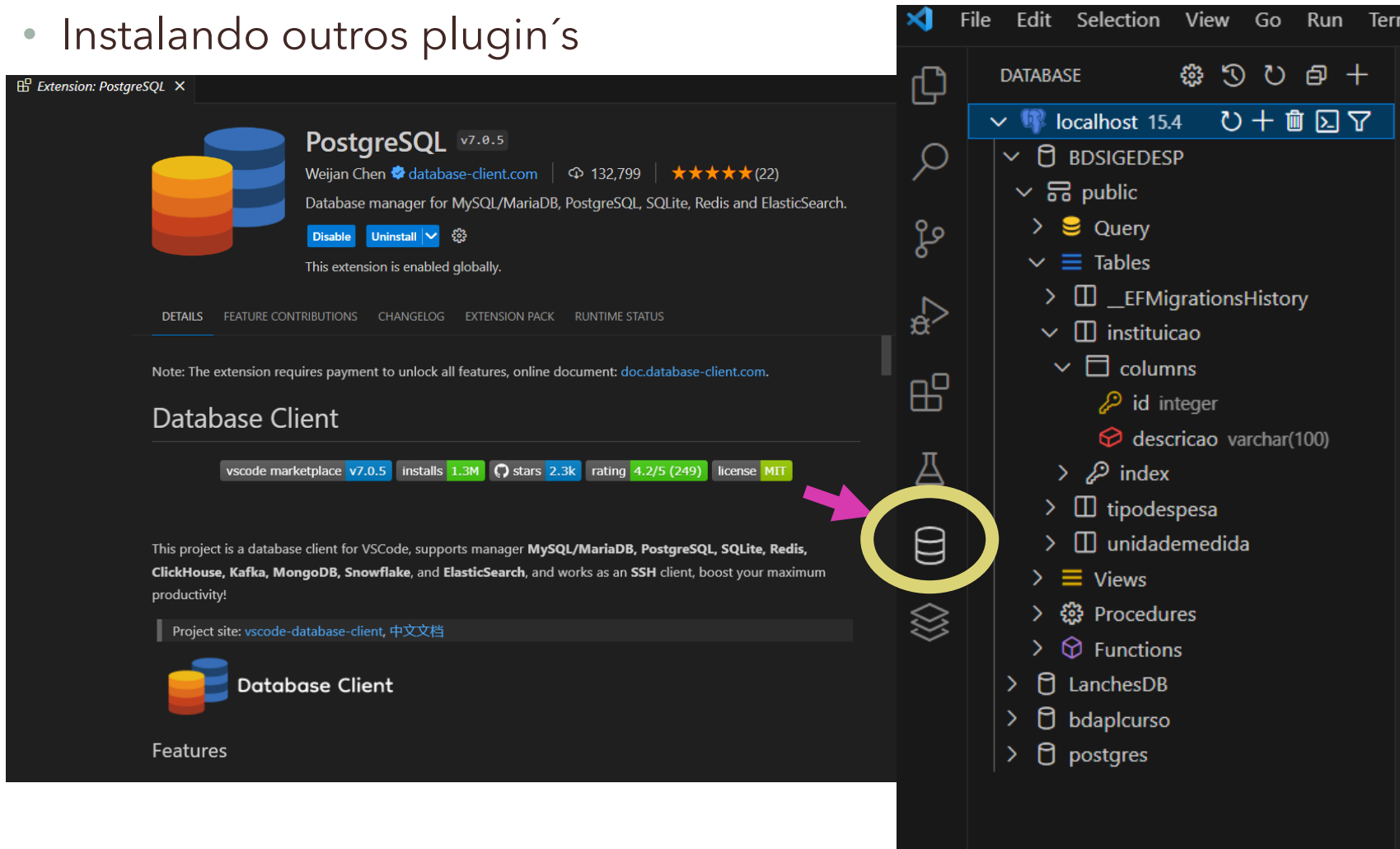




# Spring Boot Outros Plugin's interessantes

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

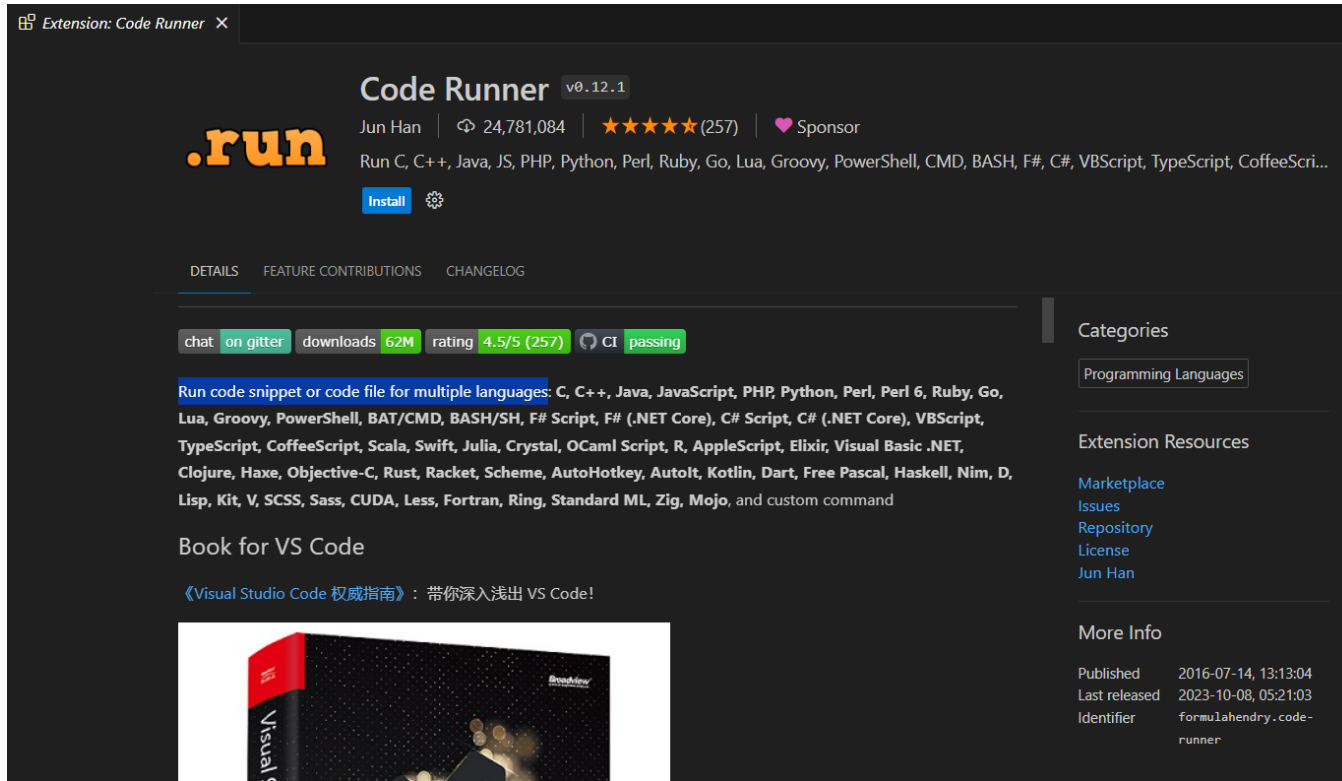
- Instalando outros plugin's



- Habilita a manipulação de diversos banco de dados (postgresql, oracle, mysql, etc)

# Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Instalando outros plugin's



The screenshot shows the 'Code Runner' extension page in the Visual Studio Code marketplace. The extension is by Jun Han, has 24,781,084 downloads, and a 4.5/5 rating from 257 reviews. It supports a wide range of languages including C, C++, Java, JavaScript, PHP, Python, Perl, Ruby, Go, Lua, Groovy, PowerShell, CMD, BASH, F#, C#, VBScript, TypeScript, CoffeeScript, Scala, Swift, Julia, Crystal, OCaml, R, AppleScript, Elixir, Visual Basic .NET, Clojure, Haxe, Objective-C, Rust, Racket, Scheme, AutoHotkey, AutoIt, Kotlin, Dart, Free Pascal, Haskell, Nim, D, Lisp, Kit, V, SCSS, Sass, CUDA, Less, Fortran, Ring, Standard ML, Zig, Mojo, and custom command. The page includes an 'Install' button, a 'Details' tab, and a 'More Info' section with publication and release dates.

**Code Runner** v0.12.1

Jun Han | 24,781,084 | ★★★★★ (257) | Sponsor

Run C, C++, Java, JS, PHP, Python, Perl, Ruby, Go, Lua, Groovy, PowerShell, CMD, BASH, F#, C#, VBScript, TypeScript, CoffeeScript, Scala, Swift, Julia, Crystal, OCaml Script, R, AppleScript, Elixir, Visual Basic .NET, Clojure, Haxe, Objective-C, Rust, Racket, Scheme, AutoHotkey, AutoIt, Kotlin, Dart, Free Pascal, Haskell, Nim, D, Lisp, Kit, V, SCSS, Sass, CUDA, Less, Fortran, Ring, Standard ML, Zig, Mojo, and custom command

**Book for VS Code**

《Visual Studio Code 权威指南》：带你深入浅出 VS Code!

**Categories**

Programming Languages

**Extension Resources**

Marketplace  
Issues  
Repository  
License  
Jun Han

**More Info**

Published	2016-07-14, 13:13:04
Last released	2023-10-08, 05:21:03
Identifier	formulahendry.code-runner

- Muito útil para utilização com linguagens de scripts pois permite a execução de trechos de código.








## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Instalar o Plugin para desenvolver com Spring Boot no Vs Code.


Extension: Spring Boot Extension Pack ✕



### Spring Boot Extension Pack v0.2.1




VMware  [vmware.com](https://vmware.com) |  2,107,898 | ★★★★★ (15)

A collection of extensions for developing Spring Boot applications

[Install](#) 





DETAILS **FEATURE CONTRIBUTIONS**





#### Extension Pack (3)





**Spring Initializr Java Support**  
A lightweight extension based on Spring Initi...  
 Microsoft [Install](#) 

VS Code Spring Boot Application Development Extension Pack

- Instala junto outros 3 pacotes:

**Spring Initializr Java Support**  3.2M ★ 4  
A lightweight extension based on Spring Initializr to generate ...  
 Microsoft [Install](#) 

**Spring Boot Dashboard**  2.4M ★ 4  
Spring Boot Dashboard for VS Code  
 Microsoft [Install](#) 

**Spring Boot Tools**  2.7M ★ 5  
Provides validation and content assist for Spring Boot `applica...  
 VMware [Install](#) 



# Spring Boot

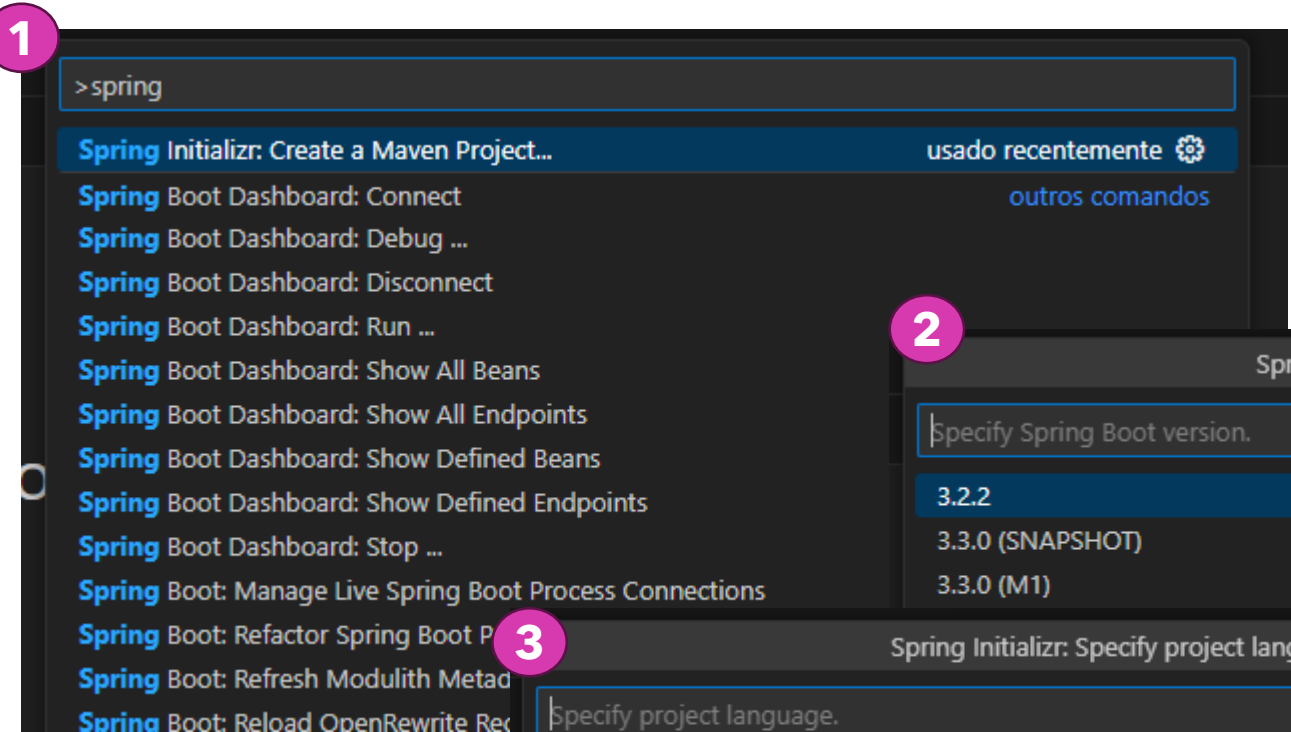
## Criando Projeto Teste com Spring Boot



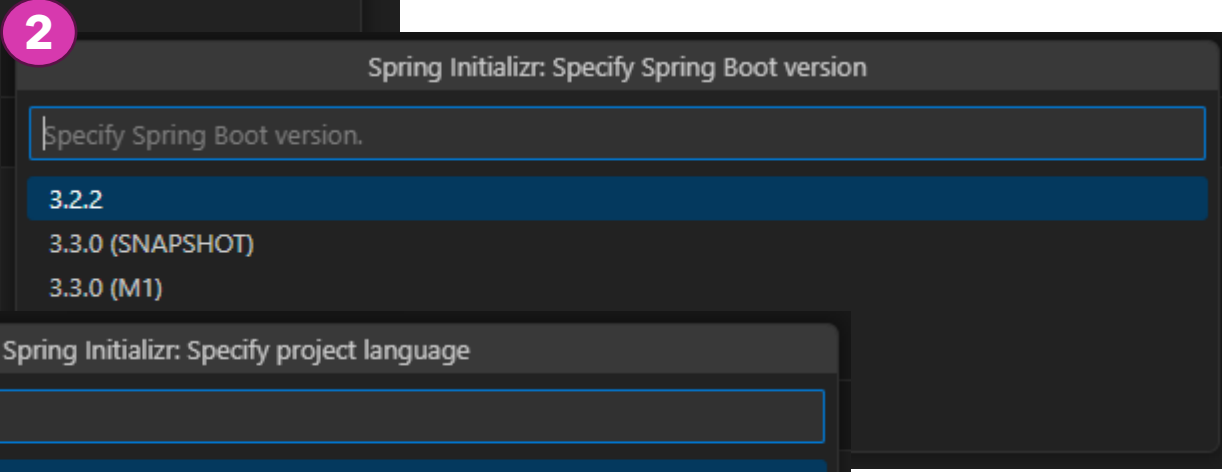
## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Inicializar projeto com **Ctrl+Shift+P** e escolher a opção **Spring Initializr: Create a Maven Project**

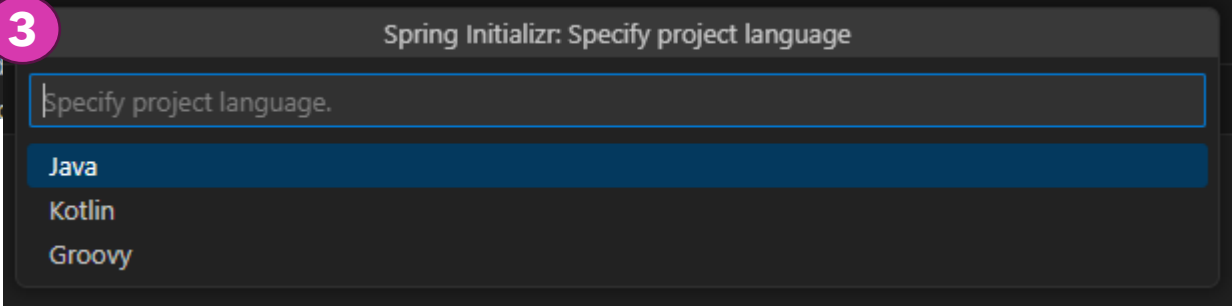
1



2



3



- Especificar a versão do Spring Boot → **3.2.2**
- Especificar a linguagem: **Java**

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Especificar o Group Id → **com.projeto teste**

4

← Spring Initializr: Input Group Id

com.projeto teste

Input Group Id for your project. (Pressione 'Enter' para confirmar ou 'Escape' para cancelar)

- Especificar o Artefact Id → **teste**

- Especificar o empacotamento: **Jar**

5

← Spring Initializr: Input Artifact Id

teste

Input Artifact Id for your project. (Pressione 'Enter' para confirmar ou 'Escape' para cancelar)

6

← Spring Initializr: Specify packaging type

Specify packaging type.

Jar

War

7

← Spring Initializr: Specify Java version

Specify Java version.

17

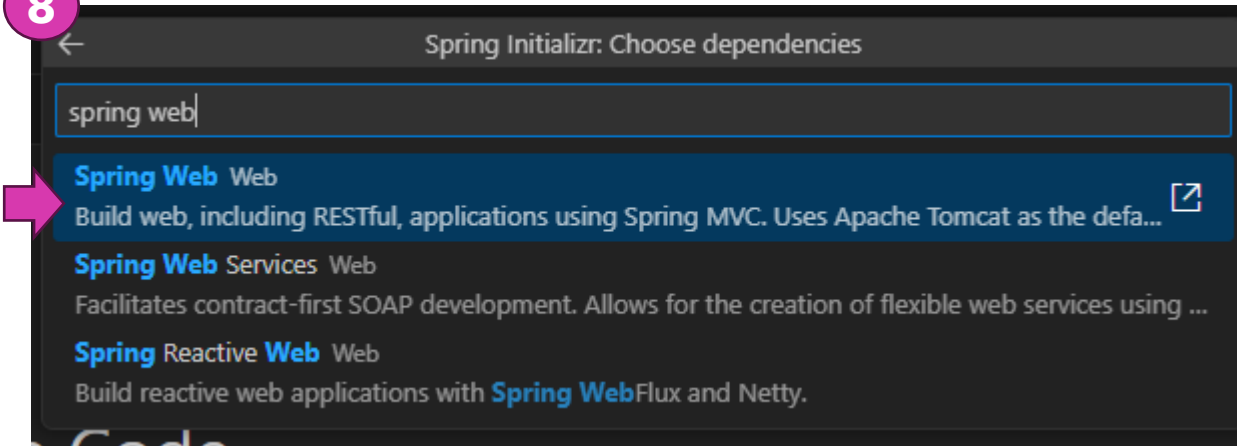
21

- Definir a versão do Java: **17**

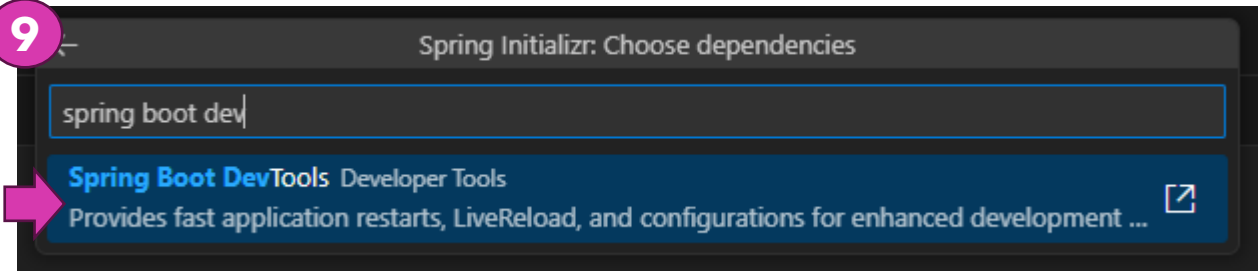
## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Selecionar as dependências do Projeto → clicar para selecionar

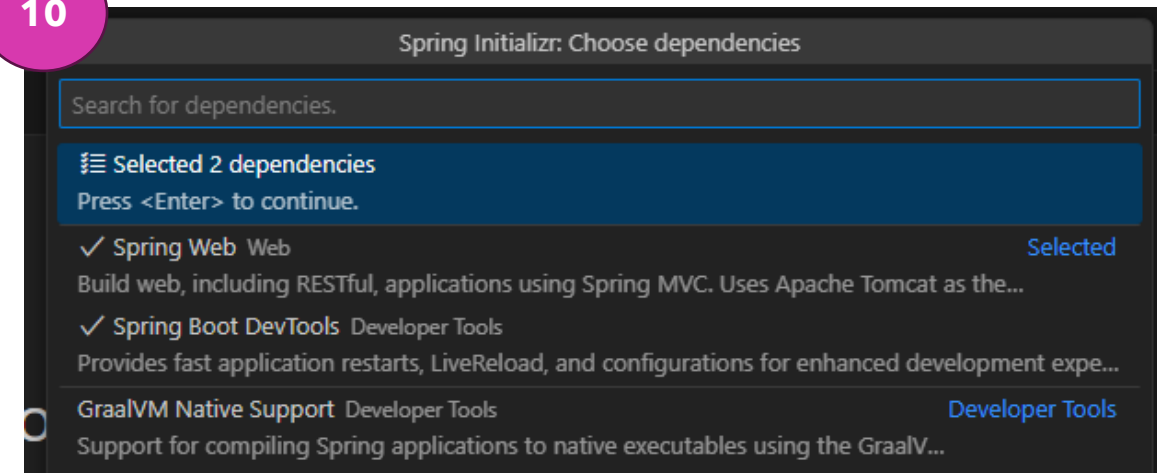
8



9



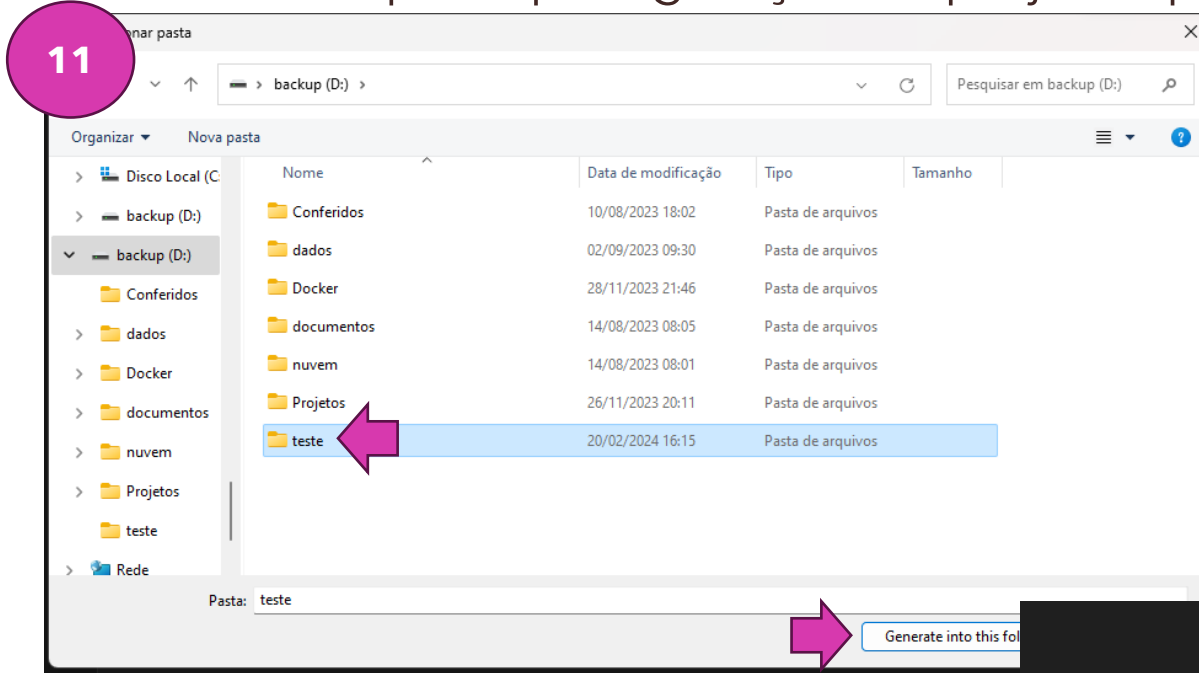
10



- Dependências Seleccionadas
- → Pressione <Enter> para continuar

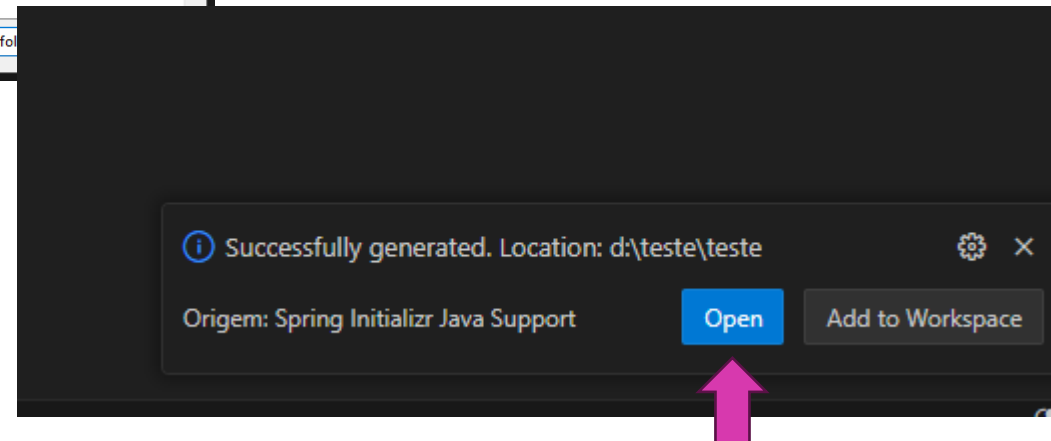
## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Selecione a pasta para geração do projeto Spring Boot



- Clicar em **Generate into this folder**

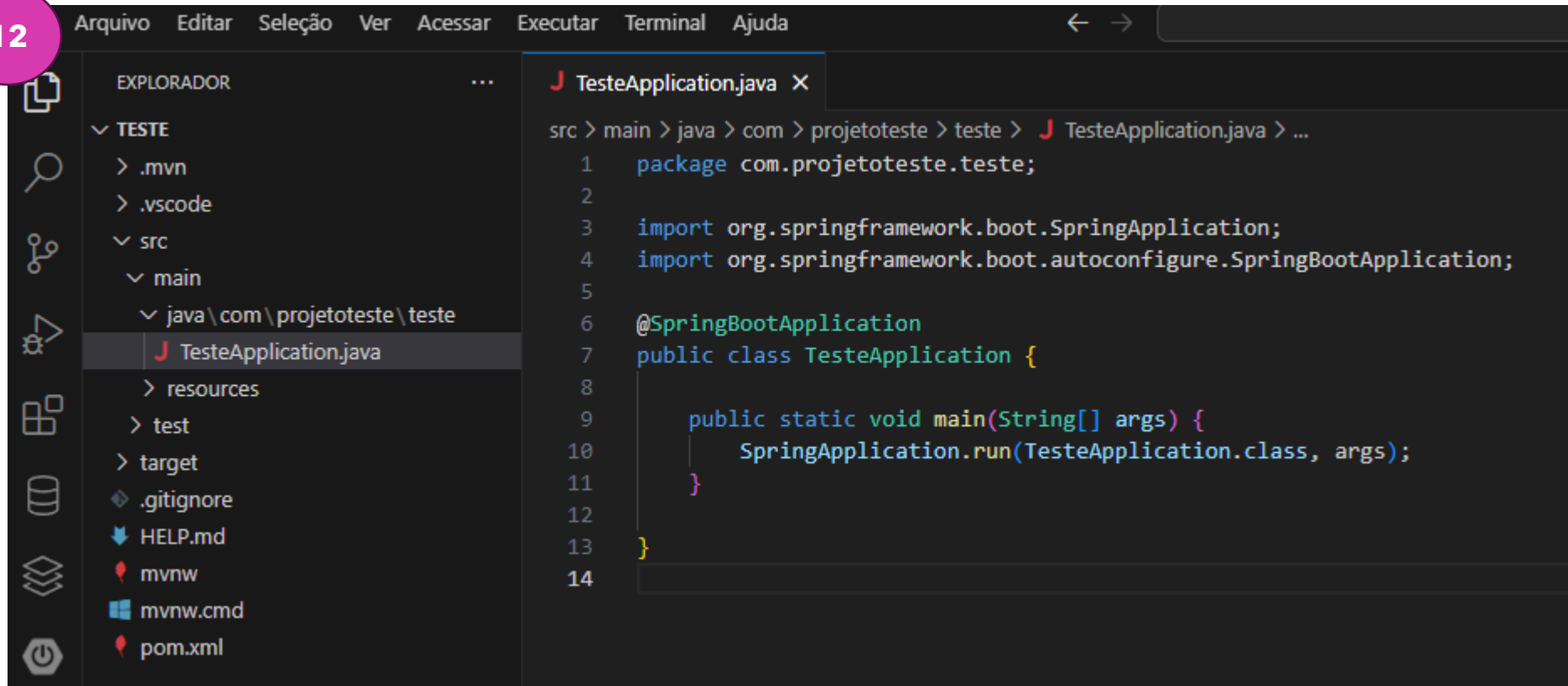
- Clique em **Open** para abrir o projeto gerado



## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Projeto Gerado

12

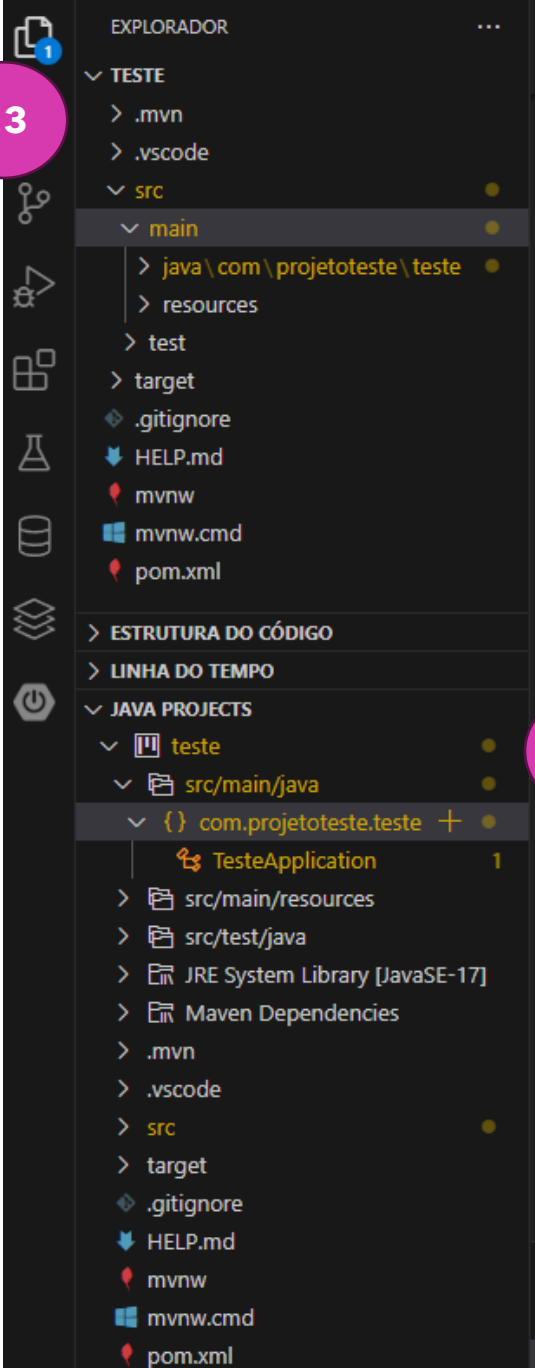


The screenshot shows the Visual Studio Code interface. On the left, the Explorer sidebar displays a project structure with folders like .mvn, .vscode, src, main, and a package path java\com\projetoteste\teste. The file TesteApplication.java is selected. The main editor area shows the code for TesteApplication.java, which is a Spring Boot application. The code includes imports for SpringApplication and SpringBootApplication, and a main method that runs the application.

```
src > main > java > com > projetoteste > teste > TesteApplication.java > ...
1  package com.projetoteste.teste;
2
3  import org.springframework.boot.SpringApplication;
4  import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6  @SpringBootApplication
7  public class TesteApplication {
8
9      public static void main(String[] args) {
10         SpringApplication.run(TesteApplication.class, args);
11     }
12
13 }
14
```



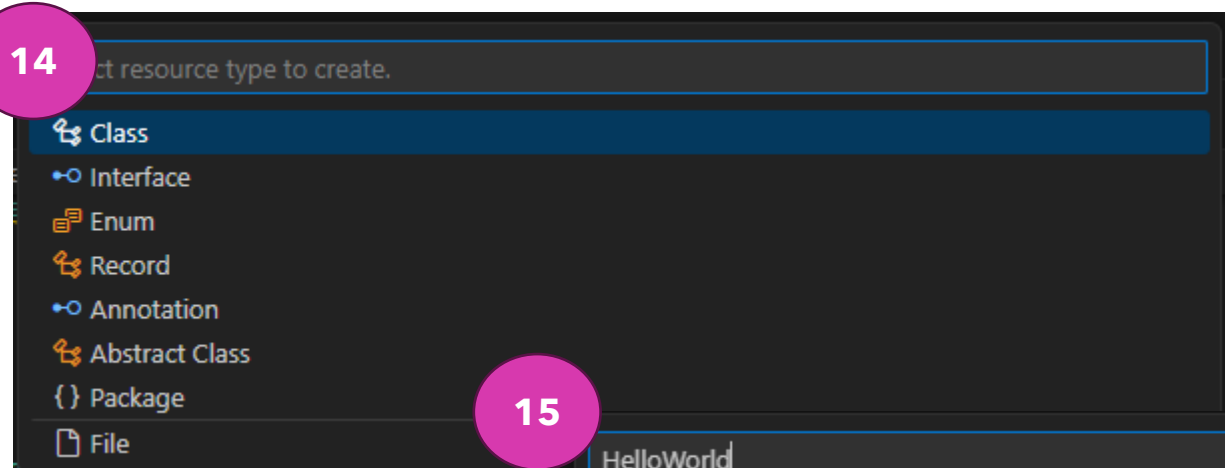
13



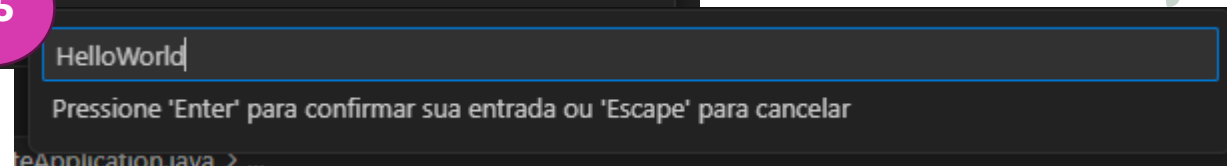
## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Vamos configurar um **endpoint** para nossa aplicação.
- Insira uma nova classe no projeto.
- No menu lateral vá na opção **JAVA PROJECTS**
- Clique no **+** em com.projetoteste.teste

14



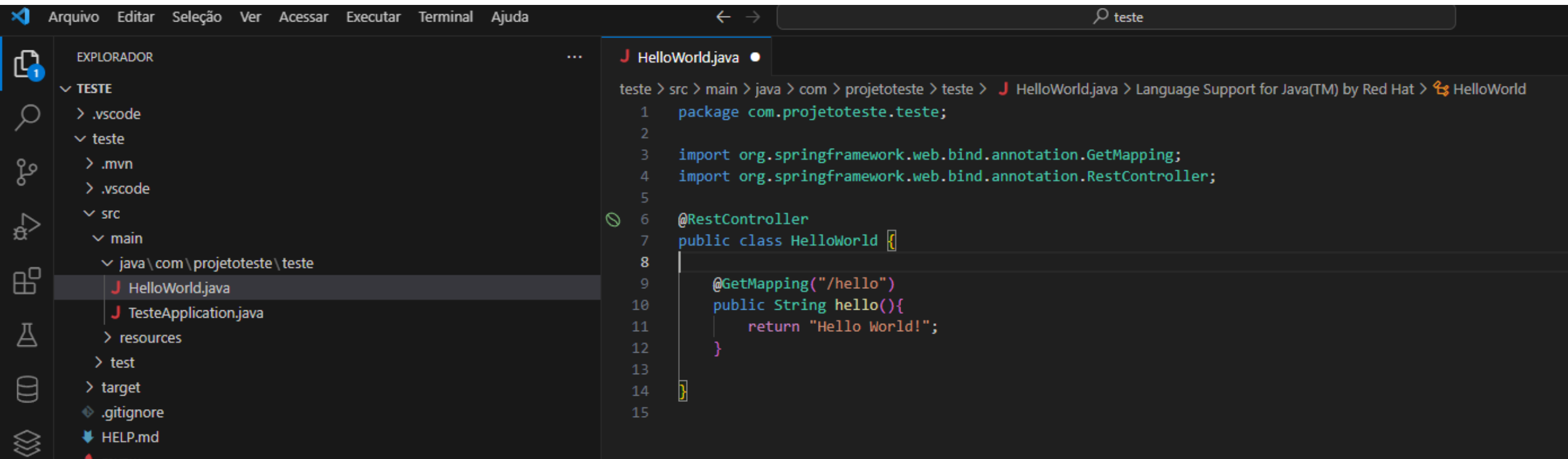
15



- Escolha Class e Informe o nome da classe a ser criada e Pressione Enter

## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Declare a classe HelloWorld como RestController com a annotation conforme o código na linha 6 e importe org.springframework.web.bind.annotation.RestController.
- Crie o método hello() na classe e o defina com a annotation @GetMapping("/hello") e faça a importação.



```
Arquivo  Editor  Seleção  Ver  Acessar  Executar  Terminal  Ajuda  teste
```

EXPLORADOR

- TESTE
  - .vscode
  - teste
    - .mvn
    - .vscode
    - src
      - main
        - java \ com \ projetoteste \ teste
          - HelloWorld.java
          - TesteApplication.java
        - resources
        - test
        - target
        - .gitignore
        - HELP.md

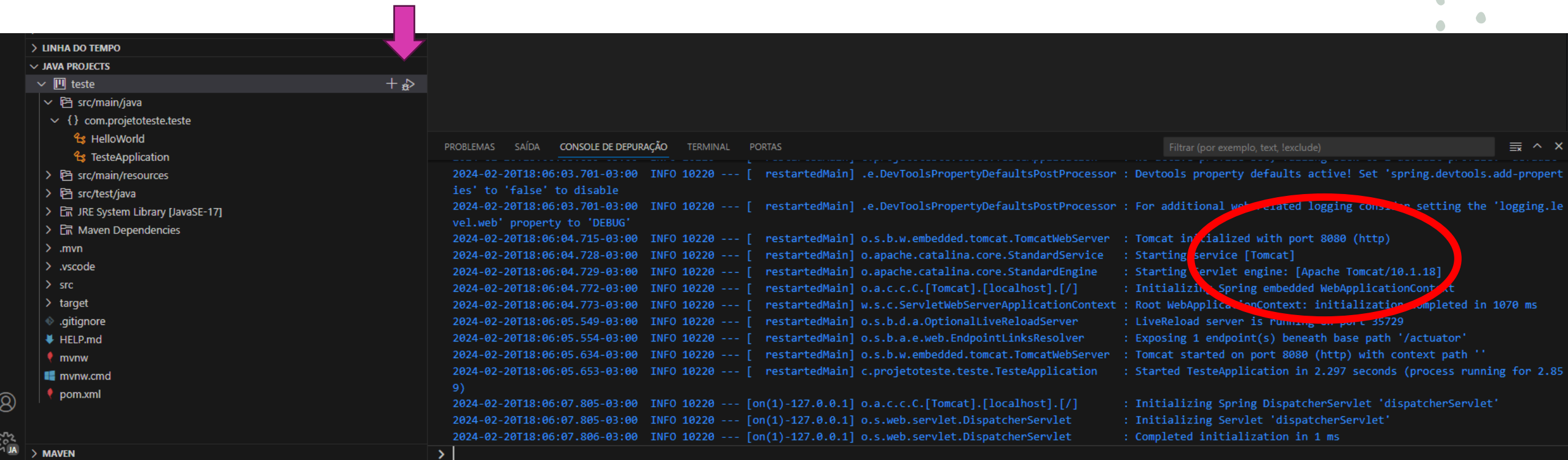
HelloWorld.java

```
teste > src > main > java > com > projetoteste > teste > HelloWorld.java > Language Support for Java(TM) by Red Hat > HelloWorld
```

```
1 package com.projetoteste.teste;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class HelloWorld {
8
9     @GetMapping("/hello")
10    public String hello(){
11        return "Hello World!";
12    }
13
14 }
15
```

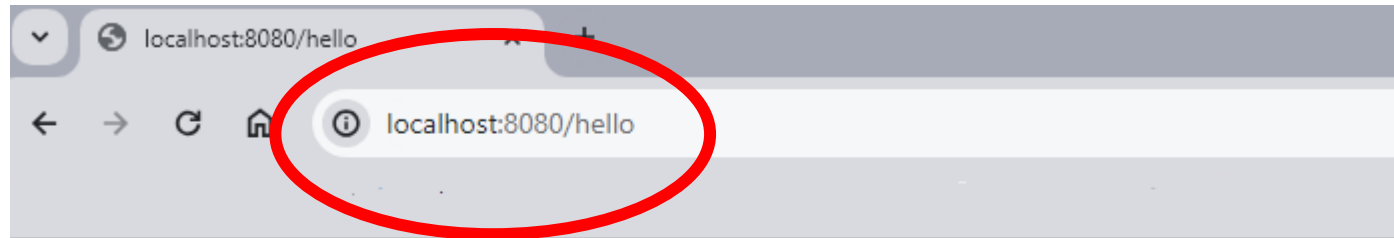
## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Execute o projeto no ícone indicado em JAVA PROJECTS.
- No CONSOLE DE DEPURAÇÃO o projeto irá iniciar sua execução na porta 8080.



## Configuração Ambiente de Desenvolvimento - Instalação Apache Maven

- Abra o navegador e acione o endpoint /hello que foi criado em nossa aplicação



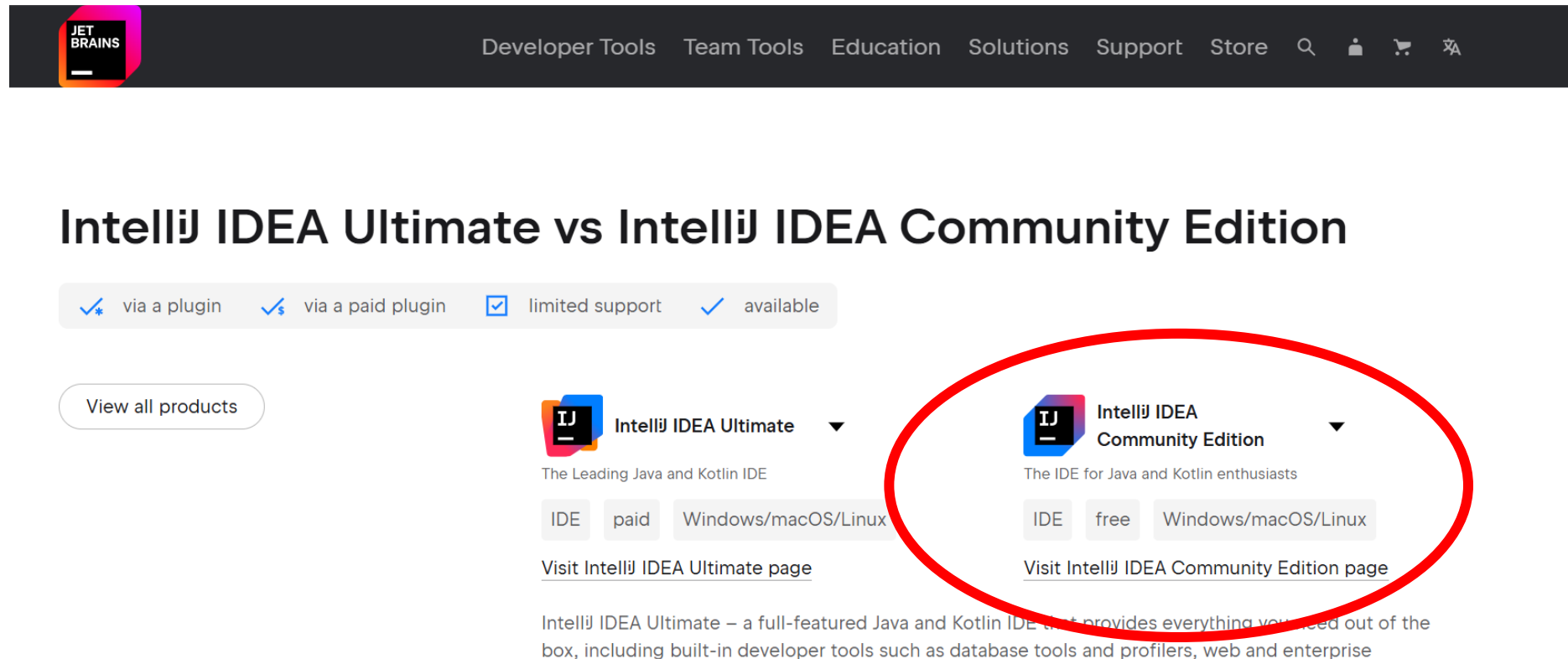
Hello World!



# Spring Boot Instalando o IntelliJ - JetBrains

## Configuração Ambiente de Desenvolvimento - Instalação IntelliJ

- Faça uma busca no google pelo IntelliJ Community Edition.
- Se você possuir e-mail institucional pode baixar a versão Ultimate.





The screenshot shows the IntelliJ IDEA website. At the top is a dark navigation bar with the JetBrains logo and links for Developer Tools, Team Tools, Education, Solutions, Support, and Store. Below this is a large heading: "IntelliJ IDEA Ultimate vs IntelliJ IDEA Community Edition". Under the heading are four filter tags: "via a plugin", "via a paid plugin", "limited support", and "available". A button labeled "View all products" is on the left. Two product cards are displayed side-by-side. The left card is for "IntelliJ IDEA Ultimate", described as "The Leading Java and Kotlin IDE", with tags for "IDE", "paid", and "Windows/macOS/Linux". The right card is for "IntelliJ IDEA Community Edition", described as "The IDE for Java and Kotlin enthusiasts", with tags for "IDE", "free", and "Windows/macOS/Linux". The right card is circled in red. Below the cards are links to visit the respective product pages. At the bottom, a paragraph describes IntelliJ IDEA Ultimate as a full-featured IDE that provides everything you need out of the box, including built-in developer tools.

**IntelliJ IDEA Ultimate vs IntelliJ IDEA Community Edition**

via a plugin via a paid plugin limited support available

[View all products](#)

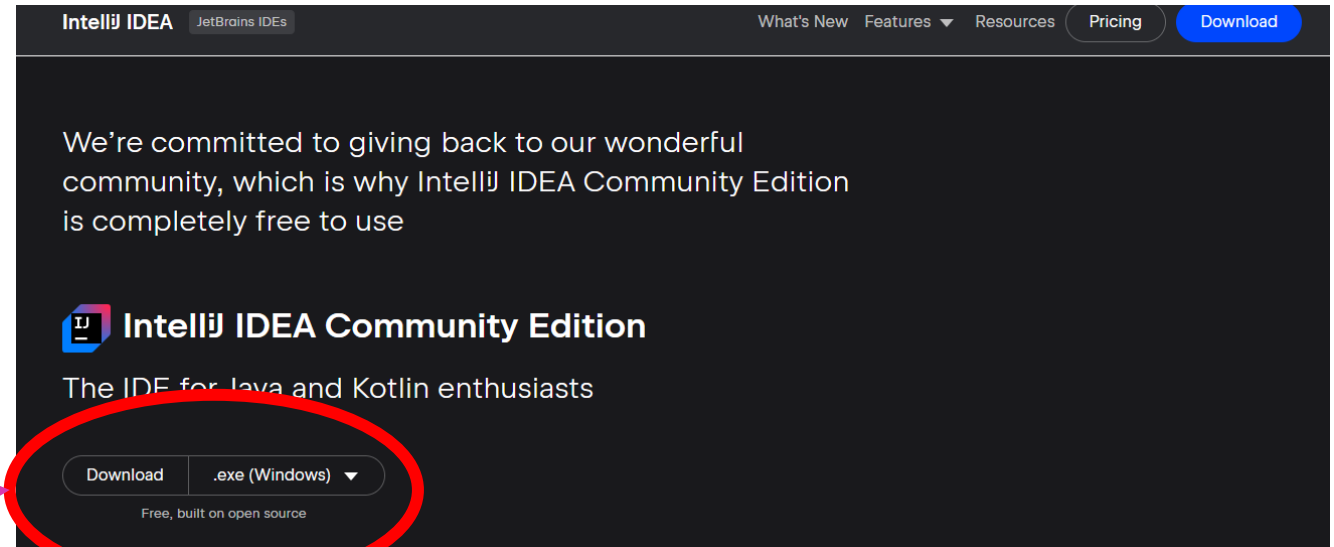
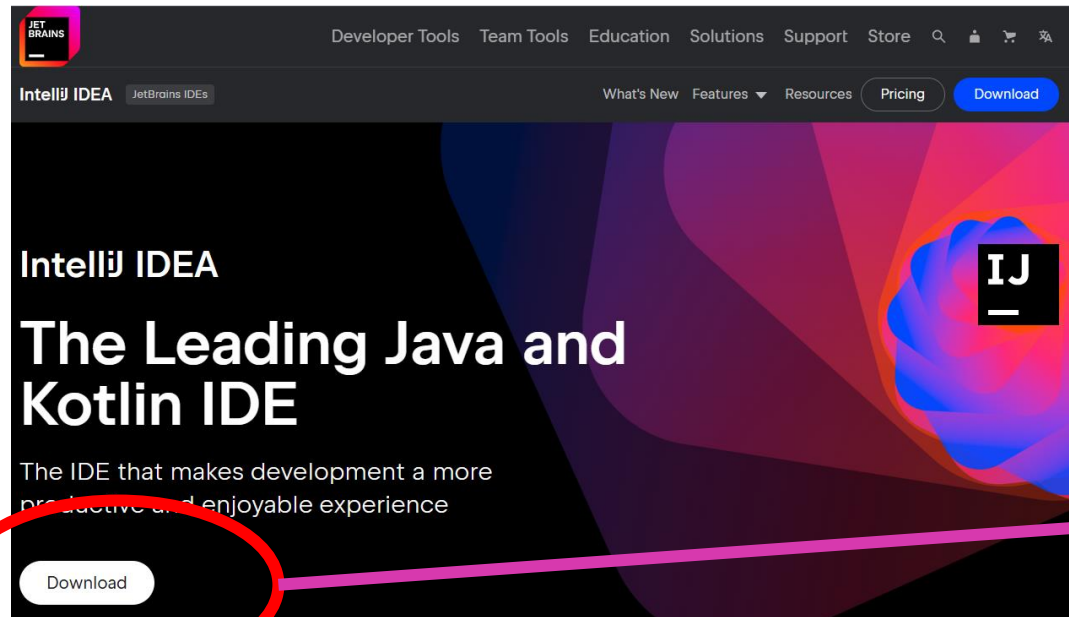
**IntelliJ IDEA Ultimate**  
The Leading Java and Kotlin IDE  
IDE paid Windows/macOS/Linux  
[Visit IntelliJ IDEA Ultimate page](#)  
IntelliJ IDEA Ultimate – a full-featured Java and Kotlin IDE that provides everything you need out of the box, including built-in developer tools such as database tools and profilers, web and enterprise

**IntelliJ IDEA Community Edition**  
The IDE for Java and Kotlin enthusiasts  
IDE free Windows/macOS/Linux  
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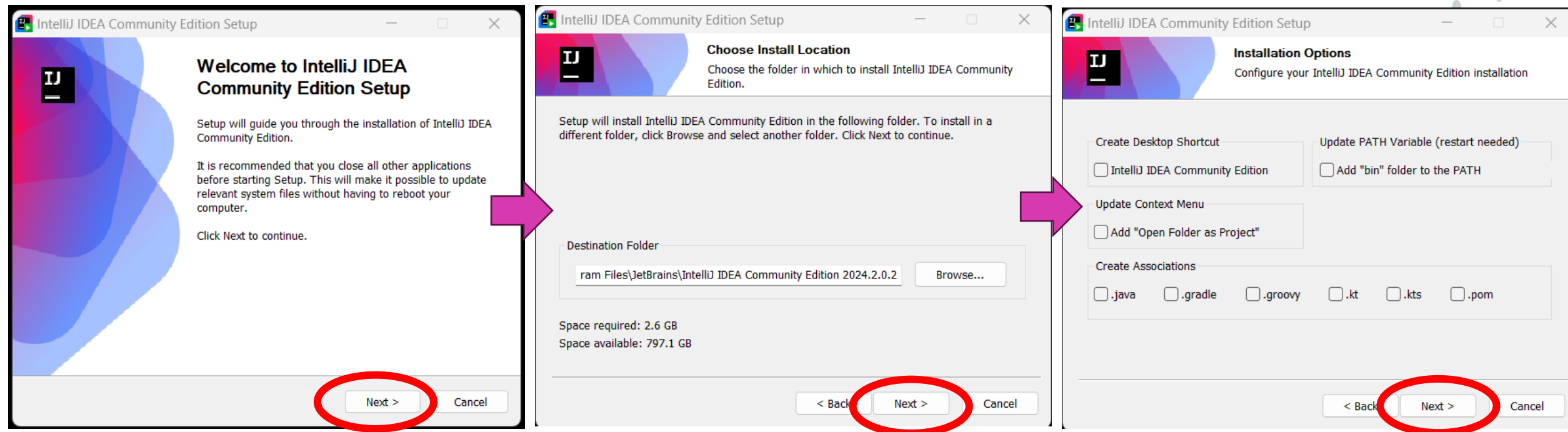
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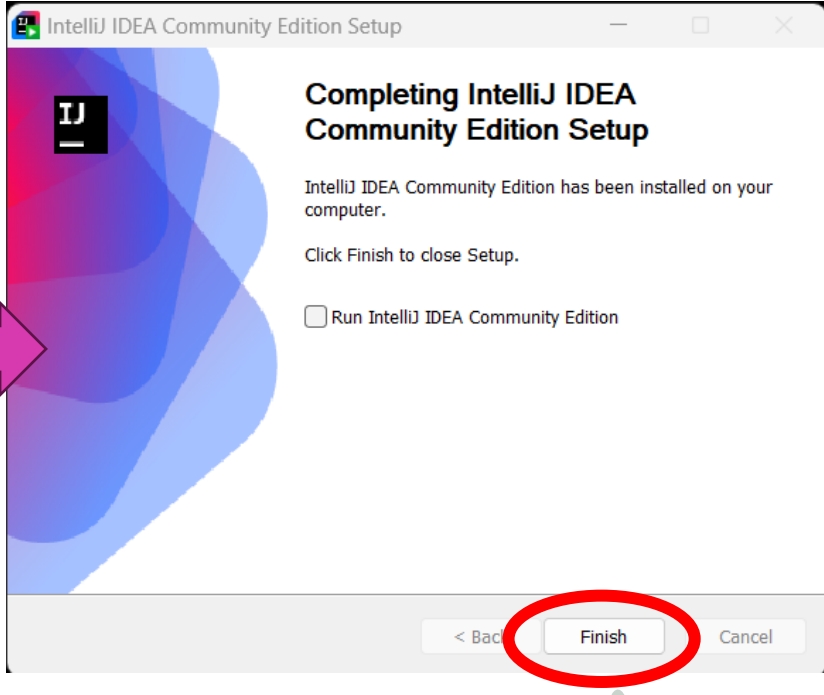
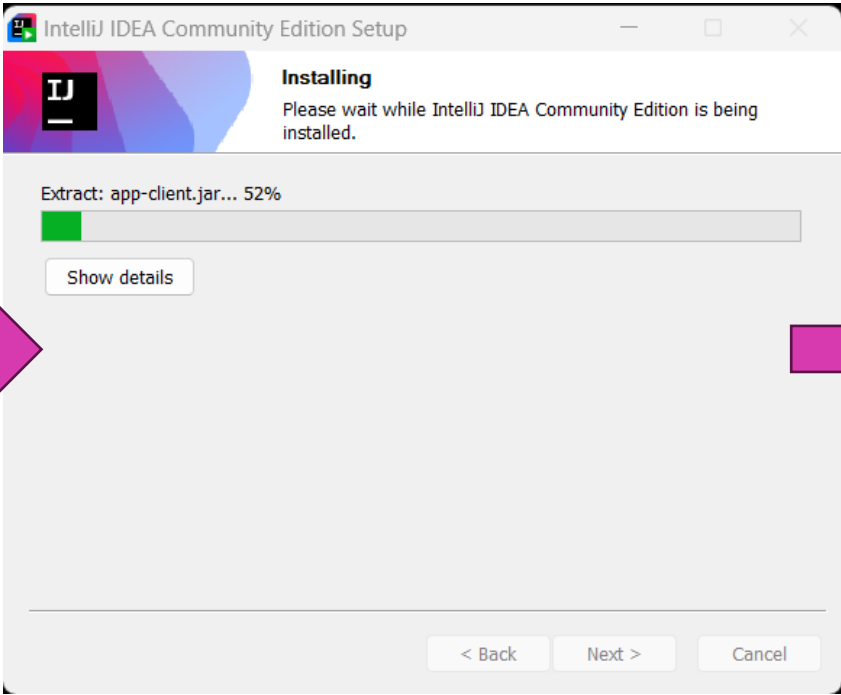
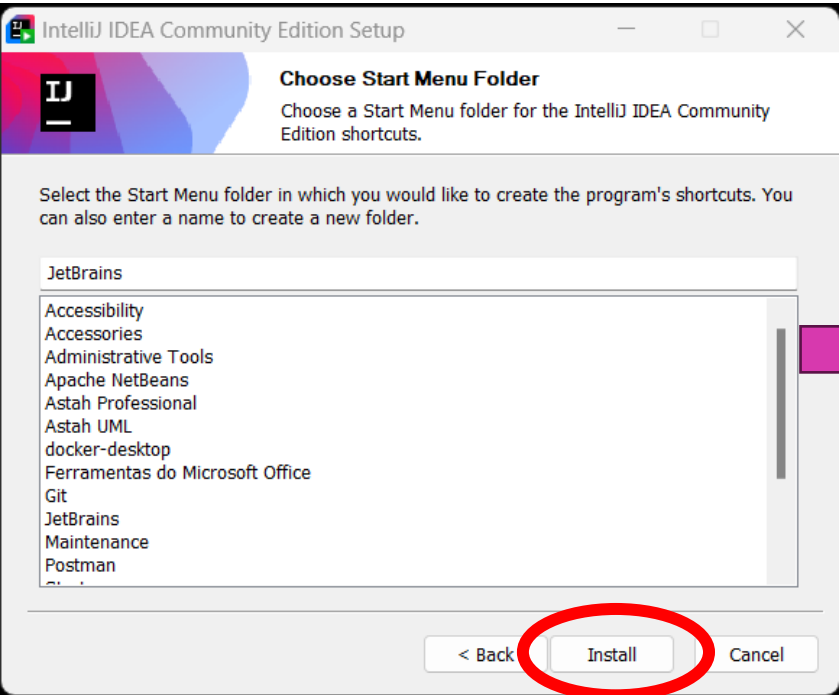
• Instalação do IntelliJ Community Edition.

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• Instalação do IntelliJ Community Edition.

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- Instalação do IntelliJ Community Edition.

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