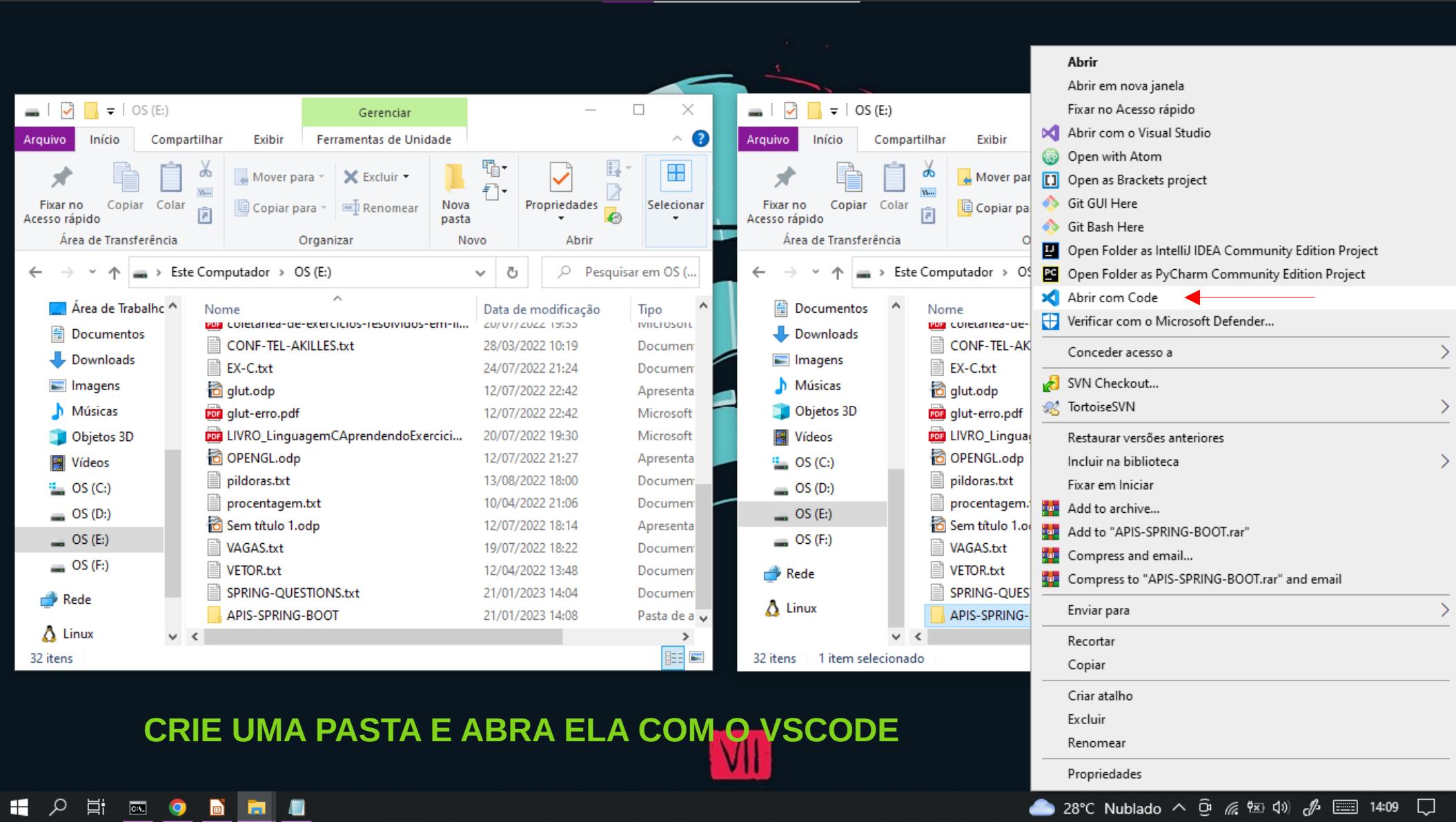


**JAVA SPRING BOOT
2023
NANO**

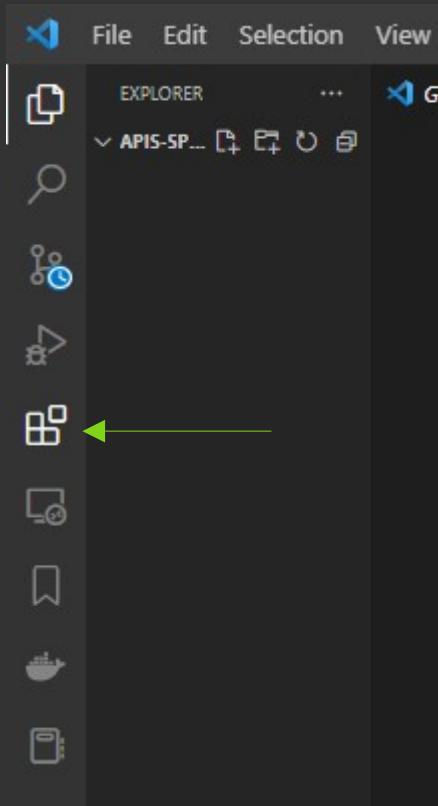
CONFIGURANDO O VISUAL ESTUDIO CODE

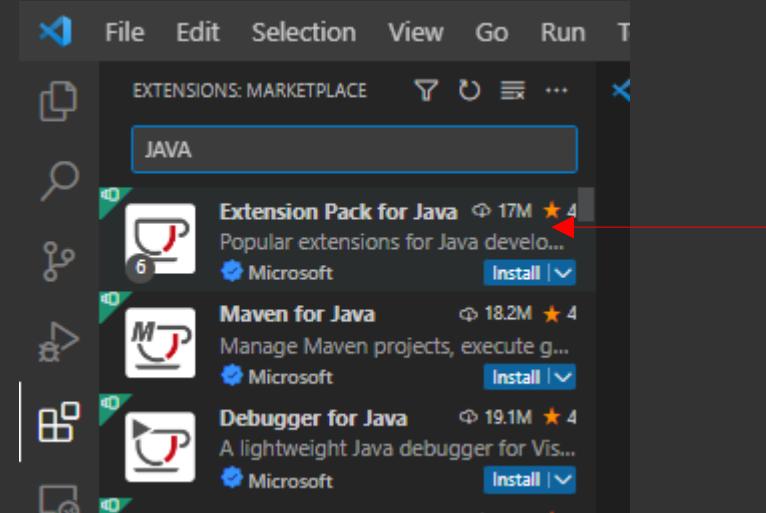


CRIE UMA PASTA E ABRA ELA COM O VS CODE

VII

INSTALANDO AS EXTENSÕES NECESSÁRIAS







File Edit Selection View Go Run

Terminal Help

Extension: Extension Pack for Java - APIS-SPRING-BOOT - Visual Studio Code



EXTENSIONS: MARKETPLACE

JAVA

- Extension Pack for Java** ⚡ 17M ★ 4
Popular extensions for Java development
Microsoft [Install](#) | [View details](#)
- Maven for Java** ⚡ 18.2M ★ 4
Manage Maven projects, execute goals...
Microsoft [Install](#) | [View details](#)
- Debugger for Java** ⚡ 19.1M ★ 4
A lightweight Java debugger for Visual Studio Code
Microsoft [Install](#) | [View details](#)
- Project Manager for Java** ⚡ 17M ★ 4
Manage Java projects in Visual Studio Code
Microsoft [Install](#) | [View details](#)
- Test Runner for Java** ⚡ 17.5M ★ 4
Run and debug JUnit or TestNG tests in VS Code
Microsoft [Install](#) | [View details](#)
- Language Support for Java** ⚡ 21.2M ★ 3.5
Java Linting, Intellisense, formatting, refactoring, and more
Red Hat [Install](#) | [View details](#)
- Spring Initializr Java Extension** ⚡ 2M ★ 3.5
A lightweight extension based on Spring Initializr
Microsoft [Install](#) | [View details](#)
- Java Language Support** ⚡ 1.4M ★ 3
Java support using the Java Compiler API
George Fraser [Install](#)
- Java Debugger** ⚡ 724K ★ 3.5
Java Debugger (break points, variable inspection, step into/step over)

Extension: Extension Pack for Java



Extension Pack for Java

v0.25.7

Preview

Microsoft | ⚡ 17,062,063

★★★★★ (54)

Popular extensions for Java development that provides Java IntelliSense, debugging, testing, Maven/Gradle support, project management, and more.

[Install](#) | [View details](#)

Details

Feature Contributions

Changelog

Extension Pack (6)



IntelliCode

AI-assisted development
Microsoft



Language Support for Java(TM) by Red Hat

Java Linting, Intellisense, formatting, refactoring, and more
Red Hat

[Install](#) | [View details](#)



Debugger for Java

A lightweight Java debugger for Visual Studio Code
Microsoft



Maven for Java

Manage Maven projects, execute goals, generate reports, and more
Microsoft

[Install](#) | [View details](#)

Extension Pack for Java

Extension Pack for Java is a collection of popular extensions that can help write, test and debug Java applications in Visual Studio Code. Check out [Java in VS Code](#) to get started.

Categories

Programming Languages | Snippets

Linters | Debuggers | Format

Extension Packs

Extension Resources

Marketplace

Repository

License

Microsoft

More Info

Published 9/27/2017, 06:30 AM

Last released 11/29/2022, 02:45 PM

File Edit Selection View Go Run Terminal Help

Install New JDK - APIS-SPRING-BOOT - Visual Studio Code

EXTENSIONS: MARKETPLACE JAVA

Install New JDK × Get Started ×

Install New JDK

Adoptium's Temurin Others

Version

- 8 (LTS)
- 11 (LTS)
- 17 (LTS)

JVM

- hotspot

Download windows-x64
jdk-17.0.6+10 | 180.05 MB

After you finish JDK installation, please reload Visual Studio Code to make it effective.

Reload Window Having trouble?

Get Started with Java Development

Your first steps to set up powerful Java tools in a lightweight, performant editor!

Get your runtime ready
The Extension Pack for Java requires at least one Java runtime to be installed.
[Install JDK](#)

Explore your project

Launch, debug and test

Extensions for additional tools and frameworks

**Se for preciso instale o jdk eu já possuia a versão 17
No cmd javac -version
Java -version
Pra saber qual versão**

EXTENSIONS: MARKETPLACE

spring

- Spring Initializr Java Support** ⚡ 2M ★ 3.5
A lightweight extension based on Spring Initializ...
Pivotal [Install](#)
- Spring Boot Tools** ⚡ 1.8M ★ 5
Provides validation and content assist for Spring ...
Pivotal [Install](#)
- Spring Boot Dashboard** ⚡ 1.6M ★ 3.5
Spring Boot Dashboard for VS Code
Microsoft [Install](#)
- Spring Boot Extension Pack** ⚡ 1.3M ★ 5
A collection of extensions for developing Spring ...
Pivotal [Install](#)
- Spring Boot Support** ⚡ 96K ★ 5
Spring Boot properties completion
ecmel [Install](#)
- Java + Spring Extension Pack** ⚡ 53K ★ 5
Some of the most popular and useful Java and S...
Loiane Groner [Install](#)
- Spring Boot Snippets** ⚡ 59K ★ 5
Useful snippets for Spring Boot projects.
Developer Soapbox [Install](#)
- Ra Spring Light Theme** ⚡ 20K ★ 5
Here is the best theme for your eye care!
Rahman Yerli [Install](#)
- Spring Boot Developer Extension ...** ⚡ 28K ★ 5
Useful extensions needed for effectively develop...
Developer Soapbox [Install](#)
- Spring Theme** ⚡ 10K
Spring Theme ported from the Spring TextMate ...
gerane [Install](#)
- Extension Pack for Java** ⚡ 390ms
Popular extensions for Java development that pr...
Microsoft [Install](#)
- Azure Spring Apps** ⚡ 5K ★ 5
An Azure Spring Apps extension for Visual Studi...
Microsoft [Install](#)

Extension: Spring Boot Extension Pack X

Spring Boot Extension Pack v0.2.0

Pivotal | ⚡ 1,375,369 | ★★★★★(13)

A collection of extensions for developing Spring Boot applications

[Install](#)

[Details](#) [Feature Contributions](#)

Extension Pack (3)

- Spring Initializr Java Support** ⚡ 1.3M ★ 5
A lightweight extension based on Spring Init...
Pivotal [Install](#)

Instale essa extensão

Categories

Programming Languages Linters
Extension Packs

Extension Resources

Marketplace Repository Pivotal

More Info

Published 11/28/2017, 17:43:15
Last released 12/14/2022, 10:57:22
Identifier pivotal.vscode-boot-dev-pack

VS Code Spring Boot Application Development Extension Pack

(also known as [Spring Tools 4](#) for Visual Studio Code)

Collection of extensions for developing and deploying Spring Boot Application

Spring Boot

The [Spring Boot Tools](#) extension provides:

- IDE Java tooling for developing and troubleshooting Spring Boot applications.
- Support for editing Spring Boot Application configuration properties files (`.properties` and `.yml`)

Spring Initializr Java

The [Spring Initializr Java Support](#) extension provides support for generating quickstart Spring Boot Java projects with Spring Initializr API.

Spring Boot Dashboard

File Edit Selection View Go Run Terminal Help Extension: Spring Boot Extension Pack - APIS-SPRING-BOOT - Visual Studio Code

EXTENSIONS: MARKETPLACE

spring

Spring Initializr Java Support
A lightweight extension based on Spring Initializ...
Microsoft

Spring Boot Tools
Provides validation and content assist for Spring ...
Pivotal

Spring Boot Dashboard
Spring Boot Dashboard for VS Code
Microsoft

Spring Boot Extension Pack
A collection of extensions for developing Spring ...
Pivotal

Spring Boot Support
Spring Boot properties completion
ecmel [Install](#)

Java + Spring Extension Pack
Some of the most popular and useful Java and S...
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Spring Boot Snippets
Useful snippets for Spring Boot projects.
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Ra Spring Light Theme
Here is the best theme for your eye care!
Rahman Yerli [Install](#)

Spring Boot Developer Extension ...
Useful extensions needed for effectively develop...
Developer Soapbox [Install](#)

Spring Theme
Spring Theme ported from the Spring TextMate ...
gerane [Install](#)

Extension Pack for Java
Popular extensions for Java development that pr...
Microsoft

Azure Spring Apps
An Azure Spring Apps extension for Visual Studi...
Microsoft [Install](#)

Spring Boot Extension Pack v0.2.0

Pivotal | 1,375,369 | ★★★★★(13)

A collection of extensions for developing Spring Boot applications

[Disable](#) [Uninstall](#)

This extension is enabled globally.

Details Feature Contributions

Extension Pack (3)

Spring Initializr Java Support
A lightweight extension based on Spring Init...
Microsoft

Categories

Programming Languages Linters Extension Packs

VS Code Spring Boot Application Development Extension Pack

(also known as [Spring Tools 4](#) for Visual Studio Code)

Collection of extensions for developing and deploying Spring Boot Application

Spring Boot

The [Spring Boot Tools](#) extension provides:

- IDE Java tooling for developing and troubleshooting Spring Boot applications.
- Support for editing Spring Boot Application configuration properties files (`.properties` and `.yml`)

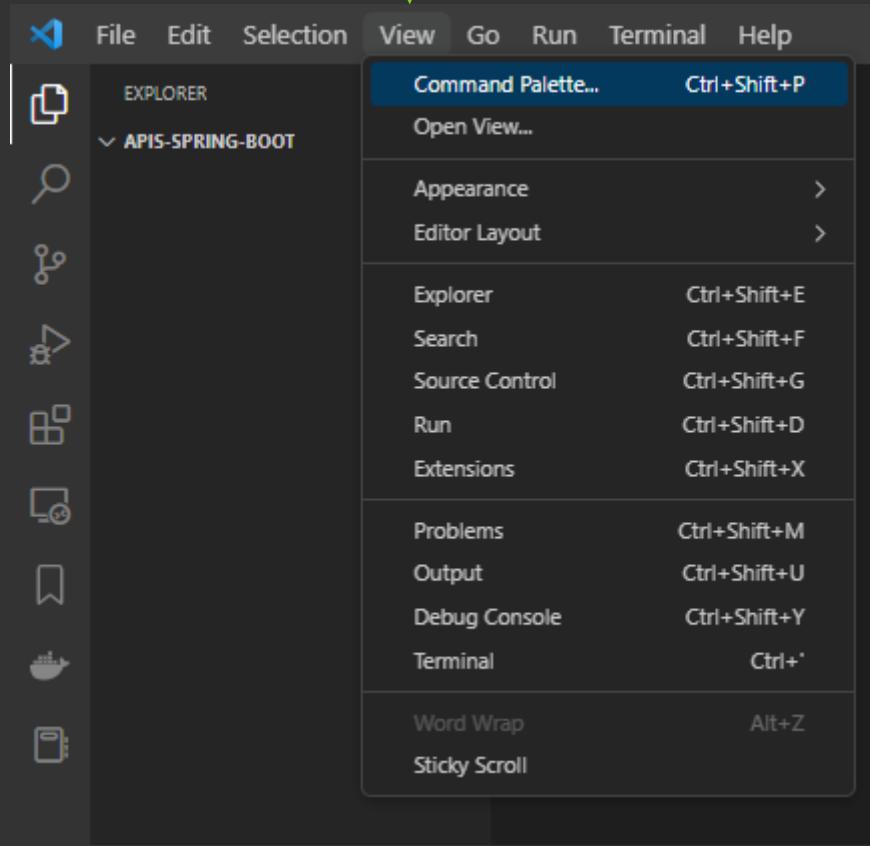
Spring Initializr Java

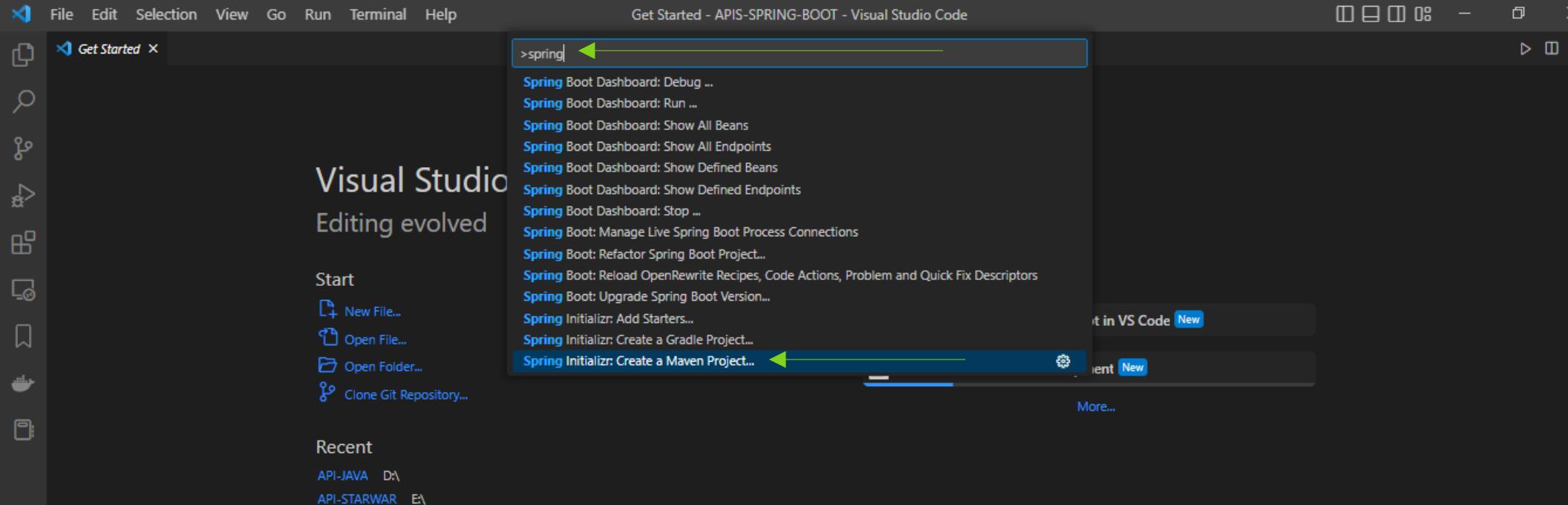
The [Spring Initializr Java Support](#) extension provides support for generating quickstart Spring Boot Java projects with Spring Initializr API.

Spring Boot Dashboard

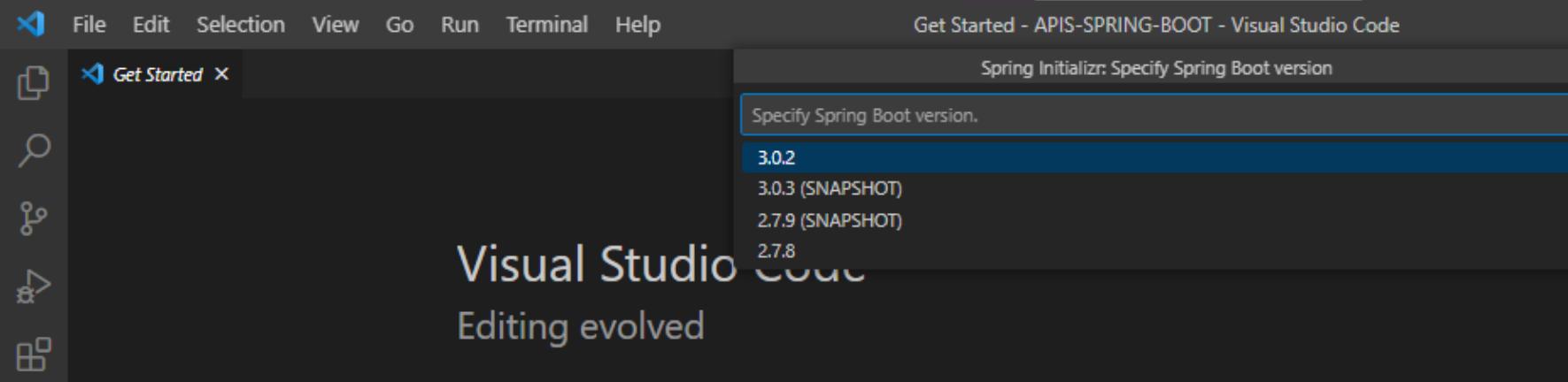
25°C Nublado Go Live 14:22

CRIANDO O PROJETO

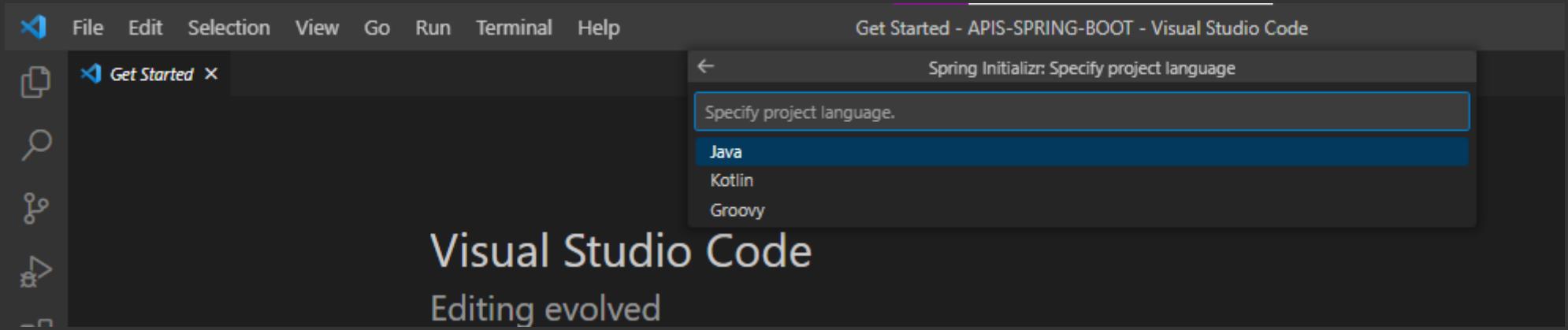




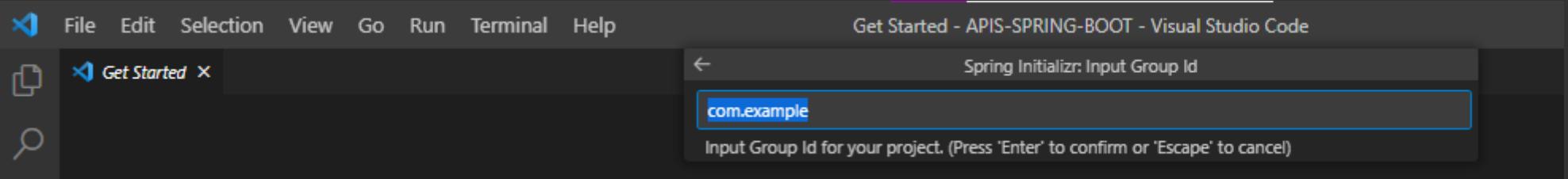
Digite spring e adicione spring initializr do maven
Essa que esta marcada ai



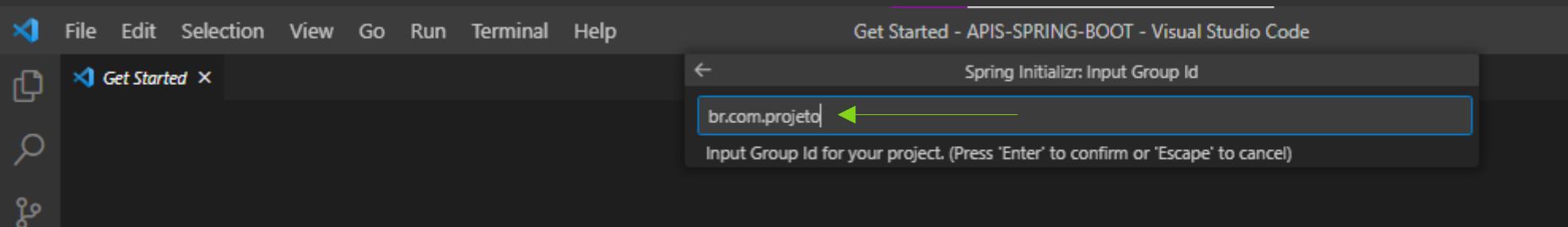
Escolha sua versão nada impede de troca-la mais tarde



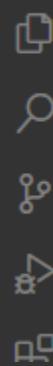
Escolha a linguagem do projeto



Group é o lugar onde vai ficar o projeto



Depois de dar o nome tecle enter



Get Started X



Spring Initializr: Input Artifact Id

demo

Input Artifact Id for your project. (Press 'Enter' to confirm or 'Escape' to cancel)

Visual Studio Code

Editing evolved

De nome ao projeto



Get Started X



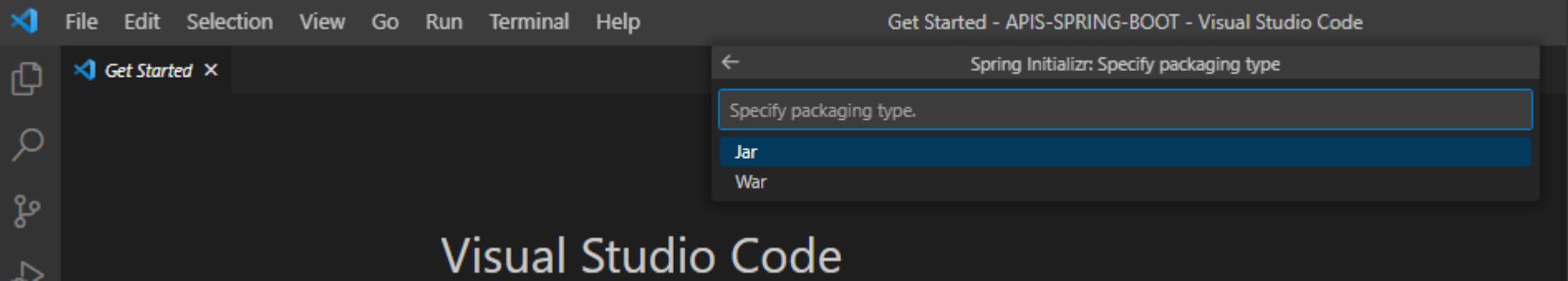
Spring Initializr: Input Artifact Id

api|

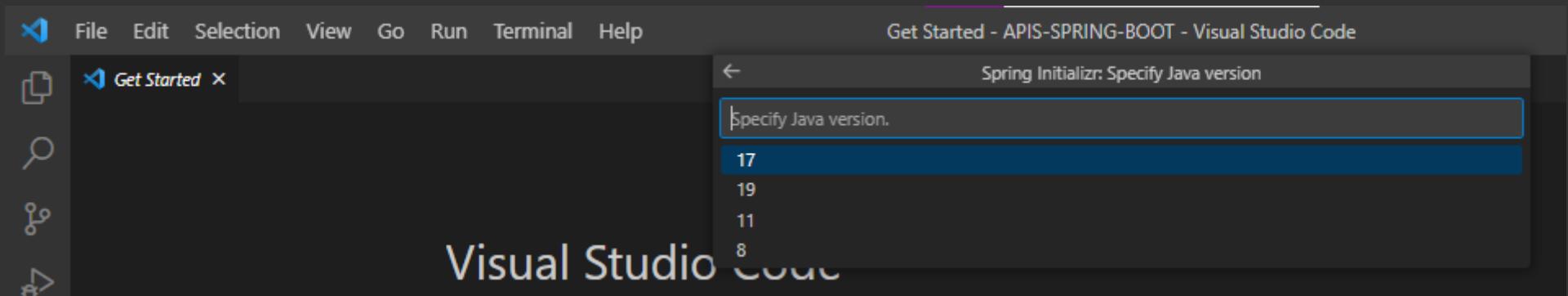
Input Artifact Id for your project. (Press 'Enter' to confirm or 'Escape' to cancel)

Visual Studio Code

Editing evolved



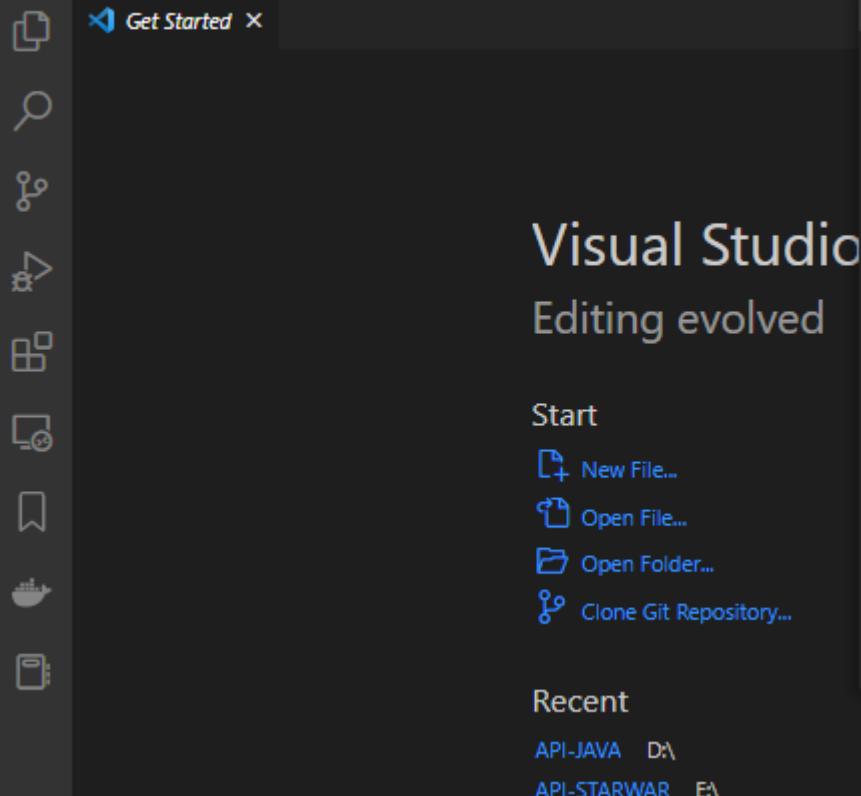
**Defina o empacotamento pra jar isso pode ser mudado
futuramente**



**Escolha a versão compativel com a sua versão de java e do jdk a minha
como disse é a 17 mais nesse ano 2023 já existe a 19**

File Edit Selection View Go Run Terminal Help

Get Started - APIS-SPRING-BOOT - Visual Studio Code



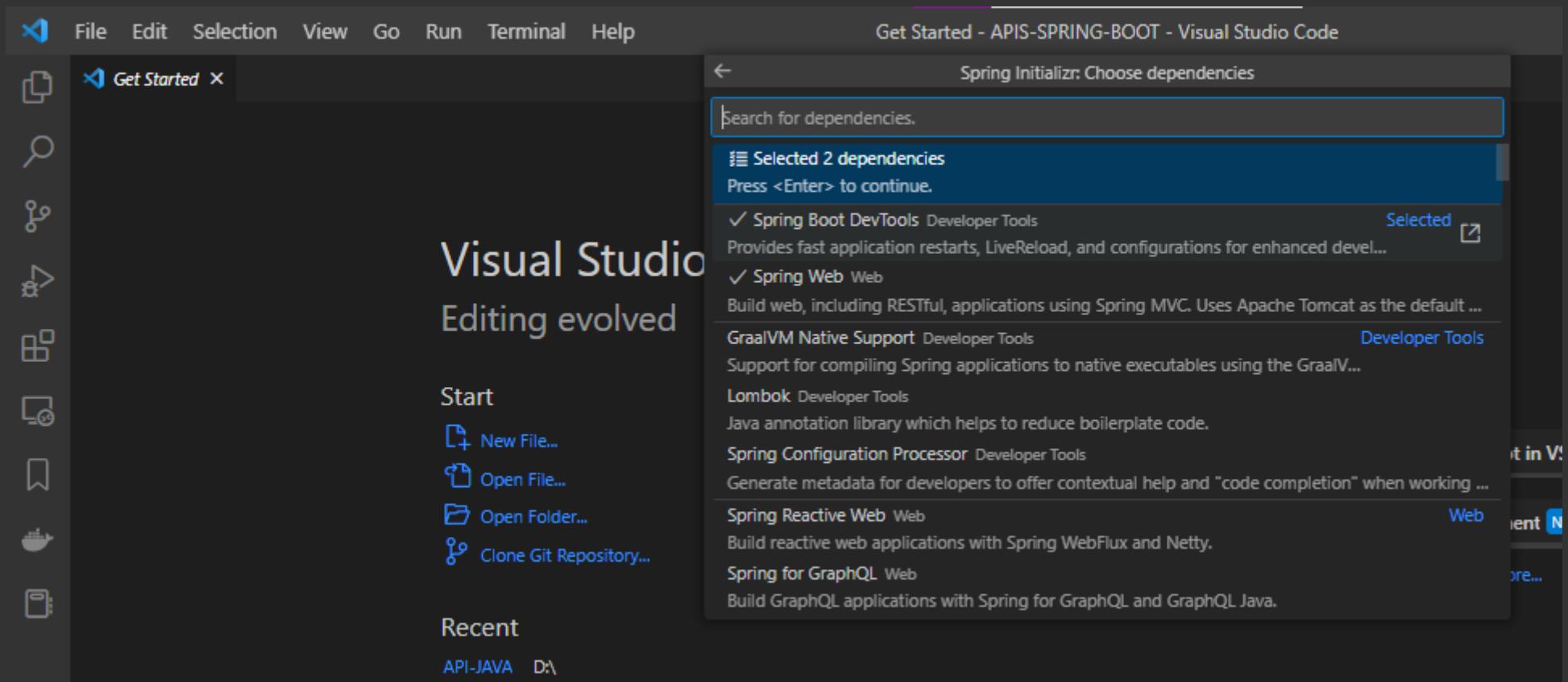
← Spring Initializr: Choose dependencies

Search for dependencies.

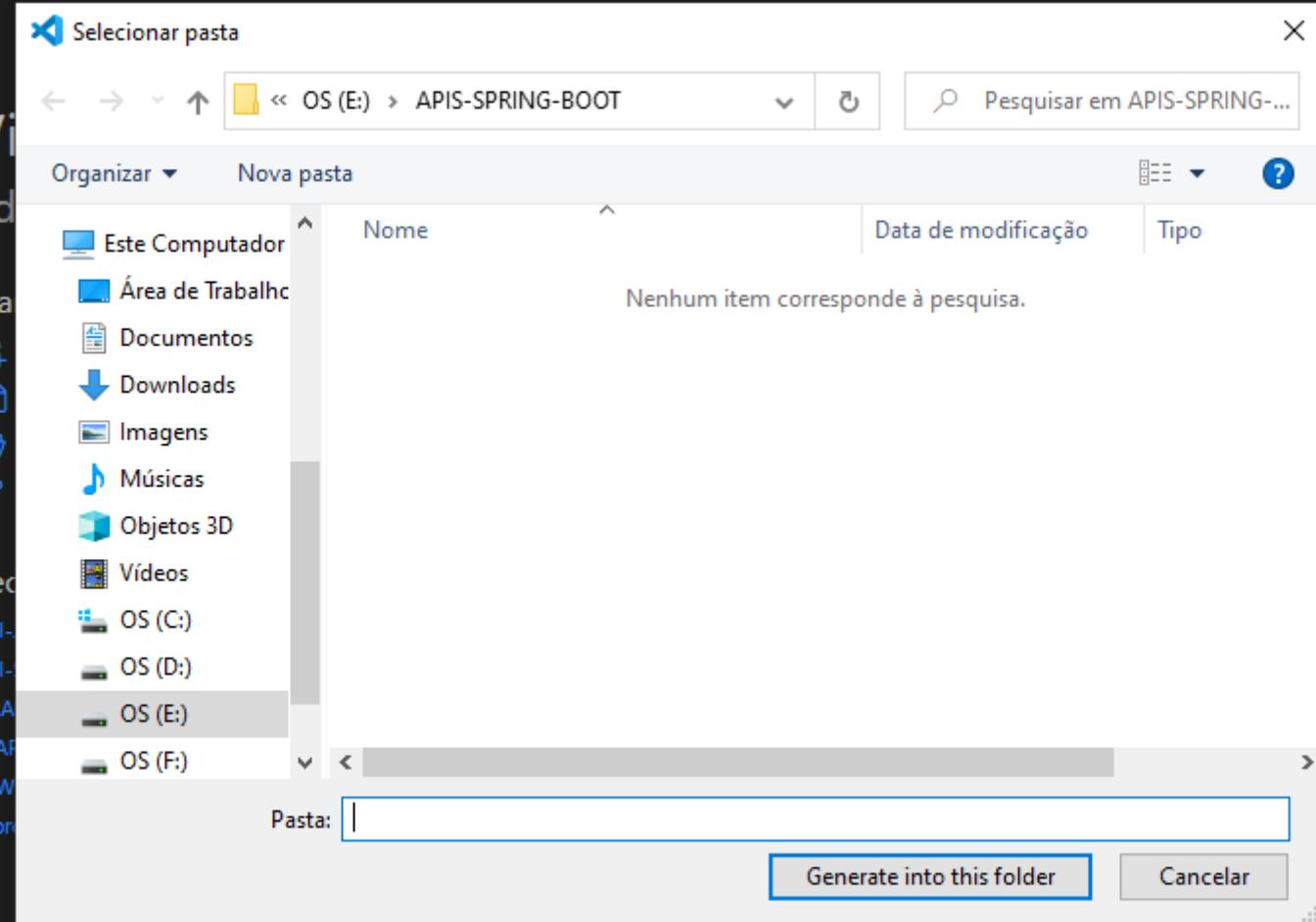
Selected 0 dependencies
Press <Enter> to continue.

GraalVM Native Support	Developer Tools	Developer Tools
Support for compiling Spring applications to native executables using the GraalV...		
Spring Boot DevTools	Developer Tools	
Provides fast application restarts, LiveReload, and configurations for enhanced development expe...		
Lombok	Developer Tools	
Java annotation library which helps to reduce boilerplate code.		
Spring Configuration Processor	Developer Tools	
Generate metadata for developers to offer contextual help and "code completion" when working ...		
Spring Web	Web	Web
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the def...		
Spring Reactive Web	Web	Web
Build reactive web applications with Spring WebFlux and Netty.		
Spring for GraphQL	Web	Web
Build GraphQL applications with Spring for GraphQL and GraphQL Java.		

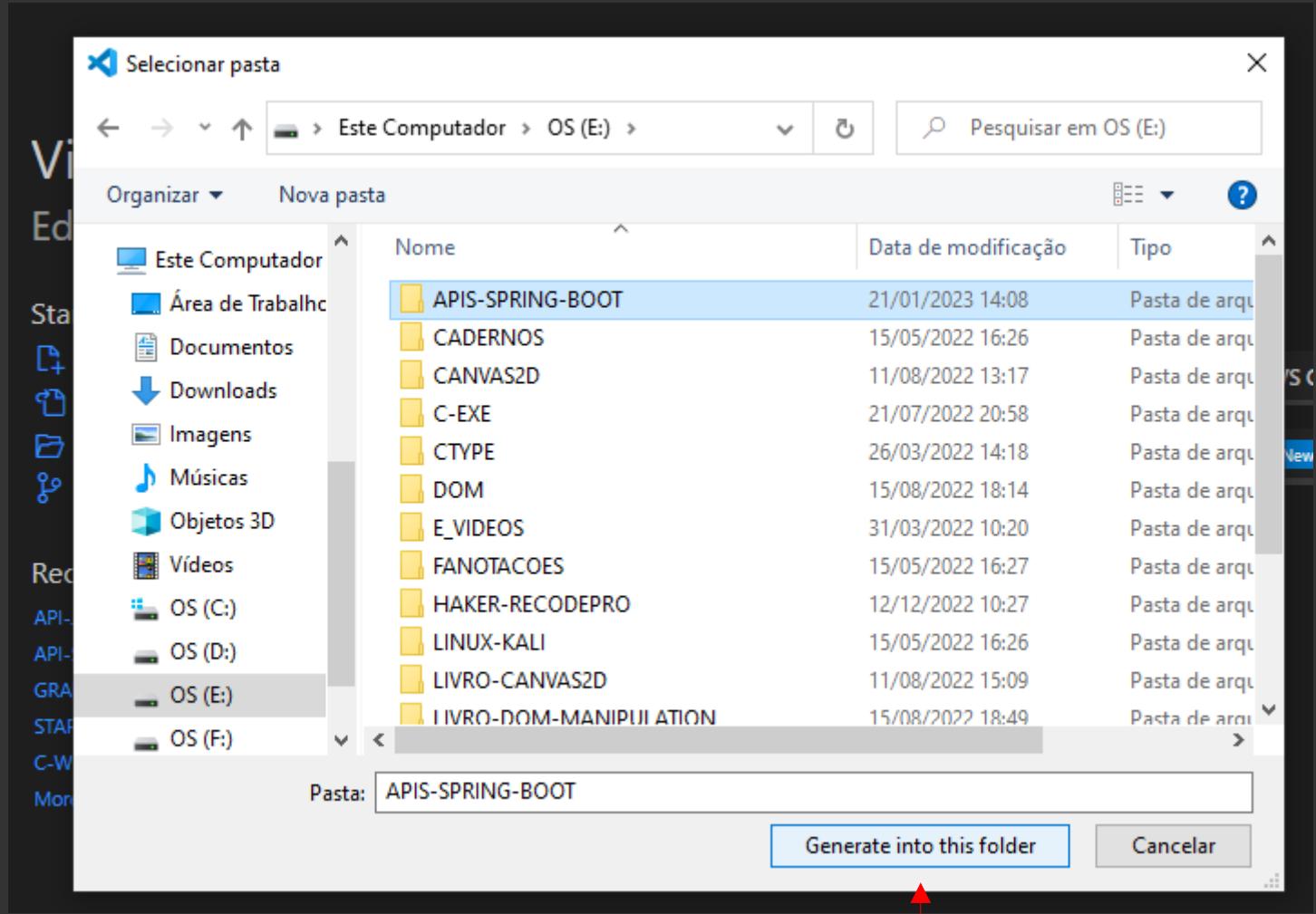
Adicione agora as dependencias do projeto
O que são dependencias? São funções que o spring usa

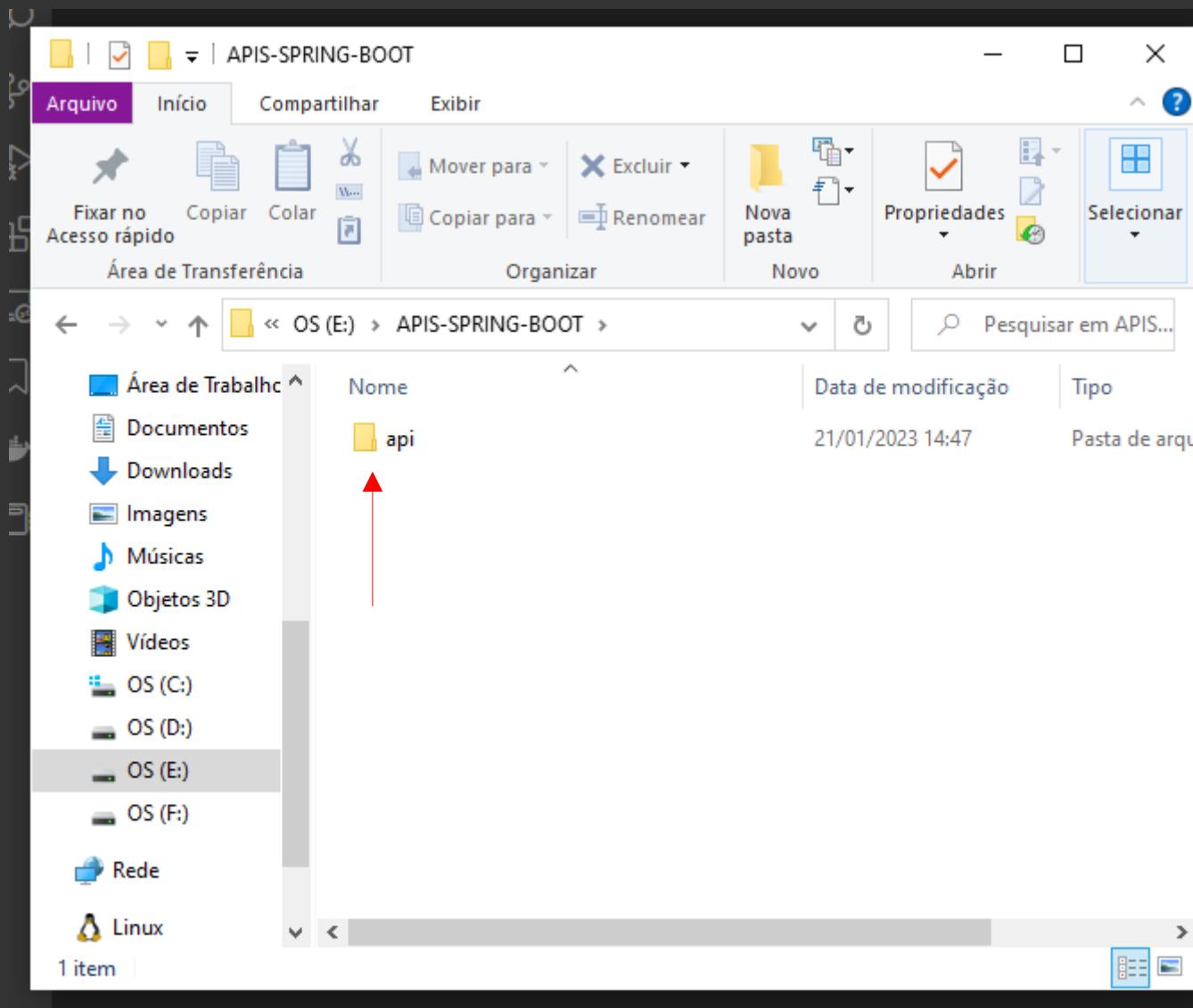


**Click para seleccionar spring boot dev tools e spring web
Por fim de enter para selecionar**

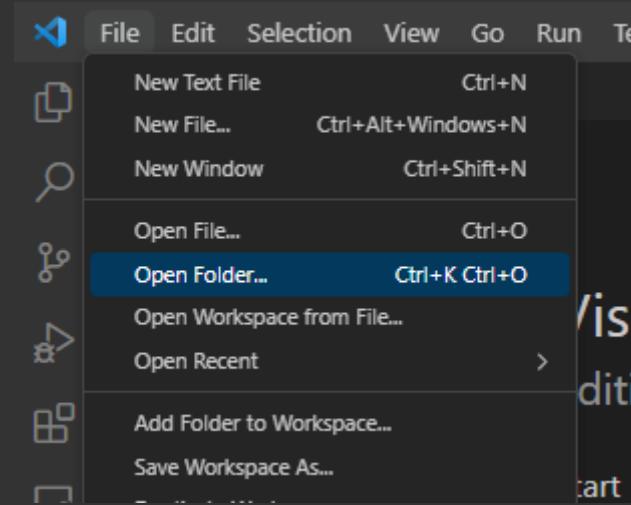


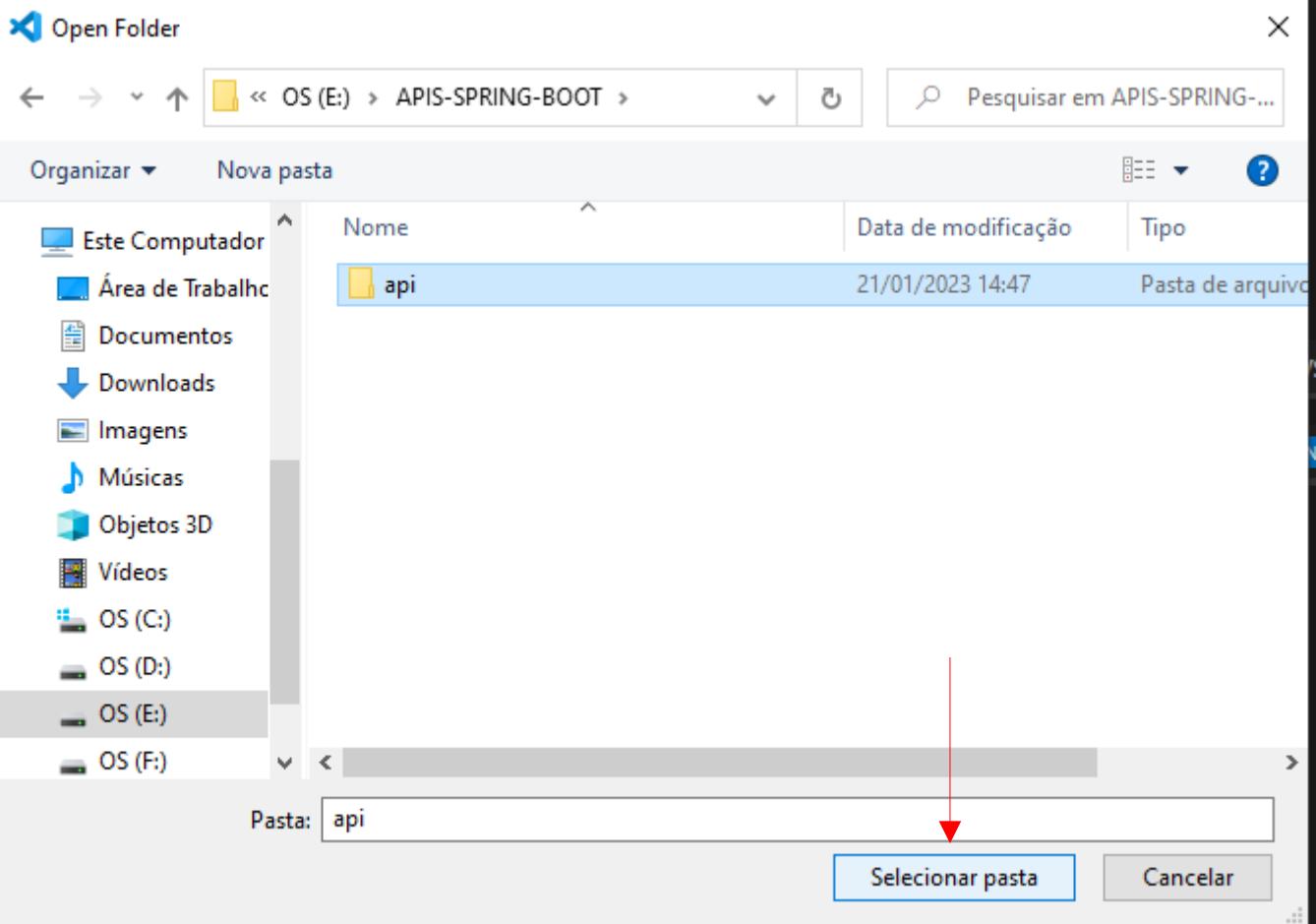
**Ele abre para você escolher onde vai salvar o projeto
Você pode escolher qualquer pasta para salvar seu projeto**





Abrindo a pasta que criamos







EXPLORER

- ... **Get Started** x
- API
 - > .mvn
 - > .vscode
 - > src
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml

Visual Studio Code

Editing evolved

Start

- New File...
- Open File...
- Open Folder...
- Clone Git Repository...

Recent

- APIS-SPRING-BOOT E:\
 - API-JAVA D:\
 - API-STARWARS E:\
 - GRAFICOS-JS F:\
 - STAR-WARS F:\
- More...

Walkthroughs

- Getting Started with Spring Boot in VS Code New

- Get Started with Java Development New

More...

Espere todos os arquivos serem baixados

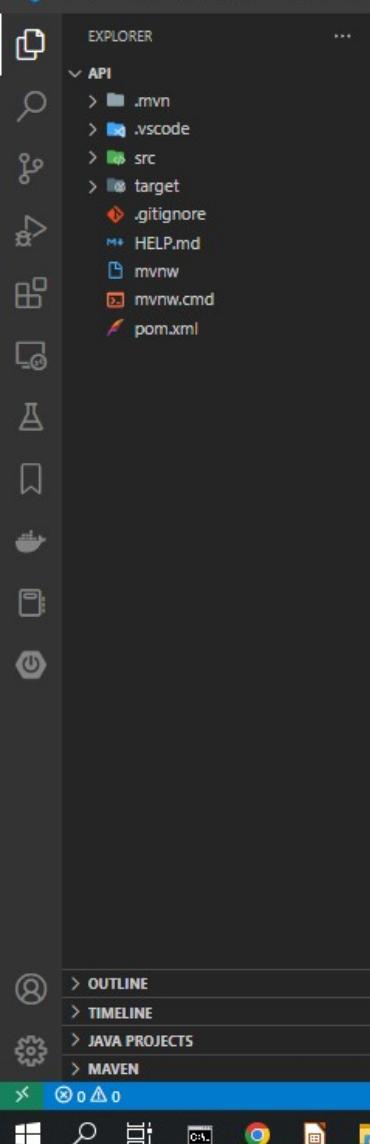
Show All Commands **Ctrl + Shift + /**

Go to File Ctrl +

Find in Files **Ctrl + Shift + F**

Start Debugging F

Toggle Terminal Ctrl +



EXECUTANDO PROJETO

File Edit Selection View Go Run Terminal Help

ApiApplication.java - api - Visual Studio Code

EXPLORER

API

.mvn .vscode src main java\br\com\projeto\api Aplication.java resources test target .gitignore HELP.md mvnw mvnw.cmd pom.xml

ApiApplication.java

```
src > main > java > br > com > projeto > api > ApiApplication.java > Language Support for Java(TM) by Red Hat > {} br.com.projeto.api
1 package br.com.projeto.api;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6 @SpringBootApplication
7 public class ApiApplication {
8
9     Run | Debug ←
10    public static void main(String[] args) {
11        SpringApplication.run(primarySource: ApiApplication.class, args);
12    }
13 }
14
```

Preste atenção nessas duas opções
Podemos rodar a aplicação com a opção run ou ir la embaixo em...



File Edit Selection View Go Run Terminal Help

ApiApplication.java - api - Visual Studio Code



EXPLORER

...

ApiApplication.java X

src > main > java > br > com > projeto > api > ApiApplication.java > Language Support for Java(TM) by Red Hat > {} br.c

```
1 package br.com.projeto.api;  
2  
3 import org.springframework.boot.SpringApplication;  
4 import org.springframework.boot.autoconfigure.SpringBootApplication;  
5  
6 @SpringBootApplication  
7 public class ApiApplication {  
8  
9     public static void main(String[] args) {  
10         SpringApplication.run(primarySource: ApiApplication.class, args);  
11     }  
12 }  
13 }  
14 }
```



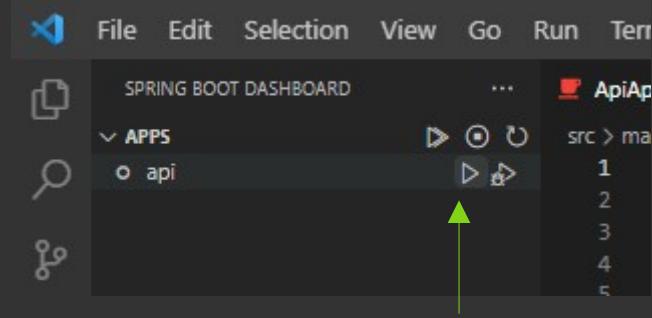
Nessa opção spring boot dashboard

A screenshot of a code editor showing a Spring Boot application structure. The left sidebar shows a project tree with 'SPRING BOOT DASHBOARD' at the root, expanded to show 'APPS' and 'api'. The main editor area shows the 'ApiApplication.java' file:

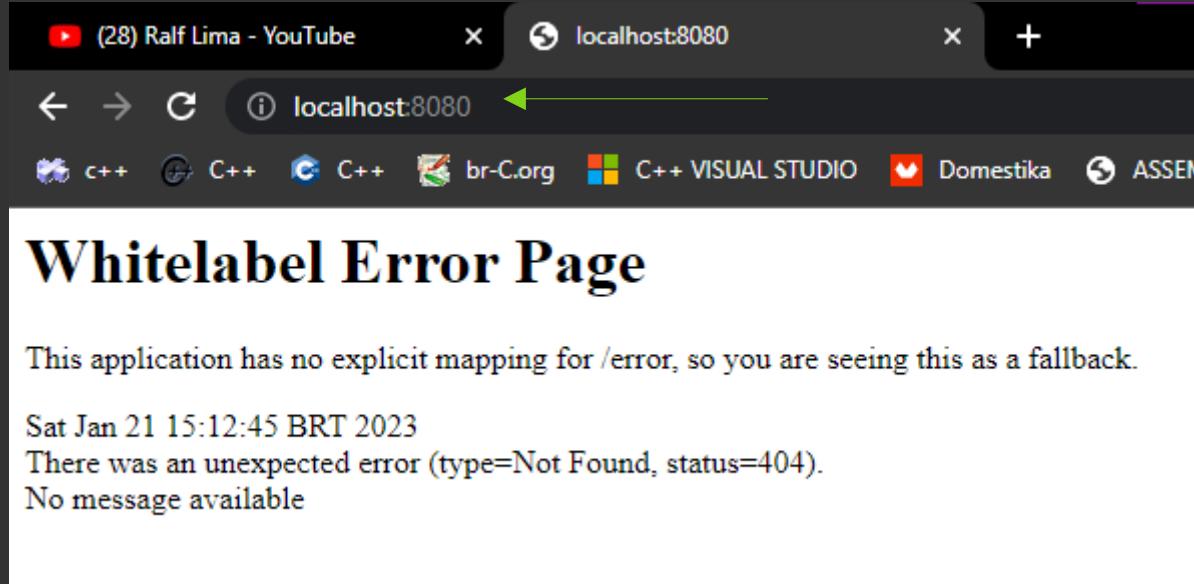
```
1 package br.com.  
2  
3 import org.spring  
4 import org.spring  
5  
6 @SpringBootApp  
7 public class Ap  
8  
9     Run | Debug  
10    public stat  
11        SpringA  
12    }  
13 }  
14 }
```

The status bar at the bottom of the editor shows the path: 'C:\Users\...'. A green arrow points from the bottom left towards the power icon in the bottom right corner of the editor window.

E rodamos o projeto
Tanto faz qualquer uma das escolhas

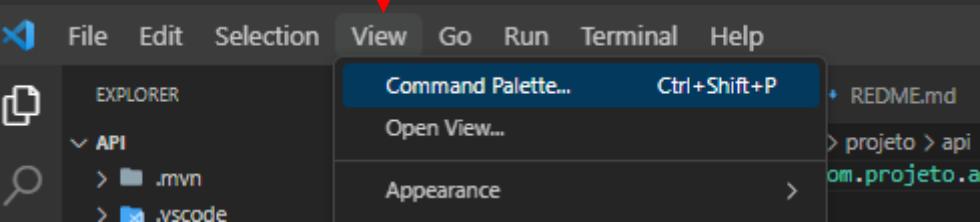


EXECUTE O PROJETO PARA FAZER UM TESTE



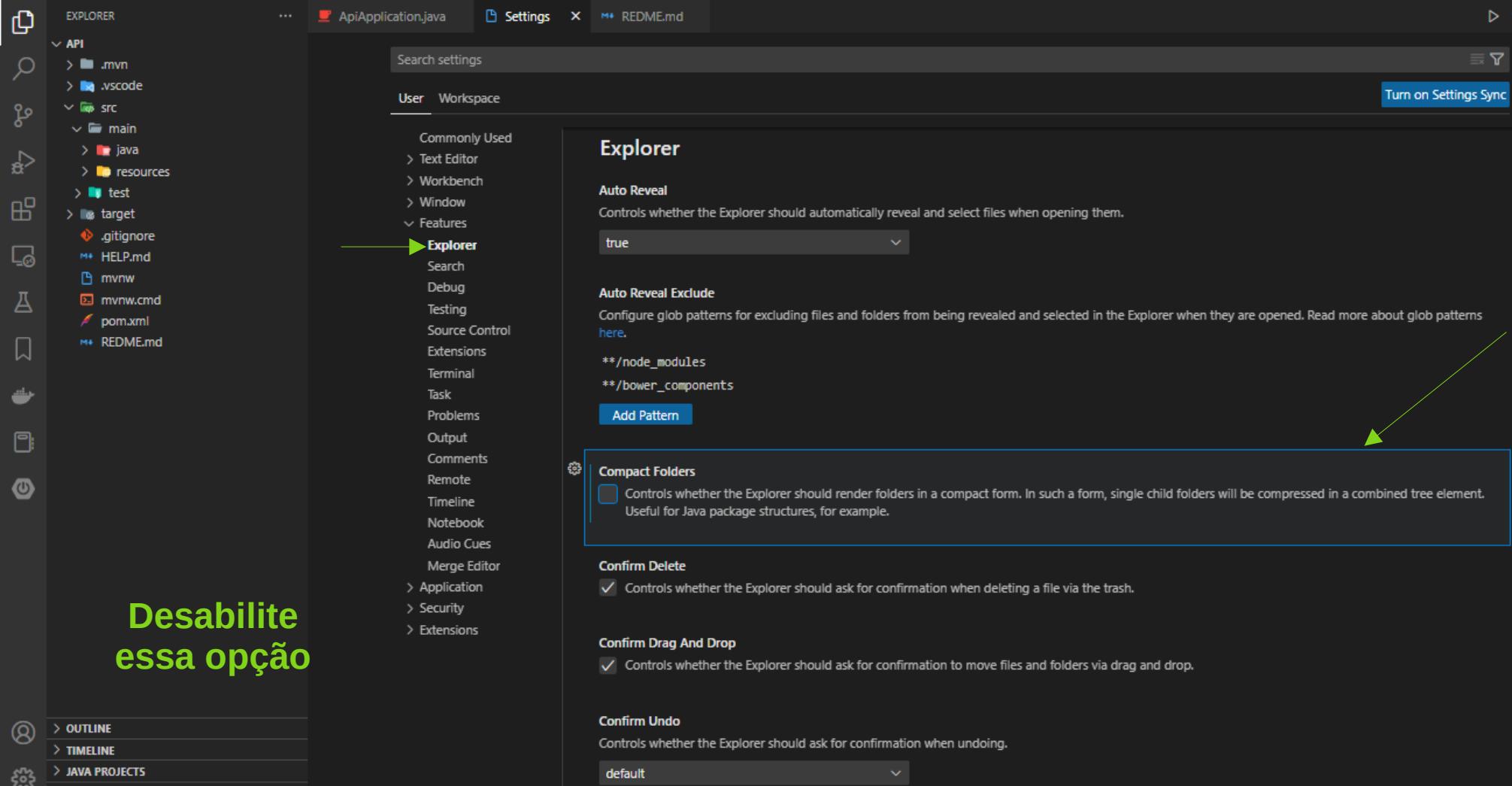
ERRO BOM SIGNIFICA QUE ESTA RODANDO

IMPLEMENTANDO O CONTROLLER PARA CORRIGIR O ERRO

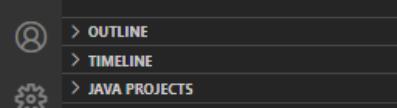


ApiApplication.java - api - Visual Studio Code

a X M4 >pref Preferences: Configure Runtime Arguments
ge br.com Preferences: File Icon Theme
t org.spr Preferences: Keymaps
t org.spr Preferences: Language Extensions
ngBootApp Preferences: Open Accessibility Settings
c class A Preferences: Open Default Keyboard Shortcuts (JSON)
un | Debug Preferences: Open Default Settings (JSON)
public sta Preferences: Open Keyboard Shortcuts
Spring Preferences: Open Settings (UI) 
Preferences: Open User Settings
Preferences: Open User Settings (JSON)
Preferences: Open Workspace Settings
Preferences: Open Workspace Settings (JSON)
Preferences: Product Icon Theme
Preferences: Toggle between Light/Dark Themes
Quick Open Previous Editor From History



Desabilite essa opção



The screenshot shows the Visual Studio Code interface with a Java Spring Boot project open. The Explorer sidebar on the left displays the project structure:

- API
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - ApiApplication.java
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md

Agora as pastas aparecem em cascata

The screenshot shows a Java project structure in the Explorer sidebar. The project root is named 'API'. Inside 'API' are '.mvn', '.vscode', 'src', and 'target'. 'src' contains 'main', which has 'java', 'br', 'com', and 'projeto'. 'projeto' contains 'api'. A context menu is open over the 'api' folder in 'projeto'. The menu items are: 'New File...', 'New Folder...', 'Reveal in File Explorer' (Shift+Alt+R), 'Open in Integrated Terminal', 'Add Folder to Java Source Path', 'Remove Folder from Java Source Path', and 'Find in Folder...' (Shift+Alt+F). The 'New Folder...' item is highlighted with a blue background.

```
1 package br.com.projeto.api;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6 @SpringBootApplication
7 public class ApiApplication {
8
9     public static void main(String[] args) {
10         SpringApplication.run(primarySource: ApiApplication.class, args);
11     }
12 }
```

**Crie uma nova pasta dentro da pasta api com o nome controle
Precisa ser este nome é obrigatorio? não**

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

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal
- Terminal:** Shows the command "ApiApplication.java" being typed.
- Explorer:** Displays the project structure:
 - API
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md

The screenshot shows the VS Code interface with a dark theme. The Explorer sidebar on the left displays the project structure:

- API
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - RFDFMF.md

The 'controle' folder is selected. A context menu is open over the 'controle' folder, with the 'New File...' option highlighted in blue.

ApiApplication.java

```
1 package br.com.projeto.api;  
2  
3 import org.springframework.boot.SpringApplication;  
4 import org.springframework.boot.autoconfigure.SpringBootApplication;  
5  
6 @SpringBootApplication  
7 public class ApiApplication {  
8  
9     public static void main(String[] args) {  
10         SpringApplication.run(primarySource:)
```

Criando uma class controle dentro da pasta controle

A screenshot of the Visual Studio Code interface. The top navigation bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar shows "Controle.java - api - Visual Studio Code". The Explorer sidebar on the left shows a project structure under "API": .mvn, .vscode, src (expanded), main (expanded), java (expanded), br (expanded), com (expanded), projeto (expanded), api (expanded), controle (expanded), Controle.java, and ApiApplication.java. Below the src folder are resources, test, target, .gitignore, HELP.md, mvnw, mvnw.cmd, pom.xml, and README.md. The main editor area displays Java code:

```
src > main > java > br > com > projeto > api > controle > Controle.java > Controle
1 package br.com.projeto.api.controle;
2
3 public class Controle {
4
5 }
```

A code completion dropdown menu is open at the bottom of the editor, listing suggestions for "Controle":

- class Controle
- interface Controle
- enum Controle
- record Controle()
- abstract class Controle
- @interface Controle

A screenshot of the Visual Studio Code interface. The menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar shows "Controle.java - api - Visual Studio Code". The Explorer sidebar on the left shows a project structure under "API": ".mvn", ".vscode", "src" (expanded), "main" (expanded), "java" (expanded), "br" (expanded), "com" (expanded), and "projeto". The main editor area displays Java code:

```
src > main > java > br > com > projeto > api > controle > Controle.java > Controle
1 package br.com.projeto.api.controle;
2
3 @RestController
4 public RestControllerEndpoint - org.springframework.boot...
5
6 }
7
```

A code completion tooltip is open at line 4, showing the suggestion "public RestControllerEndpoint - org.springframework.boot..." with a tooltip below it containing "org.springframework.boot.actuate.endpoint.web.annotation.RestControllerEndpoint".

Adicione a anotaion **@RestController** e seu import



EXPLORER

- ... ApiApplication.java
- ... Controle.java 1
- ... REDME.md

src > main > java > br > com > projeto > api > controle > Controle.java > Controle

- 1 package br.com.projeto.api.controle;
- 2 Controle
- 3 @RestController
- 4 public class Controle {
 - RestController - org.springframework.web.bind.annotation.RestController
 - RestControllerAdvice - org.springframework.web.bind.annotation.RestControllerAdvice
 - RestControllerEndpoint - org.springframework.boot.autoconfigure.endpoint.RestControllerEndpoint
 - ResponseStatus - org.springframework.web.bind.annotationResponseStatus
 - RegisterReflectionForBinding - org.springframework.web.method.HandlerMethod
 - RequestScope - org.springframework.web.context.annotation.RequestScope
 - RequestMapping - org.springframework.web.bind.annotation.RequestMapping
 - Repository - org.springframework.stereotype.Repository
 - ConditionalOnRepositoryType - org.springframework.context.annotation.ConditionalOnRepository
 - ImportRuntimeHints - org.springframework.context.annotation.ImportRuntimeHints
- 5 }
- 6 }
- 7 }

Controle

• RestController - org.springframework.web.bind.annotation.RestController
• RestControllerAdvice - org.springframework.web.bind.annotation.RestControllerAdvice
• RestControllerEndpoint - org.springframework.boot.autoconfigure.endpoint.RestControllerEndpoint
• ResponseStatus - org.springframework.web.bind.annotationResponseStatus
• RegisterReflectionForBinding - org.springframework.web.method.HandlerMethod
• RequestScope - org.springframework.web.context.annotation.RequestScope
• RequestMapping - org.springframework.web.bind.annotation.RequestMapping
• Repository - org.springframework.stereotype.Repository
• ConditionalOnRepositoryType - org.springframework.context.annotation.ConditionalOnRepository
• ImportRuntimeHints - org.springframework.context.annotation.ImportRuntimeHints

org.springframework.web.bind.annotation.RestController

A convenience annotation that is itself annotated with @Controller and @ResponseBody.

Types that carry this annotation are treated as controllers where @RequestMapping methods assume @ResponseBody semantics by default.

NOTE: @RestController is processed if an appropriate HandlerMapping - HandlerAdapter pair is configured such as the RequestMappingHandlerMapping - RequestMappingHandlerAdapter pair which are the default in the MVC Java config and the MVC namespace.

- **Since:**
 - 4.0
- **Author:**

The screenshot shows a Java project structure in the Explorer sidebar and the corresponding code in the main editor area.

Project Structure:

- API** (selected)
- .mvn
- .vscode
- src** (selected)
- main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md

Controle.java - api - Visual Studio Code

Controle.java

```
src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(TM) by Red Hat > Controle.java
```

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.RestController;
4
5 @RestController
6 public class Controle {
7
8
9 }
10
```

A screenshot of the Visual Studio Code interface. The menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar shows "Controle.java - api - Visual Studio Code". The Explorer sidebar on the left shows a project structure under "API": ".mvn", ".vscode", "src" (selected), "main", "java", "br", "com", "projeto", "api", "controle", "Controle.java" (highlighted). The main editor area displays Java code:

```
2  
3     import org.springframework.web.bind.annotation.RestController;  
4  
5     @RestController  
6     public class Controle {  
7  
8         @Get  
9         public GetExchange - org.springframework.web.service.annotation.GetExchange  
10            GetMapping - org.springframework.web.bind.annotation.GetMapping  
11        }  
12        Generated - jakarta.annotation  
13        Generated - javax.annotation.processing  
14    }
```

A tooltip is open over the "@Get" annotation, providing information:

- Shortcut for @HttpExchange for HTTP GET requests.
- Since: 6.0
- Author: Rossen Stoyanchev

Adicione a anotation **@GetMapping** e seu import

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Controle.java - api - Visual Studio Code.
- Explorer View (Left):** Shows the project structure:
 - API folder
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md
 - Code Editor (Right):** The file Controle.java is open, showing the following code:

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     @GetMapping
10    public String mensagem(){
11        return "Hello World";
12    }
13
14 }
```

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Controle.java - api - Visual Studio Code
- Explorer View:** Shows the project structure under API:
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md
- Editor View:** Controle.java file open, showing the following code:

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     @GetMapping("")
10    public String mensagem(){
11        return "Hello World";
12    }
13
14 }
```
- Bottom Status Bar:** Rota especificada dentro dos parentesis ""
De run e volte no navegador e atualize a pagina

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor Title:** Controle.java - api - Visual Studio Code
- Editor Content:** A Java file named Controle.java containing the following code:

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     @GetMapping("")
10    public String mensagem(){
11        return "Hello World";
12    }
13
14 }
15
```
- Sidebar:** Shows the project structure under SPRING BOOT DASHBOARD: APPS / api.
- Left Panel:** Icons for File Explorer, Search, Problems, Task, and Terminal.

File Edit Selection View Go Run Terminal Help ApiApplication.java - api - Visual Studio Code

EXPLORER

API

- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java

src > main > java > br > com > projeto > api > ApiApplication.java > ...

```
1 package br.com.projeto.api;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6 @SpringBootApplication
7 public class ApiApplication {
8     Run | Debug
9     public static void main(String[] args) {
10         SpringApplication.run(primarySource: ApiApplication.class, args);
11     }
12 }
13
14 }
```

RESOLVI O ERRO EXECUTANDO POR AQUI RUN

PROBLEMS OUTPUT TERMINAL

TERMINAL

```
'/actuator'
2023-01-21T16:07:10.769-03:00 INFO 6944 --- [on(1)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing
spatcherServlet'
2023-01-21T16:07:10.784-03:00 INFO 6944 --- [on(1)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Initializin
2023-01-21T16:07:10.790-03:00 INFO 6944 --- [on(1)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Completed i
2023-01-21T16:07:10.876-03:00 INFO 6944 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat star
th context path ''
2023-01-21T16:07:11.048-03:00 INFO 6944 --- [ restartedMain] br.com.projeto.api.ApiApplication : Started Api
process running for 8.088)
```

This method cannot be moved, since no possible targets have been found. Only a class which is reachable from within this method can be a valid target. The target must therefore be the declaring class of a parameter or field type. In addition the target must be writable.

Source: Language Support for Java(TM) by Red Hat (Extension)

Ln 14, Col 1 Tab Size: 4 UTF-8 LF { Java Go Live

Spring Boot-ApiApplication<api> (api)

26°C Nublado



File Edit Selection View Go Run Terminal Help

Controle.java - api - Visual Studio Code



EXPLORER

...

ApiApplication.java

Controle.java X

REDME.md



API

.mvn

.vscode

src

main

java

br

com

projeto

api

controle

Controle.java

ApiApplication.java

resources

test

target

.gitignore

HELP.md

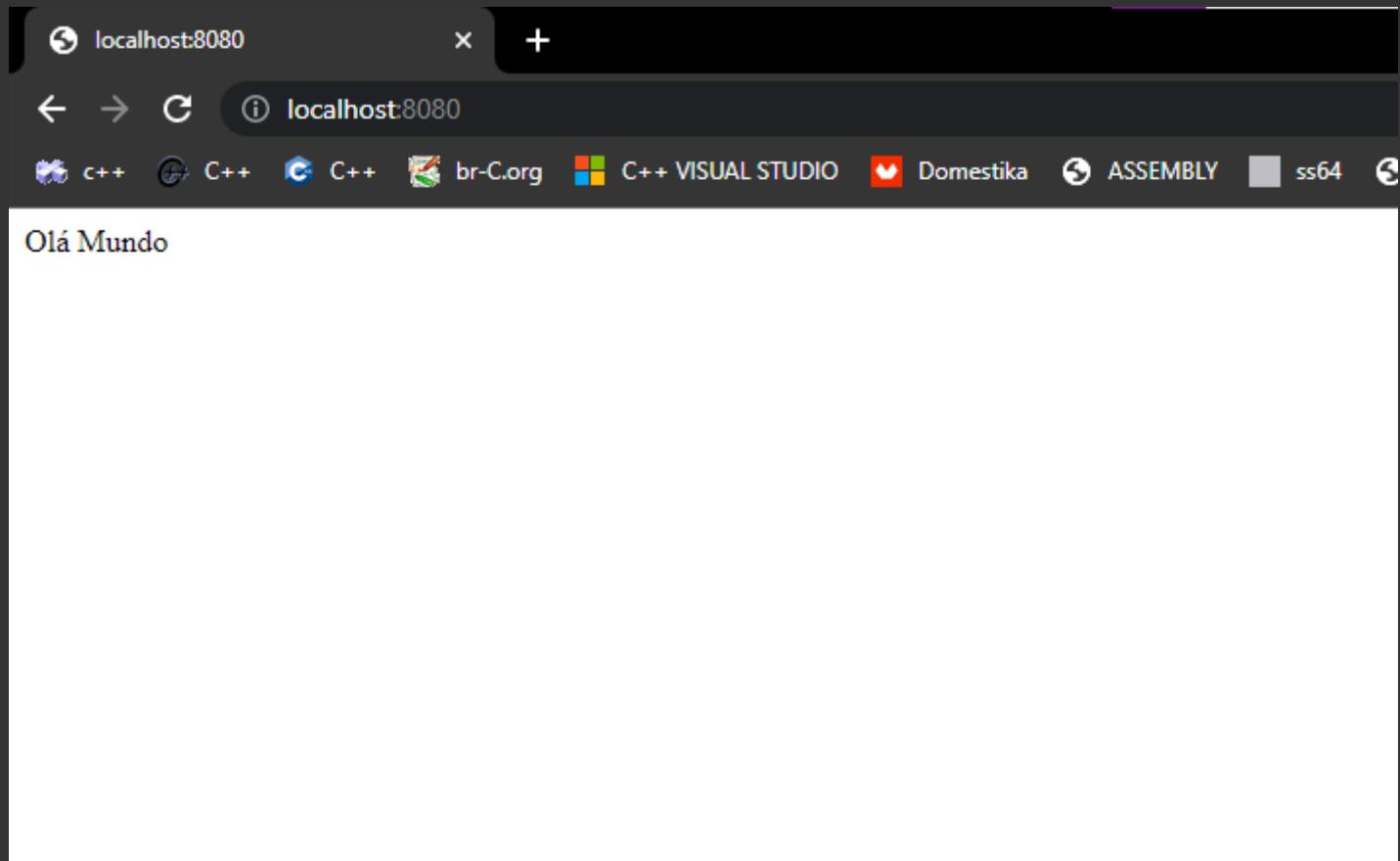
mvnw

mvnw.cmd

pom.xml

REDME.md

```
src > main > java > br > com > projeto > api > controle > Controle.java > ...
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     http://127.0.0.1:8080/
10    @GetMapping("/")
11    public String mensagem(){
12        return "Hello World";
13    }
14}
15
```



```
5  
6 @RestController  
7 public class Controle {  
8  
9     http://127.0.0.1:8080/  
10    @GetMapping("/") ←  
11    public String mensagem(){  
12        return "Hello World";  
13    }  
14 }  
15 }
```

Resolvi adicionando o / na url

#6 **@PathVariable**

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

- Explorer View:** Shows the project structure under "APIS-SPRING-BOOT". The "src/main/java" folder contains "br.com.projeto.api" and "br.com.projeto.api.controle". Inside "controle", the "Controle.java" file is selected.
- Code Editor:** Displays the "Controle.java" code. It defines a class "Controle" with two methods: "mensagem()" which returns "Hello World", and "boasVindas()" which returns "Seja bem vindo(a)".

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     @GetMapping("/")
10    public String mensagem(){
11        return "Hello World";
12    }
13
14    @GetMapping("/boasVindas")
15    public String boasVindas(){
16        return "Seja bem vindo(a)";
17    }
18
19 }
20
```
- Terminal:** Shows the command line prompt "PS E:\APIS-SPRING-BOOT>".
- Bottom Status Bar:** Includes links for "OUTLINE", "TIMELINE", "JAVA PROJECTS", and "MAVEN".
- Text Overlay:** A green text overlay provides instructions: "Crie uma nova rota", "Depois disso salve va no navegador e atualize", and "Insira a nova rota".

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

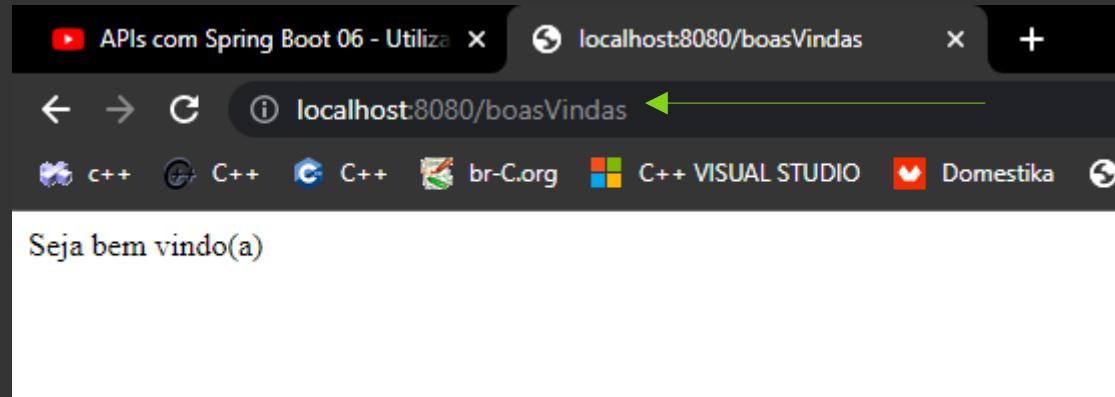
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Explorer:** Shows the project structure for "APIS-SPRING-BOOT".
- ApiApplication.java Tab:** Contains the main application class.

```
1 package br.com.projeto.api;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6 @SpringBootApplication
7 public class ApiApplication {
8
9     public static void main(String[] args) {
10         SpringApplication.run(primarySource: ApiApplication.class, args);
11     }
12 }
```
- Controle.java Tab:** Contains a REST controller class.

```
1 package br.com.projeto.api.controle;
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.RestController;
5
6 @RestController
7 public class Controle {
8
9     @GetMapping("/")
10     public String mensagem(){
11         return "Hello World";
12     }
13
14     @GetMapping("/boasVindas")
15     public String boasVindas(){
16         return "Seja bem vindo(a)";
17     }
18 }
19
20 }
```
- Terminal:** Shows logs from the application startup.

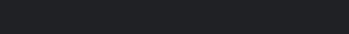
```
rt(s): 8080 (http) with context path ''
2023-01-22T11:51:53.268-03:00  INFO 5844 --- [ restartedMain] br.com.projeto.api.ApiApplication
on in 8.392 seconds (process running for 9.548)
2023-01-22T11:51:54.790-03:00  INFO 5844 --- [on(1)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/]
DispatcherServlet 'dispatcherServlet'
2023-01-22T11:51:54.825-03:00  INFO 5844 --- [on(1)-127.0.0.1] o.s.web.servlet.DispatcherServlet
'dispatcherServlet'
2023-01-22T11:51:54.830-03:00  INFO 5844 --- [on(1)-127.0.0.1] o.s.web.servlet.DispatcherServlet
: Completed initialization in 3 ms
```
- Output:** Shows the output of the application's log messages.
- Debug Console:** Shows options for running the application in PowerShell or the terminal.
- Status Bar:** Includes icons for file operations, a search bar, and system status (30°C, 11:53).

rota





localhost:8080/boasVindas



C++ VISUAL STUDIO



Domestika



ASSEMBLY



ss64



kernel.org

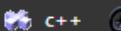


Linux kernel

Seja bem vindo(a)



localhost:8080



C++ VISUAL STUDIO



Outros favoritos

Hello World

Até aqui temos 2 rotas



EXPLORER

APIS-SPRING-BOOT

> .vscode

< api

> .mvn

> .vscode

< src

< main

< java

< br

< com

< projeto

< api

< controle

Controle.java 3

ApiApplication.java

> resources

> test

> target

< .gitignore

< HELP.md

< mvnw

< mvnw.cmd

< pom.xml

< README.md

Controle.java 3

```
api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(TM) by Red Hat > Controle > boasVindas()  
1      package br.com.projeto.api.controle;  
2  
3      import org.springframework.web.bind.annotation.GetMapping;  
4      import org.springframework.web.bind.annotation.RestController;  
5  
6      @RestController  
7      public class Controle {  
8  
9          @GetMapping("/")  
10         public String mensagem(){  
11             return "Hello World";  
12         }  
13  
14         @GetMapping("/boasVindas/{nome}")  
15         public String boasVindas(@PathVariable{  
16             return "Seja bem vindo(a)"  
17         }  
18  
19     }
```



Adicione a **@PathVariable** e seu import

• PathParam - jakarta.websocket.server
• PathVariable - org.springframework.web.bind.annotation
• PatchExchange - org.springframework.web.service.a...
• PatchMapping - org.springframework.web.bind.annot...

jakarta.websocket.server

Used to annotate method

endpoints the the ServerF

with a ServerEndpointVal

template.

File Edit Selection View Go Run Terminal Help

Controle.java - APIS-SPRING-BOOT - Visual Studio C

EXPLORER

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - ApiApplication.java
- resources
- test
- target
- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- README.md

Controle.java X

api > src > main > java > br > com > projeto > api > controle > Controle.java > ...

```
2
3     import org.springframework.web.bind.annotation.GetMapping;
4     import org.springframework.web.bind.annotation.PathVariable;
5     import org.springframework.web.bind.annotation.RestController;
6
7     @RestController
8     public class Controle {
9
10        @GetMapping("/")
11        public String mensagem(){
12            return "Hello World";
13        }
14
15        @GetMapping("/boasVindas/{nome}")
16        public String boasVindas(@PathVariable String nome){
17            return "Seja bem vindo(a)";
18        }
19
20    }
21 }
```

{nome} faz o spring pegar o nome dinamicamente
@PathVariable adicionado ao metodo só falta concatenar

File Edit Selection View Go Run Terminal Help

Controle.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

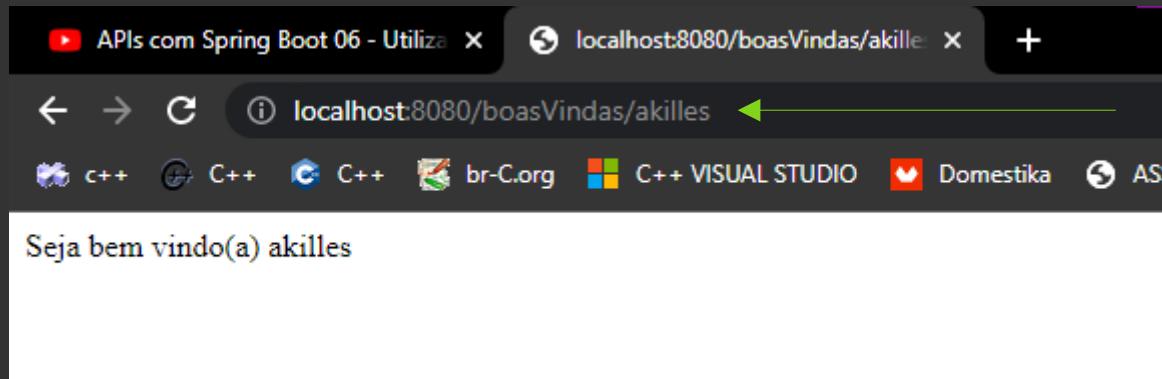
- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
- Controle.java
- ApiApplication.java
- resources
- test
- target
- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- README.md

Controle.java

api > src > main > java > br > com > projeto > api > controle > Controle.java > ...

```
2
3     import org.springframework.web.bind.annotation.GetMapping;
4     import org.springframework.web.bind.annotation.PathVariable;
5     import org.springframework.web.bind.annotation.RestController;
6
7     @RestController
8     public class Controle {
9
10        @GetMapping("/")
11        public String mensagem(){
12            return "Hello World";
13        }
14
15        @GetMapping("/boasVindas/{nome}")
16        public String boasVindas(@PathVariable String nome){
17            return "Seja bem vindo(a)" + nome;
18        }
19
20    }
```

Concatenando com nome
Agoar salve volte no navegador e teste





Se não for passado nenhum nome da esse erro
Mas tá de boa até aqui

File Edit Selection View Go Run Terminal Help

Controle.java - APIS-SPRING-BOOT - Visual Studio

EXPLORER

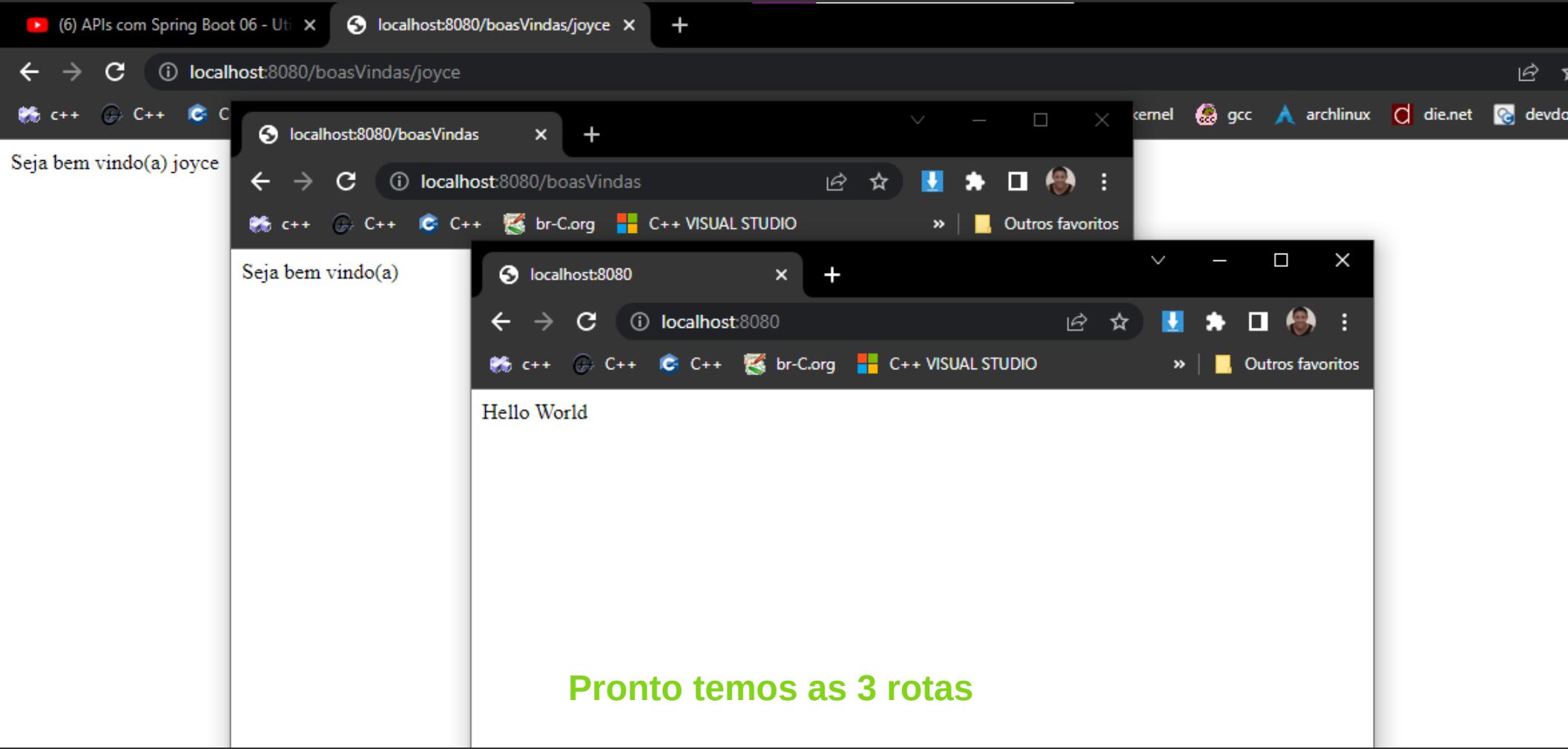
APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api- controle
 - Controle.java
 - ApiApplication.java
- resources
- test
- target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md

Controle.java

```
2
3     import org.springframework.web.bind.annotation.GetMapping;
4     import org.springframework.web.bind.annotation.PathVariable;
5     import org.springframework.web.bind.annotation.RestController;
6
7     @RestController
8     public class Controle {
9
10        @GetMapping("/")
11        public String mensagem(){
12            return "Hello World";
13        }
14
15        @GetMapping("/boasVindas")
16        public String boasVindas(){
17            return "Seja bem vindo(a) ";
18        }
19
20        @GetMapping("/boasVindas/{nome}")
21        public String boasVindas(@PathVariable String nome){
22            return "Seja bem vindo(a) " + nome;
23        }
24
25    }
```

Podemos resolver o erro adicionando a rota que falta



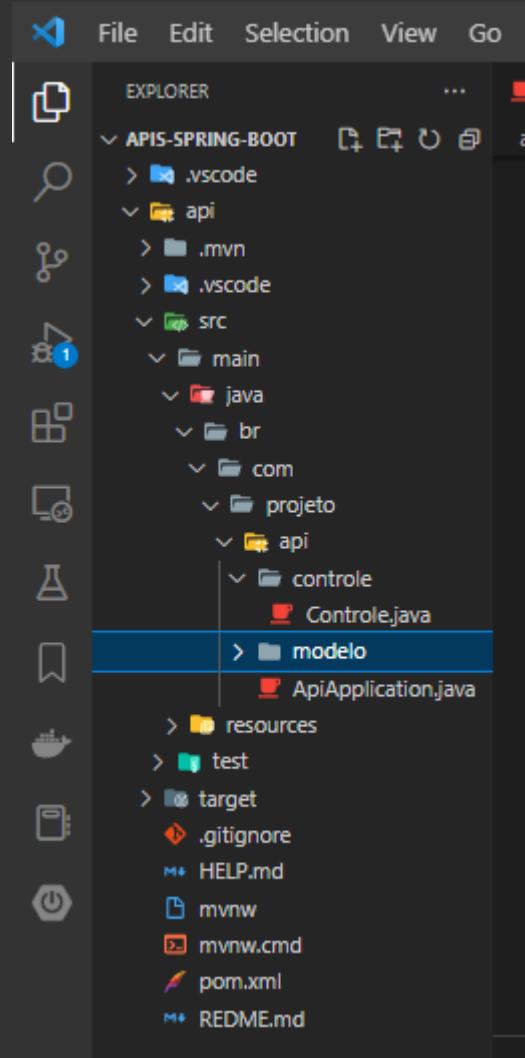
#7
MODELOS

**o que são modelos?
servem pra capturar os dados vindos de uma url
e criam tabelas sem precisar escrever o sql**

The screenshot shows the VS Code interface with a Java Spring Boot project named "APIS-SPRING-BOOT". The project structure in the Explorer sidebar includes ".vscode", "api", "src" (containing "main" and "java"), and "resources". The "java" folder under "main" contains "br", "com", and "projeto". The "projeto" folder contains "api" (which is currently selected) and "controle". Inside "api", there are "Controle.java" and "ApiApplication.java". The "resources" folder contains "test" and "target". A ".gitignore" file and "HELP.md" are also present. The "mvnw" file is shown at the bottom. The "Controle.java" file is open in the editor, displaying a simple REST controller with a single endpoint mapping "/" to the method "mensagem()". A context menu is open over the "api" folder in the Explorer, with the option "New Folder..." highlighted.

```
2  
3     import org.springframework.web.bind.annotation.  
4     import org.springframework.web.bind.annotation.  
5     import org.springframework.web.bind.annotation.  
6  
7     @RestController  
8     public class Controle {  
9  
10        @GetMapping("/")  
11        public String mensagem(){  
12            return "Hello World";  
13        }  
14    }
```

Crie uma nova pasta dentro da pasta api chamada modelo



The screenshot shows the Visual Studio Code interface with a Java Spring Boot project named "APIS-SPRING-BOOT". The project structure in the Explorer sidebar includes ".vscode", "api", ".mvn", ".vscode", "src" (containing "main" and "java" folders), and "modelo" (containing "ApiApplication.java"). The "java" folder has subfolders "br", "com", "projeto", "api", and "controle", with "Controle.java" being the active file.

The code in "Controle.java" is:

```
2
3 import org.springframework.web.bind.annotation.*;
4 import org.springframework.web.bind.annotation.RestController;
5 import org.springframework.web.bind.annotation.RequestMapping;
6
7 @RestController
8 public class Controle {
9
10    @RequestMapping("/")
11    public String mensagem(){
12        return "Hello World";
13    }
14
15    @RequestMapping("/boasVindas")
16    public String boasVindas(){
17        return "Bem-vindo ao meu projeto!";
18    }
}
```

A context menu is open over the "modelo" folder in the Explorer sidebar, with the "New File..." option highlighted. Other options in the menu include "New Folder...", "Reveal in File Explorer", "Open in Integrated Terminal", "Add Folder to Java Source Path", and "Remove Folder from Java Source Path".

Dentro da pasta **modelo** crie uma classe chamada **Pessoa.java**



File Edit Selection View Go Run Terminal Help

• Pessoa.java - APIS-SPRING-BOOT - Visual Studio



EXPLORER

...

Controle.java

Pessoa.java •



api > src > main > java > br > com > projeto > api > modelo > Pessoa.java

```
1 package br.com.projeto.api.modelo;  
2  
3 public class Pessoa {  
4     |  
5 }  
6
```

class Pessoa
interface Pessoa
enum Pessoa
record Pessoa()
abstract class Pessoa
@interface Pessoa



.vscode



api



.mvn



.vscode



src



main



java



br



com



projeto



api



controle



Controle.java



modelo



Pessoa.java



ApiApplication.java



resources



test



target



.gitignore



HELP.md



mvnw



mvnw.cmd



pom.xml



README.md

PROBLEMS

OUTPUT

TERMINAL

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Pessoa.java - APIS-SPRING-BOOT - Visual Studio Code.
- Explorer View:** Shows the project structure:
 - APIS-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - modelo
 - Pessoa.java
 - Pessoa.java 2
 - ApiApplication.java
- Code Editor:** The file Pessoa.java is open, showing the following code:

```
1 package br.com.projeto.api.modelo;
2
3 public class Pessoa {
4     private String nome;
5     private String idade;
6 }
7
8 }
```
- Toolbar:** Standard VS Code icons for file operations like Open, Save, Find, and Refresh.

Inicialmente crie esses 2 atributos nome e idade

**Lembrando que uma classe em java serve de modelo para construir objetos
atravez do seu construtor**

**Lembre-se de deixar os atributos sempre privados pois podemos manipula-
los atravez dos metodos get e set**

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

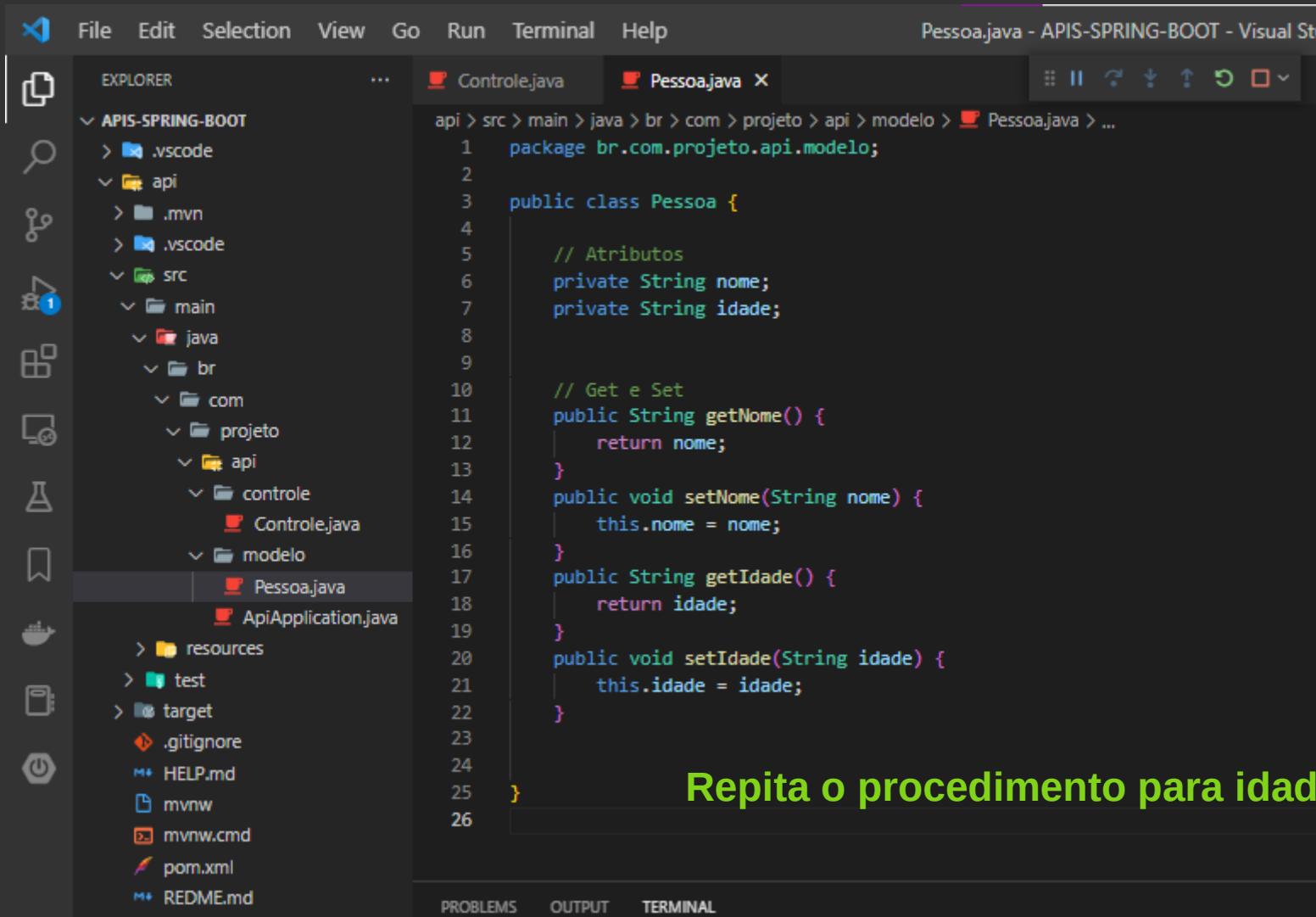
- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Pessoajava - APIS-SPRING-BOOT
- Explorer View:** Shows the project structure under 'APIS-SPRING-BOOT'. The 'src' folder contains 'main', 'java', 'br', 'com', 'projeto', 'api', 'controle', 'modelo', 'resources', 'test', and 'target' folders. Inside 'src/main/java', there are 'br.com.projeto.api.modelo' and 'br.com.projeto.api.controle' packages. 'br.com.projeto.api.modelo' contains 'Pessoa.java' and 'ApiApplication.java'. 'br.com.projeto.api.controle' contains 'Controle.java'. 'resources' contains 'application.properties' and 'application.yml'. 'target' contains 'classes', 'jar', and 'dependency' subfolders.
- Code Editor:** The file 'Pessoa.java' is open. The code is as follows:

```
package br.com.projeto.api.modelo;

public class Pessoa {

    // Atributos
    private String nome;
```
- Quick Fix Menu:** A context menu is open over the line 'private String nome;'. It includes options:
 - Quick Fix...
 - Remove 'nome', keep assignments with side effects
 - More Actions...
 - Generate Getter and Setter for 'nome' (highlighted)
 - Generate Getter for 'nome'
 - Generate Setter for 'nome'
 - Generate Constructors...
 - Add final modifier for 'nome'
- Bottom Status Bar:** Shows 'PROBLEMS 2', 'OUTPUT', and 'TERMINAL'.

Selecione toda a linha do nome e click na lampada e escolha gerar os metodos getters e setters



Repita o procedimento para idade

**Obs: quando gerei os metodos os metodos da idade ficaram por cima do nome
dai como no original era o nome por cima eu coloquei
Tente preservar a ordem dos attributos e coloque os getters e setters nessa
mesma ordem**

File Edit Selection View Go Run Terminal Help

Pessoajava - APIS-SPRING-BOOT - Visual S

EXPLORER

APIS-SPRING-BOOT

- > .vscode
- > api
- > .mvn
- > .vscode
- > src
- > main
- > java
- > br
- > com
- > projeto
- > api
- > controle
- > Controle.java
- > modelo
- > Pessoa.java
- > ApiApplication.java

Controle.java Pessoajava X

```
api > src > main > java > br > com > projeto > api > modelo > Pessoajava > ...
1 package br.com.projeto.api.modelo;
2
3 public class Pessoa {
4
5     // Atributos
6     private String nome;
7     private String idade;
8
9
10    // Get e Set
11    public String getNome() {
12        return nome;
13    }
14    public String getIdade() {
15        return idade;
16    }
17    public void setNome(String nome) {
18        this.nome = nome;
19    }
20    public void setIdade(String idade) {
21        this.idade = idade;
22    }
23
24 }
25
```

PROBLEMS OUTPUT TERMINAL

Colocados na ordem manualmente

#8

Vinculando modelos e controles

**Devemos criar uma rota que retorne obrigatoriamente um nome e uma idade
Pois tenho essas características no modelo pessoa**

File Edit Selection View Go Run Terminal Help • Controle.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
- main
- java
- br
- com
- projeto
- api
- controle

Controle.java 3 Pessoajava

api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(TM) by Red Hat > Controle

```
2
3     import org.springframework.web.bind.annotation.GetMapping;
4     import org.springframework.web.bind.annotation.PathVariable;
5     import org.springframework.web.bind.annotation.RestController;
6
7     @RestController
8     public class Controle {
9
10        @GetMapping("/")
11        public String mensagem(){
12            return "Hello World";
13        }
14
15        @GetMapping("/boasVindas")
16        public String boasVindas(){
17            return "Seja bem vindo(a) ";
18        }
19
20        @GetMapping("/boasVindas/{nome}")
21        public String boasVindas(@PathVariable String nome){
22            return "Seja bem vindo(a) " + nome;
23        }
24
25        public Pes
26    }
```

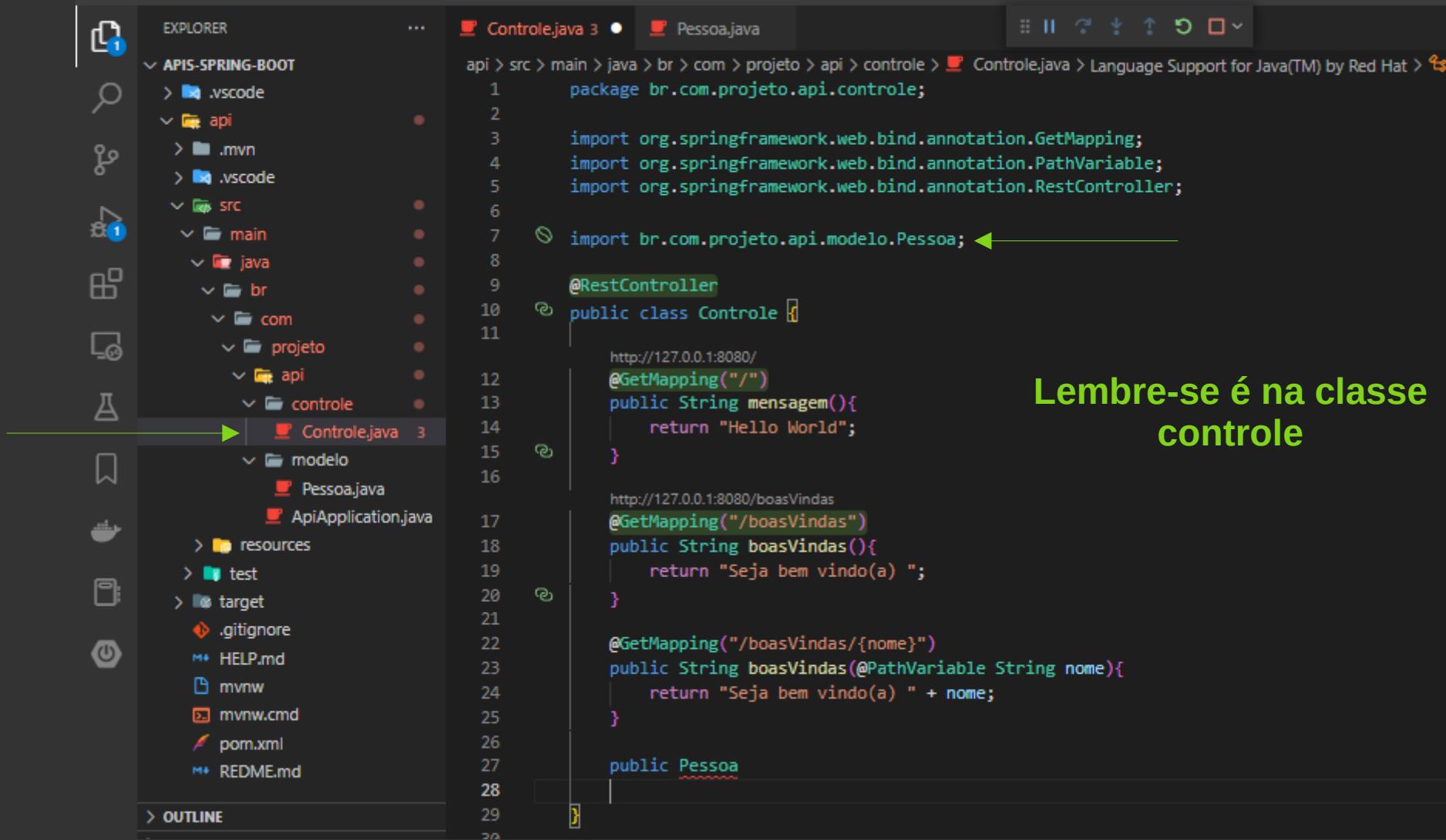
Crie a rota e importe Pessoa e adicione seu importe

PROBLEMS 3 OUTPUT TERMINAL

Pessoajava

br.com.projeto.api.modelo.Pessoa

linksResolver : Exposing 1 endpoint(
TomcatWebServer : Tomcat started on port
Application : Started ApiApplicati
on in 1.686 seconds (proc
PersistentValve - org.apache.catalina.valves
INFO 5844 --- [restartedmain] .ConditionnevaluationueltaloggingListener : Condition evaluation



Lembre-se é na classe controle



File Edit Selection View Go Run Terminal Help

Controle.java - APIS-SPRING-BOOT - Visual Studio



EXPLORER

APIS-SPRING-BOOT

.vscode

api

.mvn

.vscode

src

main

java

br

com

projeto

api

controle

Controle.java 1

modelo

Pessoa.java

ApiApplication.java

resources

test

target

.gitignore

HELP.md

mvnw

mvnw.cmd

pom.xml

README.md

Controle.java 1 X

Pessoa.java

Controle.java - APIS-SPRING-BOOT - Visual Studio

```
api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java
      import org.springframework.web.bind.annotation.RestController;
      import br.com.projeto.api.modelo.Pessoa;
      @RestController
      public class Controle {
          http://127.0.0.1:8080/
          @GetMapping("/")
          public String mensagem(){
              return "Hello World";
          }
          http://127.0.0.1:8080/boasVindas
          @GetMapping("/boasVindas")
          public String boasVindas(){
              return "Seja bem vindo(a) ";
          }
          @GetMapping("/boasVindas/{nome}")
          public String boasVindas(@PathVariable String nome){
              return "Seja bem vindo(a) " + nome;
          }
          public Pessoa pessoa(){
          }
      }
```

A ideia é pegar o nome e a
idade mais não via url
devemos usar o requestbody

O nome da rota é pessoa

EXPLORER

- APIS-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java 3
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md
 - OUTLINE
 - TIMELINE
 - JAVA PROJECTS

Controle.java 3 • Pessoa.java

```
api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(TM) by Red Hat > Controle > pessoa()  
5     import org.springframework.web.bind.annotation.RestController;  
6  
7     import br.com.projeto.api.modelo.Pessoa;  
8  
9     @RestController  
10    public class Controle {  
11  
12        @GetMapping("/")  
13        public String mensagem(){  
14            return "Hello World";  
15        }  
16  
17        @GetMapping("/boasVindas")  
18        public String boasVindas(){  
19            return "Seja bem vindo(a) ";  
20        }  
21  
22        @GetMapping("/boasVindas/{nome}")  
23        public String boasVindas(@PathVariable String nome){  
24            return "Seja bem vindo(a) " + nome;  
25        }  
26  
27        public Pessoa pessoa(@Request){  
28            RequestAttribute - org.springframework.web.bind.a...  
29        }  
30  
31    }
```

Adicione a anotation e seu import

org.springframework.web.bind.annotation.RequestAttribute x
n.RequestAttribute

Annotation to bind a method parameter to a request attribute.

The main motivation is to provide convenient access to request attributes from a controller method with an optional/required check and a cast to the target method parameter type.

- Since:
 - 4.3
- Author:
 - Rossen Stoyanchev
- See Also:
 - RequestMapping
 - SessionAttribute

EXPLORER

APIS-SPRING-BOOT

- > .vscode
- < api
 - > .mvn
 - > .vscode
- < src
 - < main
 - < java
 - < br
 - < com
 - < projeto
 - < api
 - < controle
 - Controle.java 3
 - > resources
 - > test
 - > target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md

Controle.java 3 • Pessoajava

api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(

```
2
3 import org.springframework.web.bind.annotation.GetMapping;
4 import org.springframework.web.bind.annotation.PathVariable;
5 import org.springframework.web.bind.annotation.RequestBody;
6 import org.springframework.web.bind.annotation.RestController;
7
8 import br.com.projeto.api.modelo.Pessoa;
9
10 @RestController
11 public class Controle {
12
13     http://127.0.0.1:8080/
14     @GetMapping("/")
15     public String mensagem(){
16         return "Hello World";
17     }
18
19     http://127.0.0.1:8080/boasVindas
20     @GetMapping("/boasVindas")
21     public String boasVindas(){
22         return "Seja bem vindo(a) ";
23     }
24
25     @GetMapping("/boasVindas/{nome}")
26     public String boasVindas(@PathVariable String nome){
27         return "Seja bem vindo(a) " + nome;
28     }
29
30     public Pessoa pessoa(@RequestBody){}
31 }
```

File Edit Selection View Go Run Terminal Help

• Controle.java - APIS-SPRING-BOOT - Visual

EXPLORER

APIS-SPRING-BOOT

- > .vscode
- < api
- > .mvn
- > .vscode
- < src
- < main
- < java
- < br
- < com
- < projeto
- < api
- < controle
- Controle.java
- < modelo
- Pessoa.java
- ApiApplication.java

> resources

> test

> target

.gitignore

HELP.md

mvnw

mvnw.cmd

pom.xml

REDME.md

OUTLINE

```
    7
    8     import br.com.projeto.api.modelo.Pessoa;
    9
   10    @RestController
   11    public class Controle {
   12
   13        http://127.0.0.1:8080/
   14        @GetMapping("/")
   15        public String mensagem(){
   16            return "Hello World";
   17
   18        http://127.0.0.1:8080/boasVindas
   19        @GetMapping("/boasVindas")
   20        public String boasVindas(){
   21            return "Seja bem vindo(a) ";
   22
   23        @GetMapping("/boasVindas/{nome}")
   24        public String boasVindas(@PathVariable String nome){
   25            return "Seja bem vindo(a) " + nome;
   26
   27
   28        public Pessoa pessoa(@RequestBody Pessoa p){
   29            return p;
   30
   31
   32
   33    }
```

Pessoa é o tipo de dado que espero

Nome desse objeto do tipo Pessoa
p

O que retornamos

**Quando usamos o @RequestBody não podemos usar o @GetMapping
Pois ele não tem suporte ao @RequestBody**

Dai usamo o
@PostMapping

Lembrando que todos os verbos http tem seus POST GET DELETE UPDATE ETC...

File Edit Selection View Go Run Terminal Help • Controle.java - APIS-SPRING-BOOT - Visual Studio Code jakarta.annotation.PostConstruct

EXPLORER ... Controle.java 1 Pessoajava

APIS-SPRING-BOOT .vscode api .mvn .vscode src main java br com projeto api controle Controle.java Language Support

```
    7
    8     import br.com.projeto.api.modelo.Pessoa;
    9
   10    @RestController
   11    public class Controle {
   12
   13        http://127.0.0.1:8080/
   14        @GetMapping("/")
   15        public String mensagem(){
   16            return "Hello World";
   17
   18        http://127.0.0.1:8080/boasVindas
   19        @GetMapping("/boasVindas")
   20        public String boasVindas(){
   21            return "Seja bem vindo(a) ";
   22
   23        @GetMapping("/boasVindas/{nome}")
   24        public String boasVindas(@PathVariable String nome){
   25            return "Seja bem vindo(a) " + nome;
   26
   27
   28        @Post
   29        public void PostConstruct - jakarta.annotation
   30
   31
   32
   33
   34
   35 }
```

PROBLEMS 1 OUTPUT

TERMINAL 2023-01-22T12:43:17.507+00:00 [INFO] 3044 --- [restartedMain] br.com.projeto.apispringbootApplication : Started ApispringbootApplication in 1.861 seconds (process running for 3094.247)

Adicionamos O post e seu import

The `PostConstruct` annotation is used on a method that needs to be executed after dependency injection is done to perform any initialization. This method must be invoked before the class is put into service. This annotation must be supported on all classes that support dependency injection. The method annotated with `PostConstruct` must be invoked even if the class does not request any resources to be injected. Only one method in a given class can be annotated with this annotation. The method on which the `PostConstruct` annotation is applied must fulfill all of the following criteria:

- The method must not have any parameters except in the case of interceptors in which case it takes an `InvocationContext` object as defined by the Jakarta Interceptors specification.
- The method defined on an interceptor class or superclass of an interceptor class must have one of the following signatures:
 - `void (InvocationContext)`
 - `Object (InvocationContext) throws Exception`

Note: A `PostConstruct` interceptor method must not throw application exceptions, but it may be declared to throw checked exceptions including the `java.lang.Exception` if the same interceptor method interposes on business or timeout methods in addition to lifecycle events. If a `PostConstruct` interceptor method returns a value, it is ignored by the container.

- The method defined on a non-interceptor class must have the following signature:

EXPLORER ...

APIS-SPRING-BOOT

- > .vscode
- < api
- > .mvn
- > .vscode
- < src
- < main
- < java
- < br
- < com
- < projeto
- < api
- < controle
- Controle.java
- < modelo
- Pessoa.java
- ApiApplication.java
- > resources
- > test
- > target
- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- REDME.md

Controle.java • Pessoa.java

api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support

```
2
3      import org.springframework.web.bind.annotation.GetMapping;
4      import org.springframework.web.bind.annotation.PathVariable;
5      import org.springframework.web.bind.annotation.PostMapping;
6      import org.springframework.web.bind.annotation.RequestBody;
7      import org.springframework.web.bind.annotation.RestController;
8
9      import br.com.projeto.api.modelo.Pessoa;
10
11     @RestController
12     public class Controle {
13
14         http://127.0.0.1:8080/
15         @GetMapping("/")
16         public String mensagem(){
17             return "Hello World";
18
19         http://127.0.0.1:8080/boasVindas
20         @GetMapping("/boasVindas")
21         public String boasVindas(){
22             return "Seja bem vindo(a) ";
23
24         @GetMapping("/boasVindas/{nome}")
25         public String boasVindas(@PathVariable String nome){
26             return "Seja bem vindo(a) " + nome;
27
28
29         @PostMapping
30         public Pessoa pessoa(@RequestBody Pessoa p){
31             return p;
32
33 }
```

PROBLEMS OUTPUT TERMINAL

EXPLORER ... Controle.java X Pessoa.java

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - resources
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md

OUTLINE

TIMELINE

JAVA PROJECTS

```
api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java
```

```
6     import org.springframework.web.bind.annotation.RequestBody;
7     import org.springframework.web.bind.annotation.RestController;
8
9     import br.com.projeto.api.modelo.Pessoa;
10
11    @RestController
12    public class Controle {
13
14        @GetMapping("/")
15        public String mensagem(){
16            return "Hello World";
17        }
18
19        @GetMapping("/boasVindas")
20        public String boasVindas(){
21            return "Seja bem vindo(a) ";
22        }
23
24        @GetMapping("/boasVindas/{nome}")
25        public String boasVindas(@PathVariable String nome){
26            return "Seja bem vindo(a) " + nome;
27        }
28
29        @PostMapping("/pessoa")
30        public Pessoa pessoa(@RequestBody Pessoa p){
31            return p;
32        }
33    }
```

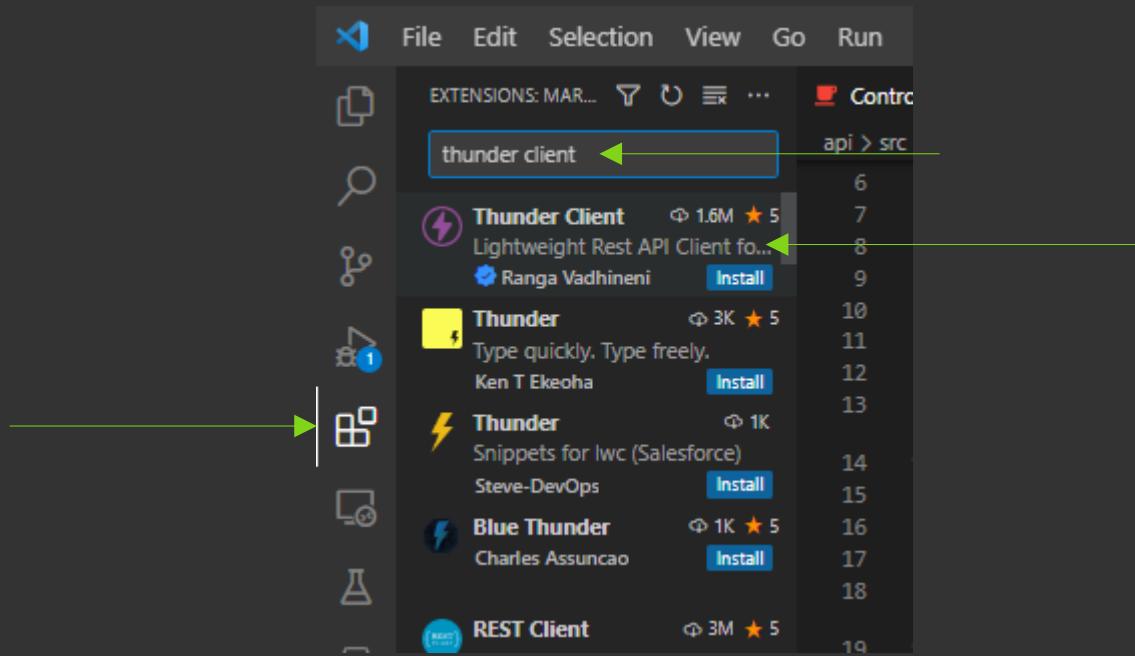
PROBLEMS OUTPUT TERMINAL

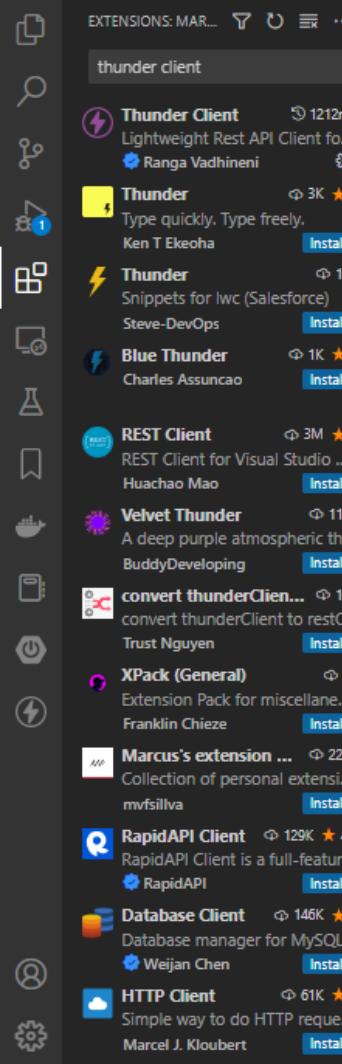
Por fim criamos a rota /pessoa

#9
Testando o projeto com thunder

Quando utilizamos o @PostMapping não podemos utilizar o navegador pois ele não tem suporte precisamos baixar uma extenção por isso vamos baixar o thunder client

Se não quisermos poderemos usar o postman ou o insomnia





Extension: Thunder Client X Pessoajava

Thunder Client v2.3.4

Ranga Vadhineni | 1,637,530 | ★★★★★(155) | Sponsor

Lightweight Rest API Client for VS Code

Disable Uninstall ⚙️

This extension is enabled globally.

Pronto instalamos

Details Feature Contributions Changelog Runtime Status

Thunder Client

Thunder Client is a lightweight Rest API Client Extension for Visual Studio Code, hand-crafted by [Ranga Vadhineni](#) with simple and clean design.

- Voted as #10 Product of the day on Product Hunt
- Website - www.thunderclient.com
- Follow Twitter for updates - twitter.com/thunder_client
- Support: github.com/rangav/thunder-client-support

Story behind Thunder Client

- Read Launch Blog Post on [Medium](#)

Usage

- Install the Extension, Click Thunder Client icon on the Action Bar.
- From Sidebar click [New Request](#) button to test API

TERMINAL

```
2023-03-00 INFO 5844 --- [ restartedMain] br.com.projeto.api.ApiApplication      : Started ApiApplication (process running for 4041.403)
2023-03-00 INFO 5844 --- [ restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation
```

Categories

Programming Languages Snippets Testing

Extension Resources

Marketplace Repository License Ranga Vadhineni

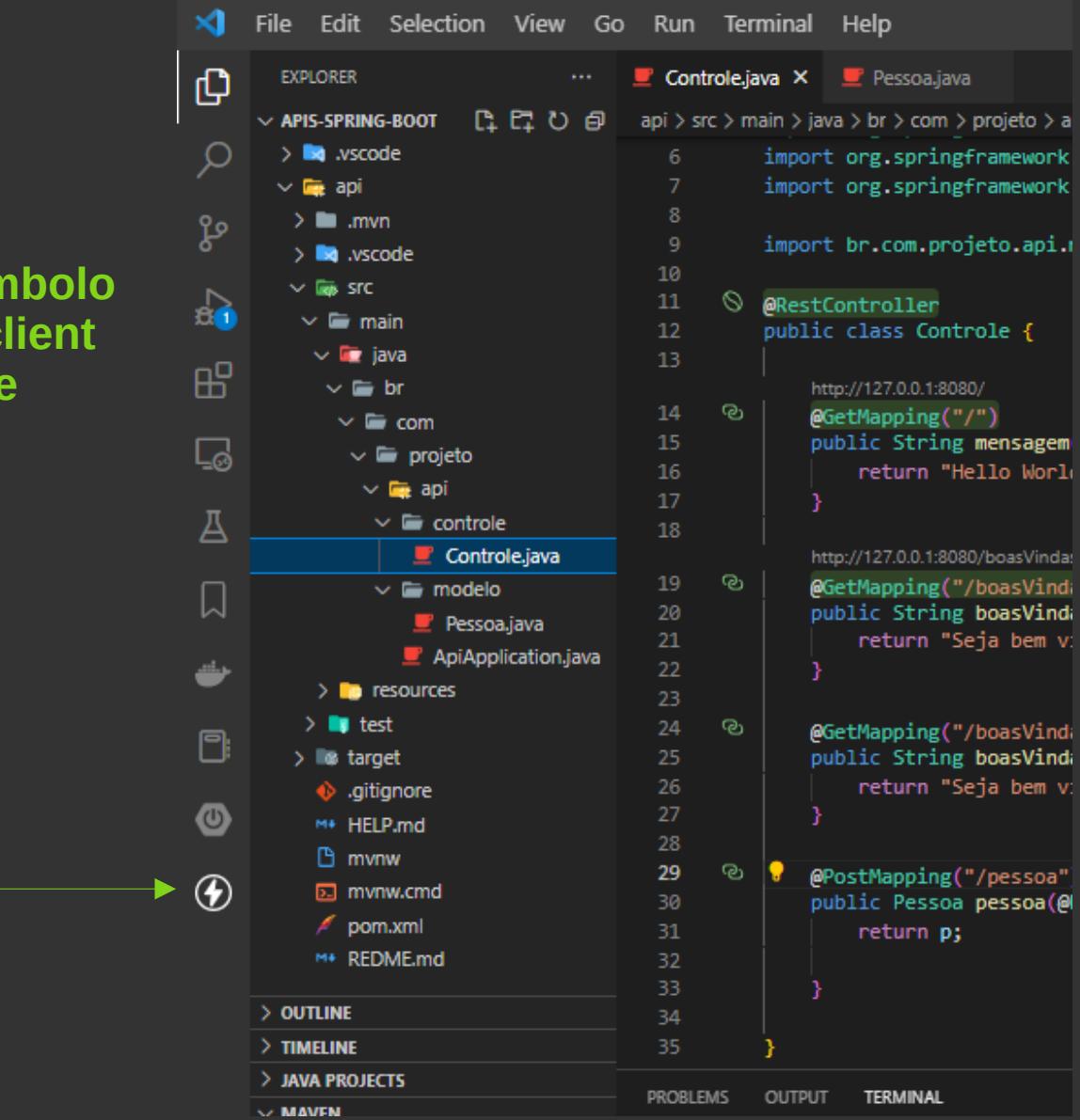
More Info

Published 3/30/2021, 09:59:45
Last released 1/22/2023, 05:38:57
Identifier rangav.vscode-thunder-client

DEBUG CONSOLE

powershell
Run: ApiAp...

Repare no simbolo
do thunder client
Click nele

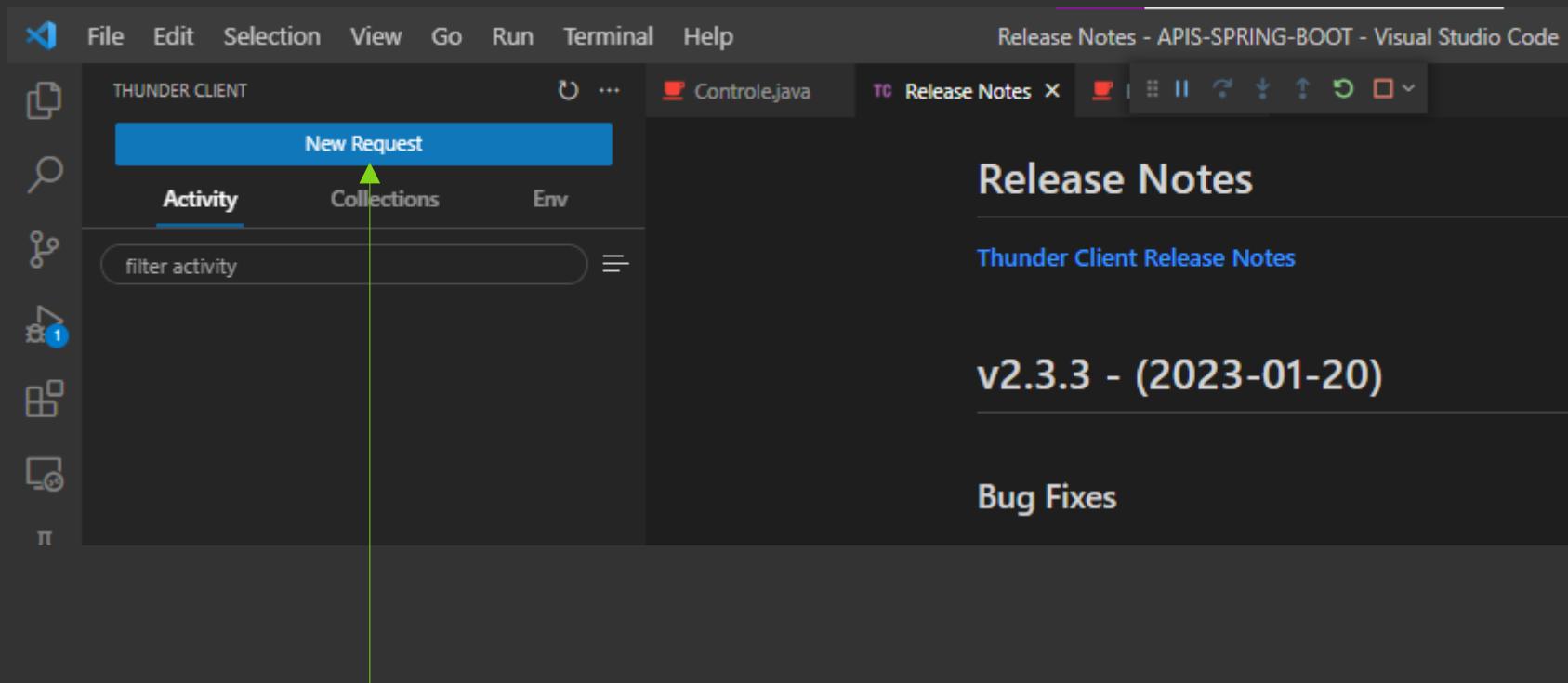


The screenshot shows the Visual Studio Code interface with the following details:

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Explorer Bar:** Shows the project structure under "APIS-SPRING-BOOT".
 - src folder contains main, java, br, com, projeto, api, controle, modelo, and resources.
 - java folder contains Controle.java, Pessoa.java, and ApiApplication.java.
 - resources folder contains application.properties.
 - test folder.
 - target folder.
 - gitignore file.
 - HELP.md file.
 - mvnw file.
 - mvnw.cmd file.
 - pom.xml file.
 - README.md file.
- Editor:** The file "Controle.java" is open, showing Java code for a Spring Controller.

```
6 import org.springframework.web.bind.annotation.GetMapping;
7 import org.springframework.web.bind.annotation.PostMapping;
8 import br.com.projeto.api.modelo.Pessoa;
9 import br.com.projeto.api.servico.ServicoPessoa;
10
11 @RestController
12 public class Controle {
13
14     @GetMapping("/")
15     public String mensagem() {
16         return "Hello World";
17     }
18
19     @GetMapping("/boasVindas")
20     public String boasVindas() {
21         return "Seja bem vindo!";
22     }
23
24     @GetMapping("/boasVindas")
25     public String boasVindas() {
26         return "Seja bem vindo!";
27     }
28
29     @PostMapping("/pessoa")
30     public Pessoa pessoa(@RequestBody Pessoa p) {
31         return p;
32     }
33 }
```
- Status Bar:** Shows the status "APIs-Spring-Boot" and the number "1" in the status bar.

Click em new request



File Edit Selection View Go Run Terminal Help New Request - APIS-SPRING-BOOT - Visual Studio Code

THUNDER CLIENT

New Request

Activity Collections Env filter activity

Controle.java Release Notes

GET https://www.thunderclient.com/welcome Send

Status: Size: Time:

Query Headers 2 Auth Body Tests Pre Run New Response Headers Cookies Results Docs

Query Parameters

parameter value

Welcome to Thunder Client

Your activity will appear here...

Send Request Ctrl + Enter

Import Curl Ctrl + U

Change Environment Ctrl + E

Git Sync Details

PROBLEMS OUTPUT TERMINAL

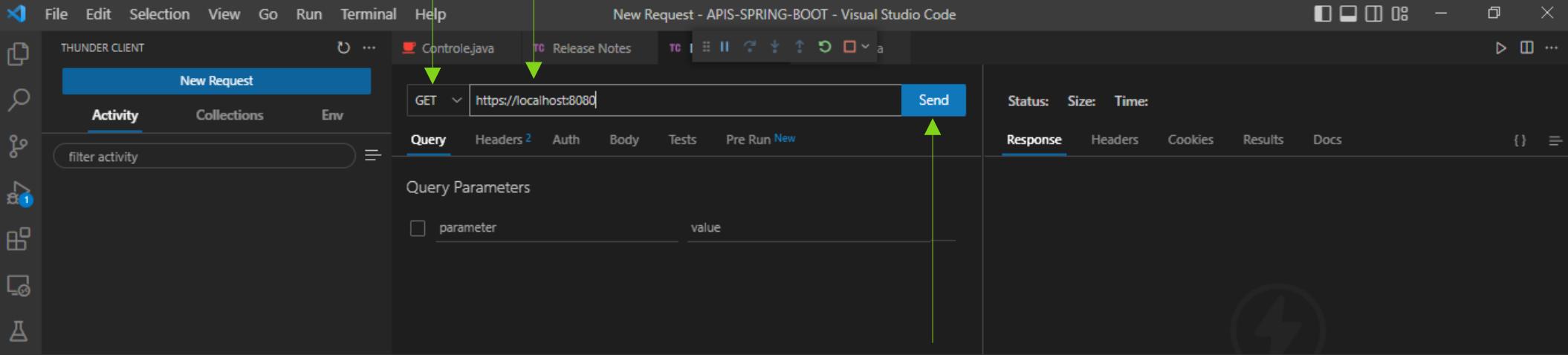
2023-01-22T12:59:05.123-03:00 INFO 5844 --- [restartedMain] br.com.projeto.api.ApiApplication : Started ApiApplication in 0.798 seconds (process running for 4041.403)

2023-01-22T12:59:05.139-03:00 INFO 5844 --- [restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation unchanged

DEBUG CONSOLE

powershell Run: ApiAp...

31°C Parc ens... 13:09

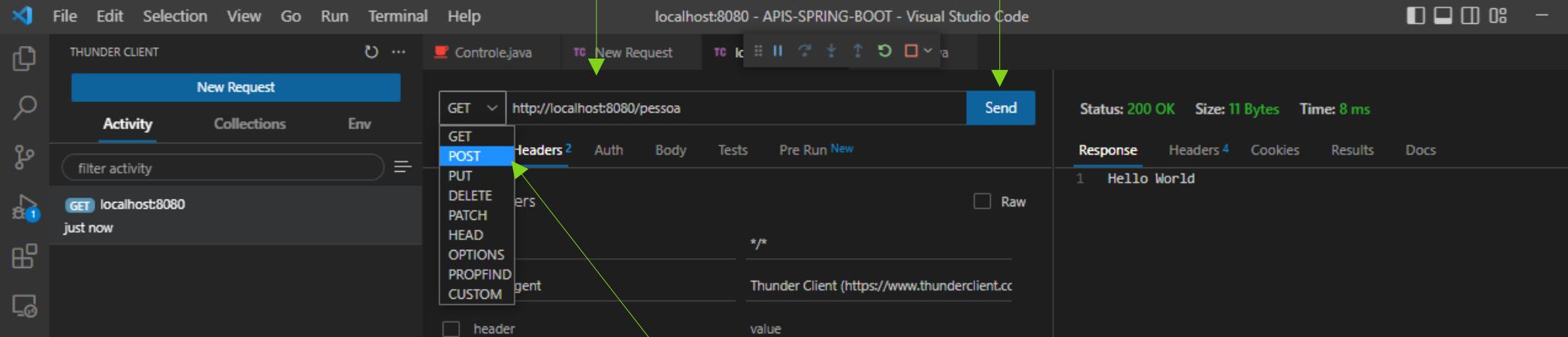


Fazemos um teste na rota hello world digite a url com o metodo get e click em send

A screenshot of the Thunder Client extension in Visual Studio Code. The interface shows a request being sent to `http://localhost:8080/`. The response status is `200 OK`, size is `11 Bytes`, and time is `8 ms`. The response body contains the text `Hello World`.

The Thunder Client sidebar shows a recent activity: a `GET` request to `localhost:8080` just now.

Como deu erro copie e coleia a própria url do navegador dai deu certo



Para acessar a rota /pessoa troque o metodo para POST cole a url e de send

File Edit Selection View Go Run Terminal Help localhost:8080 - APIS-SPRING-BOOT - Visual Studio Code

THUNDER CLIENT

New Request

Activity Collections Env

filter activity

POST localhost:8080 just now

Controle.java New Request

POST http://localhost:8080/pessoa Send

Headers 2 Query Auth Body Tests Pre Run New

Http Headers Raw

Accept */*

User-Agent Thunder Client (https://www.thunderclient.cc)

header value

Status: 400 Bad Request Size: 5.83 KB Time: 57 ms

Response Headers 4 Cookies Results Docs

```
1 {
2   "timestamp": "2023-01-22T16:16:37.356+00:00",
3   "status": 400,
4   "error": "Bad Request",
5   "trace": "org.springframework.http.converter.HttpMessageNotReadableException: Required request body is missing: public br.com.projeto.api.modelo.Pessoa br.com.projeto.api.controle.Controle.pessoa(br.com.projeto.api.modelo.Pessoa)\r\n\r\nat org.springframework.web.servlet.mvc.method.annotation.RequestResponseBodyMethodProcessor.readWithMessageConverters(RequestResponseBodyMethodProcessor.java:166)\r\n\r\nat org.springframework.web.servlet.mvc.method.annotation.RequestResponseBodyMethodProcessor.resolveArgument(RequestResponseBodyMethodProcessor.java:136)\r\n\r\nat org.springframework.web.method.support.HandlerMethodArgumentResolverComposite.resolveArgument(HandlerMethodArgumentResolverComposite.java:122)\r\n\r\nat org.springframework.web.method.support.InvocableHandlerMethod.getMethodArgumentValues(InvocableHandlerMethod.java:181)\r\n\r\nat org.springframework.web.method.support.InvocableHandlerMethod.invokeForRequest(InvocableHandlerMethod.java:148)\r\n\r\nat org.springframework.web.servlet.mvc.method.annotation.ServletInvocableHandlerMethod.invokeAndHandle(ServletInvocableHandlerMethod.java:117)\r\n\r\nat org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandlerAdapter.invokeHandlerMethod(RequestMappingHandlerAdapter.java:884)\r\n\r\nat org.springframework.web.servlet.mvc.method.annotation
```

PROBLEMS OUTPUT TERMINAL

TERMINAL

```
ted initialization in 1 ms
2023-01-22T13:16:37.351-03:00  WARN 5844 --- [nio-8080-exec-8] .w.s.m.s.DefaultHandlerExceptionResolver : Resolved [org.springframework.http.converter.HttpMessageNotReadableException: Required request body is missing: public br.com.projeto.api.modelo.Pessoa br.com.projeto.api.controle.Controle.pessoa(br.com.projeto.api.modelo.Pessoa)]
```

DEBUG CONSOLE

powershell Run: ApiApp...

31°C Parc ens... 13:16

Click em body

Lembre-se que json não é o único formato temos xml entre outros mais o mais utilizado é jason veja qual eles estão pedindo nesse caso é json e na grande maioria sera

A screenshot of the Thunder Client extension in Visual Studio Code. The interface shows a 'New Request' dialog with the following details:

- Method: POST
- Endpoint: http://localhost:8080/pessoa
- Body tab selected
- Content type: Json
- JSON Content:

```
1 {  
2     "nome": "Cristiano",  
3     "idade": 40  
4 }
```

The 'Send' button is highlighted with a blue arrow pointing towards it. To the right, the response area is visible with tabs for Response, Headers, Cookies, Results, and Docs.

No body crie seu objeto json
E depois click em send

File Edit Selection View Go Run Terminal Help localhost:8080 - APIS-SPRING-BOOT - Visual Studio Code

THUNDER CLIENT ApiApplication.java localhost:8080

New Request

Activity Collections Env

filter activity

POST localhost:8080 just now

POST http://localhost:8080/pessoa Send

Query Headers 2 Auth Body 1 Tests Pre Run New

Json Xml Text Form Form-encode Graphql Binary

Json Content Format

```
1 {  
2   "nome": "Cristiano",  
3   "idade": 40  
4 }
```

Status: 200 OK Size: 33 Bytes Time: 187 ms

Response Headers 4 Cookies Results Docs

```
1 {  
2   "nome": "Cristiano",  
3   "idade": "40"  
4 }
```

Conseguimos passar o objeto via body
Desse jeito os dados não são passados
pela url e você pode até passar senhas

PROBLEMS OUTPUT TERMINAL

TERMINAL

```
(s): 8080 (http) with context path ''  
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [ restartedMain] br.com.projeto.api.ApiApplication  
in 18.894 seconds (process running for 22.481)  
2023-01-22T13:41:52.193-03:00 INFO 10316 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/]  
spatcherServlet 'dispatcherServlet'  
2023-01-22T13:41:52.194-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet  
dispatcherServlet:  
2023-01-22T13:41:52.200-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet  
on in 4 ms
```

DEBUG CONSOLE

: Started ApiApplication
: Initializing Spring Di
: Initializing Servlet '
: Completed initializati

powershell Run: ApiAp...

31°C Parc ens... 13:45

#10
Criando a base de dados

Nesse passo podemos usar o mysql ou qualquer outro tipo para criar a base de dados
Nesse caso usarei uma extensão para mysql no próprio vscode

File Edit Selection View Go Run Terminal Help

Extension: MySQL - APIS-SPRING-BOOT - Visual Studio Code

EXTENSIONS: MARKETPLACE

mysql

- MySQL** v1.1M ★ 3.5
MySQL management tool
Jun Han [Install](#)
- MySQL** v767K ★ 4
Database manager for MySQL/Maria...
WeiJian Chen [Install](#)
- MySQL Syntax** v430K ★ 3
MySQL syntax highlighting support
Jake Bathman [Install](#)
- SQLTools MySQL/Mari...** v519K ★ 5
SQLTools MySQL/MariaDB
Matheus Teixeira [Install](#)
- mysql-inline-decorator** v108K ★ 3
Add color coding to inline MySQL st...
odubuc [Install](#)
- MySQL Autocomplete** v24K ★ 5
MySQL Sintax Autocomplete for Vis...
nospinozacr [Install](#)
- MySQL Statement Scr...** v41K ★ 5
Easy mysql statement running with s...
Jared Black [Install](#)
- ES7 JavaScript/Node/...** v38K ★ 5
Simple extension for Node, javascript...
abrahamwilliam007 [Install](#)
- SQLite & MySQL Snipp...** v27K ★ 5
A snippet for MySQL and SQLite, to ...
Rohit Chouhan [Install](#)
- MySQL Tool** v2K ★ 4.5

Extension: MySQL X

MySQL v6.1.3

Weijan Chen | 767,140 | ★★★★☆(191)

Database manager for MySQL/MariaDB, PostgreSQL, SQLite, Redis and ElasticSearch.

[Install](#)

Details Feature Contributions Changelog

Database Client

This project is no longer maintain for free and requires payment to unlock all features. At the same time I will put more effort into developing this project.

The online document is migrate to [doc.database-client.com](#).

vscode marketplace v6.1.3 installs 767k stars 2k rating 4.1/5 (191) license MIT

This project is a database client for VSCode, supports manager MySQL/MariaDB, PostgreSQL, SQLite, Redis, ClickHouse, 达梦, and ElasticSearch, and works as an SSH client, boost your maximum productivity!

Project site: [vscode-database-client](#), 中文文档

PROBLEMS OUTPUT TERMINAL

TERMINAL

DEBUG CONSOLE

Categories

Programming Languages Keymaps

Extension Resources

Marketplace Repository License Weijan Chen

More Info

Published 5/5/2020, 05:03:00
Last released 1/13/2023, 19:54:23
Identifier cweijan.vscode-mysql-client?

Va em extensões e instale essa extensão para o mysql

EXTENSIONS: MARKETPLACE

mysql

- MySQL** v1.1M ★ 3.5
MySQL management tool
Jun Han [Install](#)
- MySQL** Database manager for MySQL/Maria...
Weijan Chen [Install](#)
- MySQL Syntax** v430K ★ 3
MySQL syntax highlighting support
Jake Bathman [Install](#)
- SQLTools MySQL/Mari...** v519K ★ 5
SQLTools MySQL/MariaDB
Matheus Teixeira [Install](#)
- mysql-inline-decorator** v108K ★ 3
Add color coding to inline MySQL st...
odubuc [Install](#)
- MySQL Autocomplete** v24K ★ 5
MySQL Syntax Autocomplete for Vis...
nospinozacr [Install](#)
- MySQL Statement Scr...** v41K ★ 5
Easy mysql statement running with s...
Jared Black [Install](#)
- ES7 JavaScript/Node/...** v38K ★ 5
Simple extension for Node, javascript...
abrahamwilliam007 [Install](#)
- SQLite & MySQL Snipp...** v27K ★ 5
A snippet for MySQL and SQLite, to ...
Rohit Chouhan [Install](#)
- MySQL Tool** v2K ★ 4.5
MySQL management tool is a unifie...
wycliffe Pepela [Install](#)
- MySQL Inline Decorator...** v1K ★ 5
Ilyas Akin [Install](#)
- Go MySQL Highlighter** v5K ★ 5
Syntax highlights MySQL strings in G...
Stirling Marketing Group [Install](#)

Extension: MySQL X



MySQL v6.1.3

Weijan Chen | 767,140 | ★★★★☆(191)

Database manager for MySQL/MariaDB, PostgreSQL, SQLite, Redis and ElasticSearch.

[Disable](#) [Uninstall](#) [⚙️](#)

This extension is enabled globally.

[Details](#) [Feature Contributions](#) [Changelog](#)

Database Client

This project is no longer maintain for free and requires payment to unlock all features. At the same time I will put more effort into developing this project.

The online document is migrate to [doc.database-client.com](#).

vscode marketplace v6.1.3 installs 767k stars 2k rating 4.1/5 (191) license MIT

This project is a database client for VSCode, supports manager MySQL/MariaDB, PostgreSQL, SQLite, Redis, ClickHouse, and ElasticSearch, and works as an SSH client, boost your maximum productivity!

PROBLEMS OUTPUT TERMINAL

TERMINAL

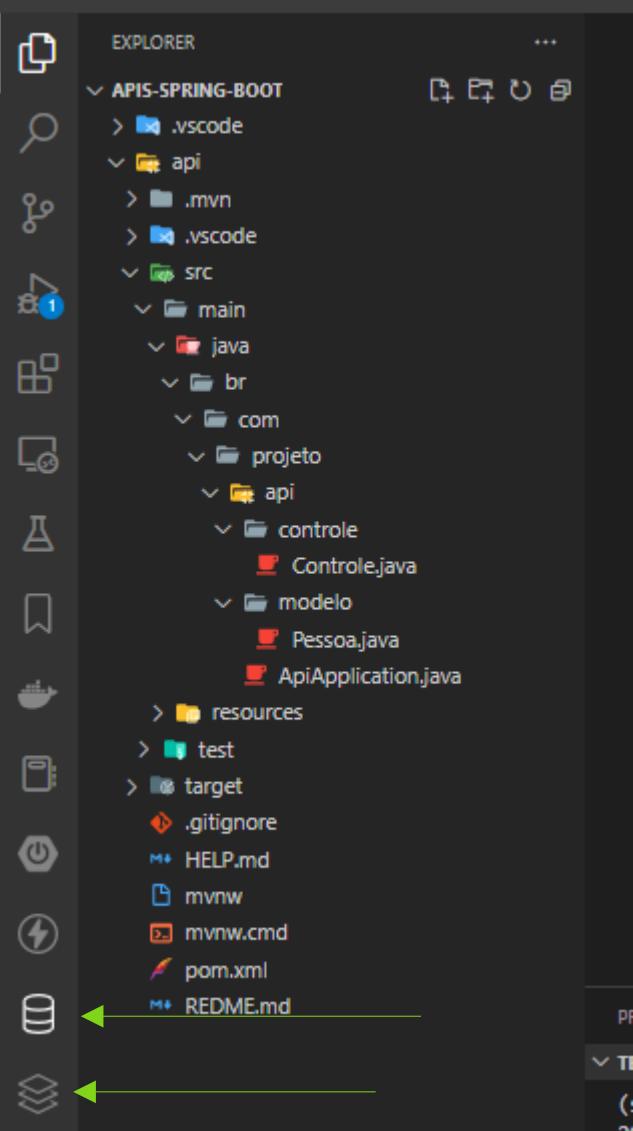
```
(s): 8080 (http) with context path ""
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [ restartedMain] br.com.projeto.api.ApiApplication : Started ApiApp...
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Sp...
2023-01-22T13:41:52.193-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Se...
2023-01-22T13:41:52.194-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initi...
2023-01-22T13:41:52.200-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initialization in 4 ms
```

DEBUG CONSOLE

- [powershell](#)
- [Run: ApiAp...](#)

31°C Parc ens... 13:53

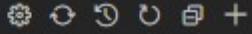
File Edit Selection View Go Run Terminal



Ela cria 2 atalhos click no database



DATABASE



You haven't created any connections [learn more.](#)



Create Connection

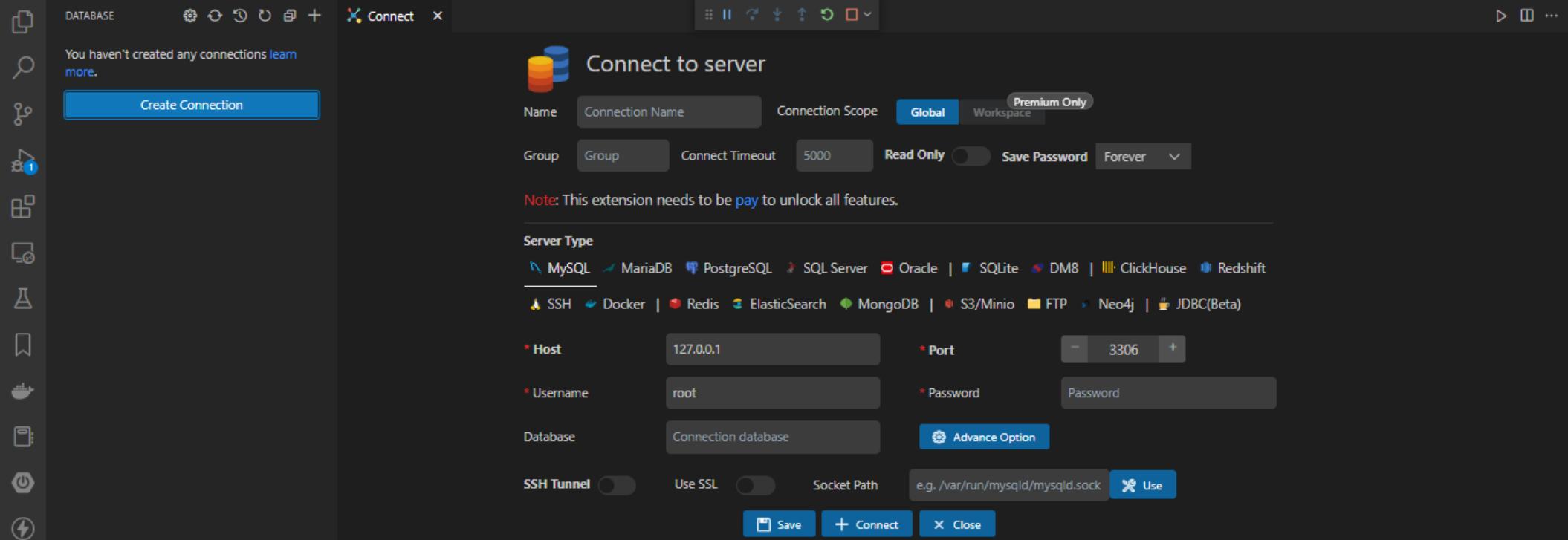


PROBLE

TERMIN

(s): 8





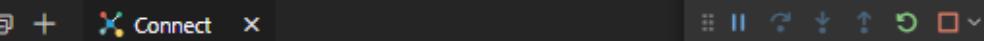
PROBLEMS OUTPUT TERMINAL

```
(s): 8080 (http) with context path ''
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [ restartedMain] br.com.projeto.api.ApiApplication      : Started ApiAp
ication in 18.894 seconds (process running for 22.481)
2023-01-22T13:41:52.193-03:00 INFO 10316 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing
DispatcherServlet 'dispatcherServlet'
2023-01-22T13:41:52.194-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet      : Initializing
servlet 'dispatcherServlet'
2023-01-22T13:41:52.200-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet      : Completed ini
alization in 4 ms
[]
```

◀ DEBUG CONSOLE

powershell

PowerShell



Deixei os dados como
estão só mudei a senha
Depois click em connect



Connect to server

Name

Connection Name

Connection Scope

Global

Premium Only
Workspace

Group

Group

Connect Timeout

5000

Read Only

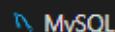
Save Password

Forever

▼

Note: This extension needs to be [pay](#) to unlock all features.

Server Type



MySQL



MariaDB



PostgreSQL



SQL Server



Oracle



SQLite



DM8



ClickHouse



Redshift



SSH



Docker



Redis



ElasticSearch



MongoDB



S3/Minio



FTP



Neo4j



JDBC(Beta)

* Host

127.0.0.1

* Port

3306

* Username

root

* Password

Database

Connection database

Advance Option

SSH Tunnel



Use SSL



Socket Path

e.g. /var/run/mysql/mysqld.sock

Use



Save



Connect



Close

PROBLEMS OUTPUT TERMINAL

TERMINAL

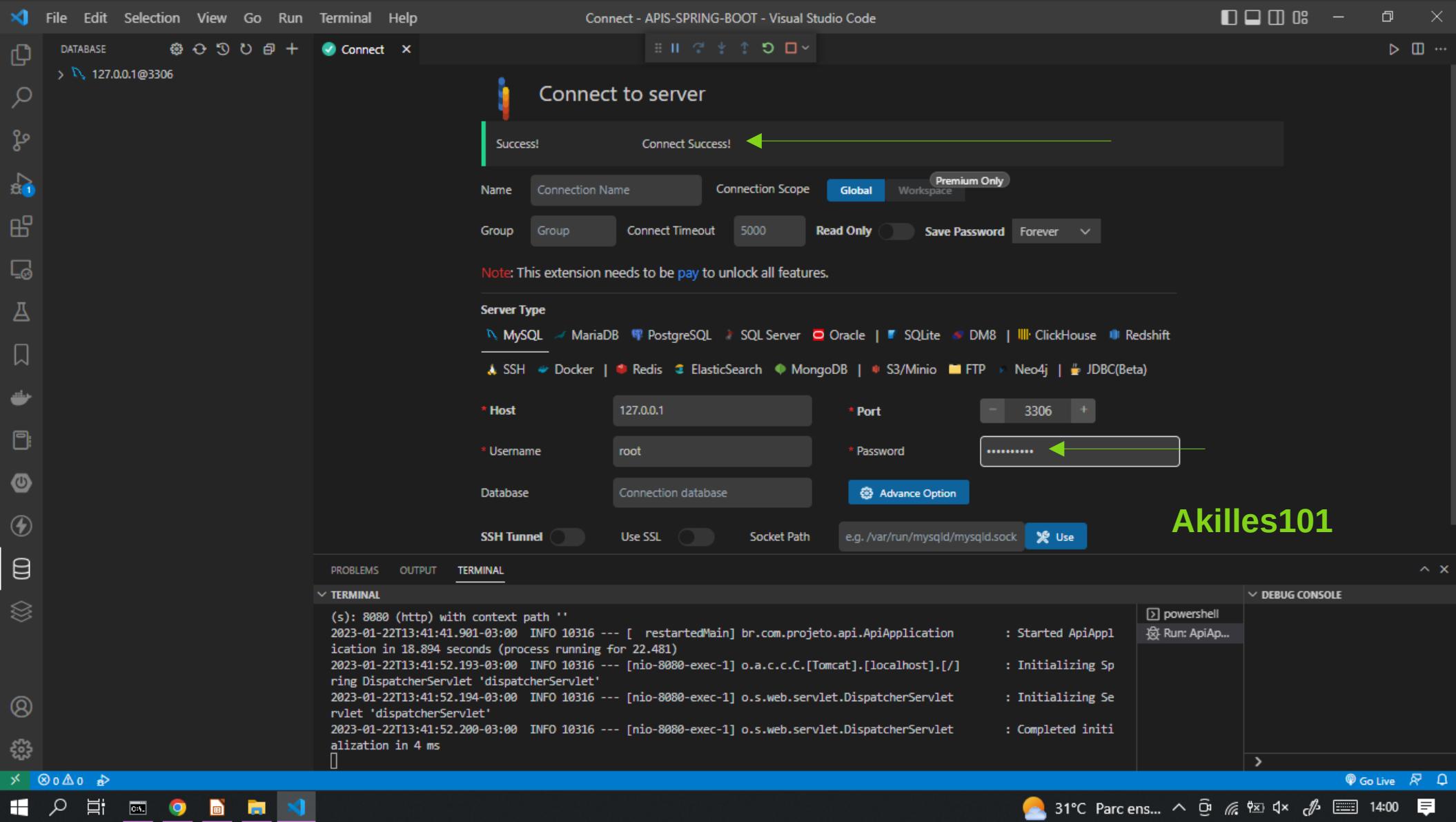
(s): 8080 (http) with context path ''

Akilles101

A senha é a verdadeira do mysql

DEBUG CONSOLE

powershell



Aqui estão as bases de dados do mysql

File Edit Selection View Go Run Terminal Help Connect - APIS-SPRING-BOOT - Visual Studio Code

DATABASE 127.0.0.1@3306 + -

Connect to server

Success! Connect Success!

Name Connection Name Connection Scope Global Premium Only

Group Group Connect Timeout 5000 Read Only Save Password Forever

Note: This extension needs to be pay to unlock all features.

Server Type

MySQL MariaDB PostgreSQL SQL Server Oracle SQLite DM8 ClickHouse Redshift

SSH Docker Redis ElasticSearch MongoDB S3/Minio FTP Neo4j JDBC(Beta)

* Host 127.0.0.1 * Port 3306

* Username root * Password

Database Connection database Advance Option

SSH Tunnel Use SSL Socket Path e.g. /var/run/mysql/mysqld.sock Use

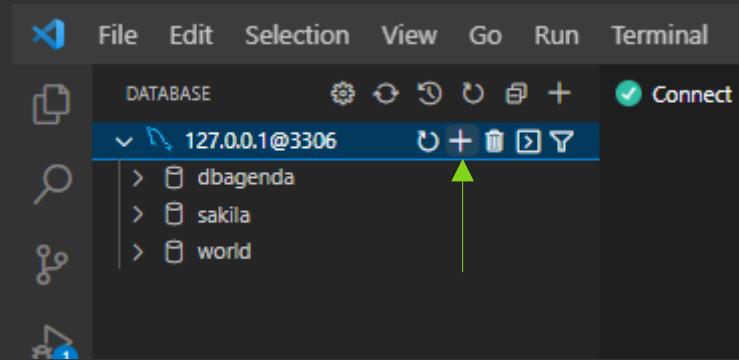
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

TERMINAL

```
(s): 8080 (http) with context path ""
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [ restartedMain] br.com.projeto.api.ApiApplication : Started ApiAppl
ication in 18.894 seconds (process running for 22.481)
2023-01-22T13:41:52.193-03:00 INFO 10316 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Sp
ring DispatcherServlet 'dispatcherServlet'
2023-01-22T13:41:52.194-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Se
rvlet 'dispatcherServlet'
2023-01-22T13:41:52.200-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initi
alization in 4 ms
[]
```

powershell Run: ApiAp...

31°C Parc ens... Go Live 14:01



Click no sinal de + para criar o banco de dados

The screenshot shows the MySQL Workbench application window. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar indicates the current file is "create-db-template.sql - APIS-SPRING-BOOT - Visual Studio". The left sidebar has icons for Database, Schema, Table, View, Function, and Procedure. The Database section shows a connection to "127.0.0.1@3306" with three databases listed: dbagenda, sakila, and world. The main pane displays the contents of the "create-db-template.sql" file:

```
C: > Users > brito > AppData > Roaming > Code > User > globalStorage > cweijan.vscode-mysql-client2 > 16
    ⚡ Active Connection
    ↴ 1   -- Active: 1674406792944@127.0.0.1@3306 MySQL
        ▷ Execute
    2   CREATE DATABASE |
    3   |   DEFAULT CHARACTER SET = 'utf8mb4';
```

The screenshot shows the MySQL Workbench application. On the left, there's a sidebar with icons for File, Edit, Selection, View, Go, Run, Terminal, and Help. Below that is a database browser pane showing a connection to '127.0.0.1@3306' with databases 'dbagenda', 'sakila', and 'world'. The main area is a terminal window titled 'create-db-template.sql' which contains the following SQL code:

```
1 Active Connection
2 Active: 1674406792944@127.0.0.1@3306 MySQL
3 CREATE DATABASE api_spring
4     DEFAULT CHARACTER SET = 'utf8mb4';
```

Depois de dar nome api_spring click em execute

File Edit Selection View Go Run Terminal Help • create-db-template.sql - APIS-SPRING-BOOT - Visual Studio Code

DATABASE 127.0.0.1@3306 8.0.25 Connect create-db-template.sql

C:\> Users > brito > AppData > Roaming > Code > User > globalStorage > cweijan.vscode-mysql-client2 > 1674406792944@127.0.0.1@3306 > create-db-template.sql > ..

Active Connection
1 Active: 1674406792944@127.0.0.1@3306 MySQL
Execute
2 CREATE DATABASE api_spring
3 DEFAULT CHARACTER SET = 'utf8mb4';

Data

CREATE DATABASE api_spring
DEFAULT CHARACTER SET = 'utf8mb4'

+ Input to filter result Free 1 Cost: 536ms < >

CREATE DATABASE api_spring DEFAULT CHARACTER SET = 'utf8mb4'

AffectedRows : 1

Veja que o banco de dados foi criado

PROBLEMS OUTPUT TERMINAL

TERMINAL

```
(s): 8080 (http) with context path ""
2023-01-22T13:41:41.901-03:00 INFO 10316 --- [ restartedMain] br.com.projeto.api.ApiApplication      : Started ApiAppl
ication in 18.894 seconds (process running for 22.481)
2023-01-22T13:41:52.193-03:00 INFO 10316 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/]      : Initializing Sp
ring DispatcherServlet 'dispatcherServlet'
2023-01-22T13:41:52.194-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet      : Initializing Se
rvlet 'dispatcherServlet'
2023-01-22T13:41:52.200-03:00 INFO 10316 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet      : Completed initi
alization in 4 ms
```

DEBUG CONSOLE

powershell
Run: ApiAp...

Ln 3, Col 39 Spaces: 4 UTF-8 CRLF SQL Go Live

31°C Parc ens... 14:05

#11
IMPLEMENTANDO DEPENDENCIAS

**Feche o servidor mysql e o servidor
Quando o servidor está funcionando posso atualizar ou baixar dependencias? não**

EXPLORER

- APIS-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - modelo
 - Pessoa.java
 - ApiApplication.java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md

ApiApplication.java X

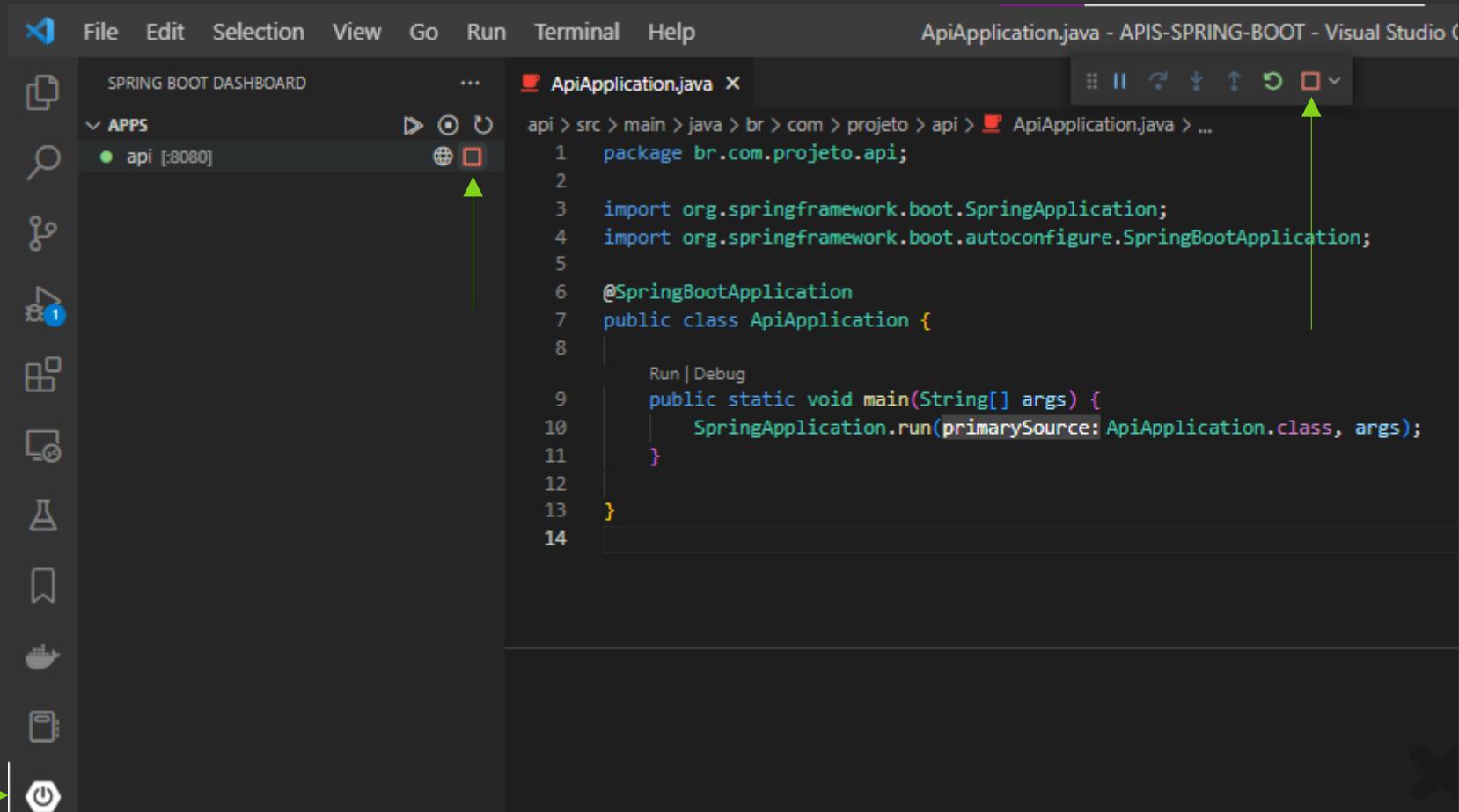
api > src > main > java > br > com > projeto > api > ApiApplication.java > ...

```
1 package br.com.projeto.api;  
2  
3 import org.springframework.boot.SpringApplication;  
4 import org.springframework.boot.autoconfigure.SpringBootApplication;  
5  
6 @SpringBootApplication  
7 public class ApiApplication {  
8  
9     public static void main(String[] args) {  
10         SpringApplication.run(primarySource: ApiApplication.class, args);  
11     }  
12 }  
13 }  
14 }
```

PROBLEMS OUTPUT TERMINAL

TERMINAL

on port(s): 8080 (http) with context path ''
2023-01-23T11:16:20.014-03:00 INFO 11124 --- [restartedMain] br.com.projeto.api.ApiApplication
ication in 24.163 seconds (process running for 28.408)



File Edit Selection View Go Run Terminal Help

ApiApplication.java - APIS-SPRING-BOOT - Visual Studio Code

SPRING BOOT DASHBOARD

APPS

api [:8080]

```
ApiApplication.java X
```

api > src > main > java > br > com > projeto > api > ApiApplication.java > ...

```
1 package br.com.projeto.api;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5
6 @SpringBootApplication
7 public class ApiApplication {
8
9     public static void main(String[] args) {
10         SpringApplication.run(primarySource: ApiApplication.class, args);
11     }
12 }
13
14 }
```

Run | Debug

Run | Debug

Qualquer uma das 2 opções finaliza o servidor

EXPLORER

APIS-SPRING-BOOT

- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - modelo
 - Pessoa.java
 - ApiApplication.java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md

api > pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>3.0.2</version>
    <relativePath/> <!-- lookup parent from repository -->
  </parent>
  <groupId>br.com.projeto</groupId>
  <artifactId>api</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>api</name>
  <description>Demo project for Spring Boot</description>
  <properties>
    <java.version>17</java.version>
  </properties>
  <dependencies>

    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-actuator</artifactId>
    </dependency>

    <dependency>
      <groupId>org.springframework.boot</groupId>
```

Todas as dependencias ficam no arquivo pom.xml

PROBLEMS OUTPUT TERMINAL

OUTLINE

TIMELINE

JAVA PROJECTS

MAVEN

api br.com.projeto:api

port(s): 8080 (http) with context path ''
2023-01-23T11:23:14.611-03:00 INFO 6540 --- [restartedMain] br.com.projeto.api.ApiApplication : Started ApiApplication in 11.71 seconds (process running for 14.239)
2023-01-23T11:23:15.963-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatcherServlet'
2023-01-23T11:23:16.063-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2023-01-23T11:23:16.087-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Completed initialization in 2 ms
PS E:\APIS-SPRING-BOOT>

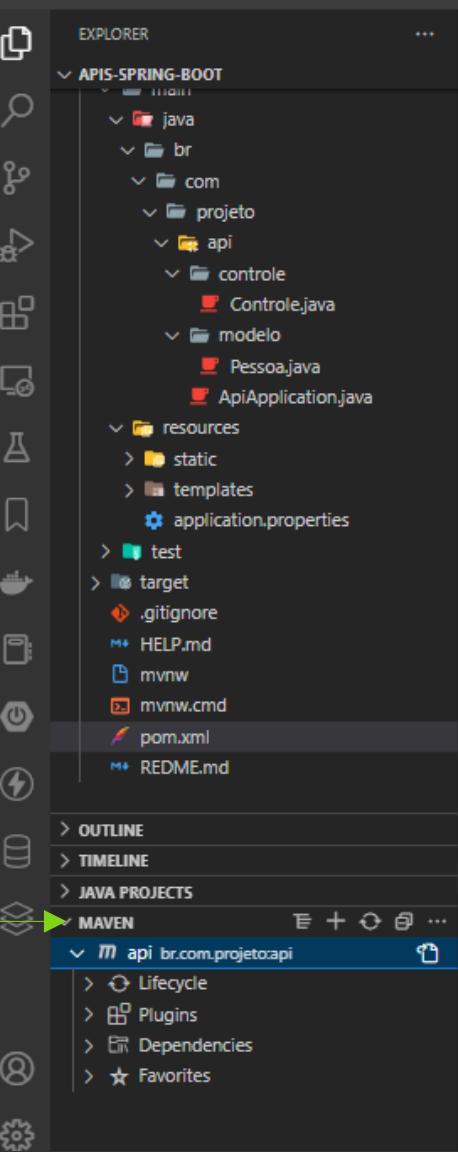
Run: ApiApp...

Run: ApiApp...

DEBUG CONSOLE

ADICIONANDO AS DEPENDÊNCIAS

File Edit Selection View Go Run

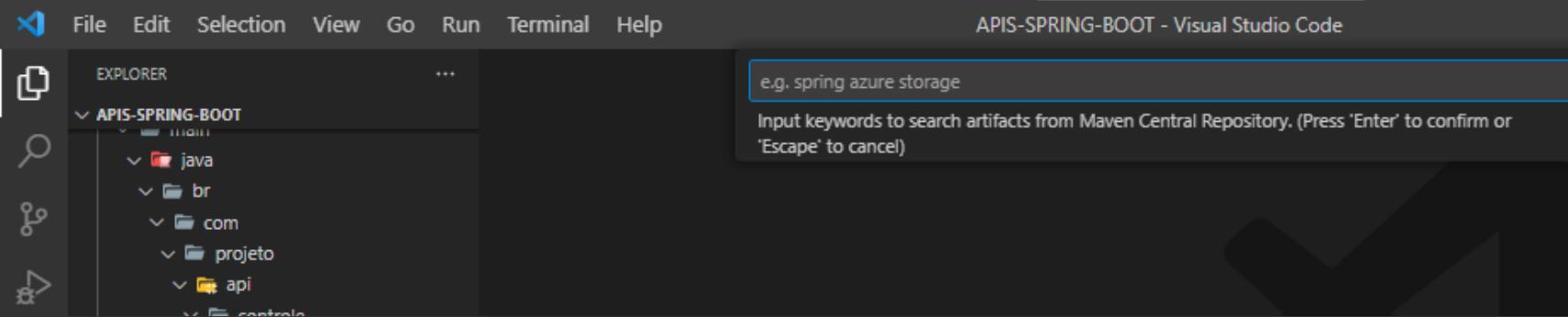


O QUE É O MAVEN?

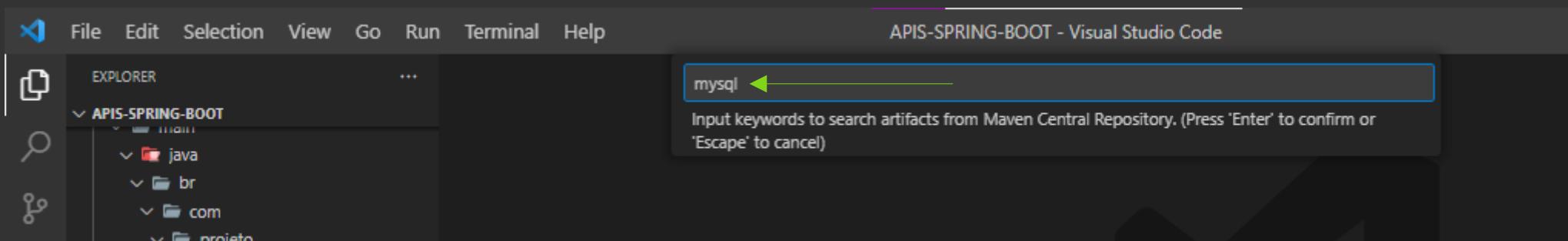
Responsável por gerenciar os pacotes do spring

Click no sinal de +

**Abre um popup que pede keyords
O que são keywords? Palavras chaves**

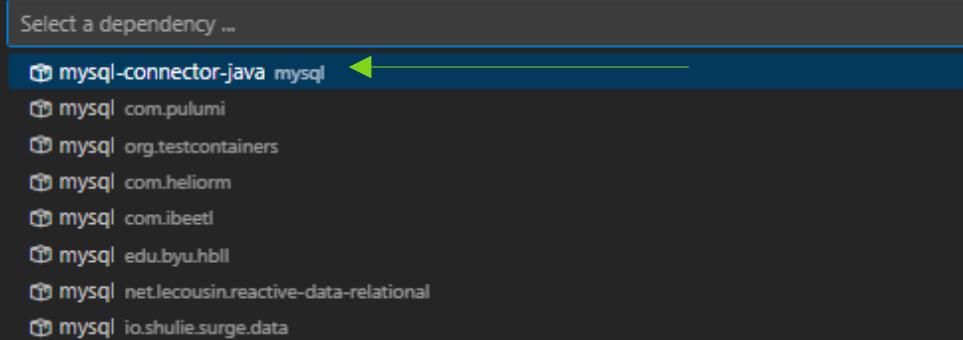
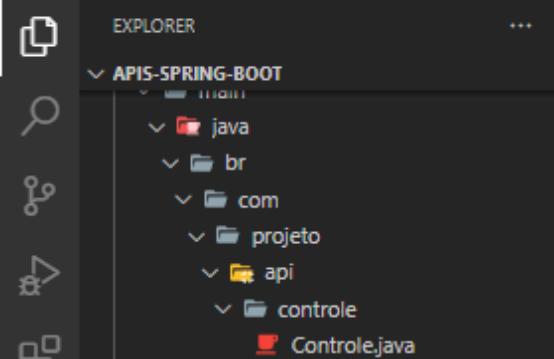


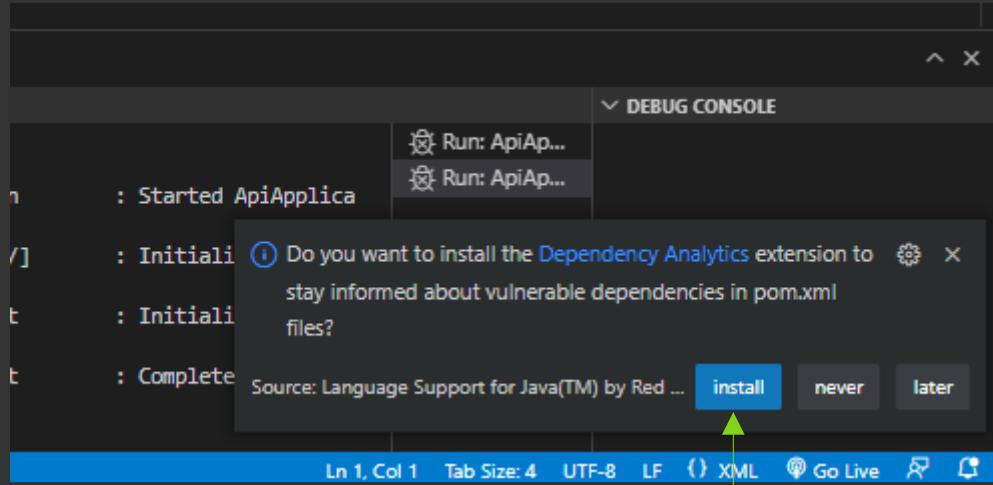
Digite mysql e tecle enter



File Edit Selection View Go Run Terminal Help

APIS-SPRING-BOOT - Visual Studio Code





EXPLORER pom.xml

APIS-SPRING-BOOT

- java
- br
- com
 - projeto
 - api
 - Controle.java
 - controle
 - Controle.java
 - modelo
 - Pessoa.java
 - ApiApplication.java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - REDME.md

api > pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>3.0.2</version>
    <relativePath/> <!-- lookup parent from repository -->
  </parent>
  <groupId>br.com.projeto</groupId>
  <artifactId>api</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>api</name>
  <description>Demo project for Spring Boot</description>
  <properties>
    <java.version>17</java.version>
  </properties>
  <dependencies>

    <dependency>
      <groupId>mysql</groupId>
      <artifactId>mysql-connector-java</artifactId>
      <version>8.0.32</version>
    </dependency>
  </dependencies>

```

Dependencia adicionada
ela aparece no arquivo
pom.xml

PROBLEMS 1 OUTPUT TERMINAL

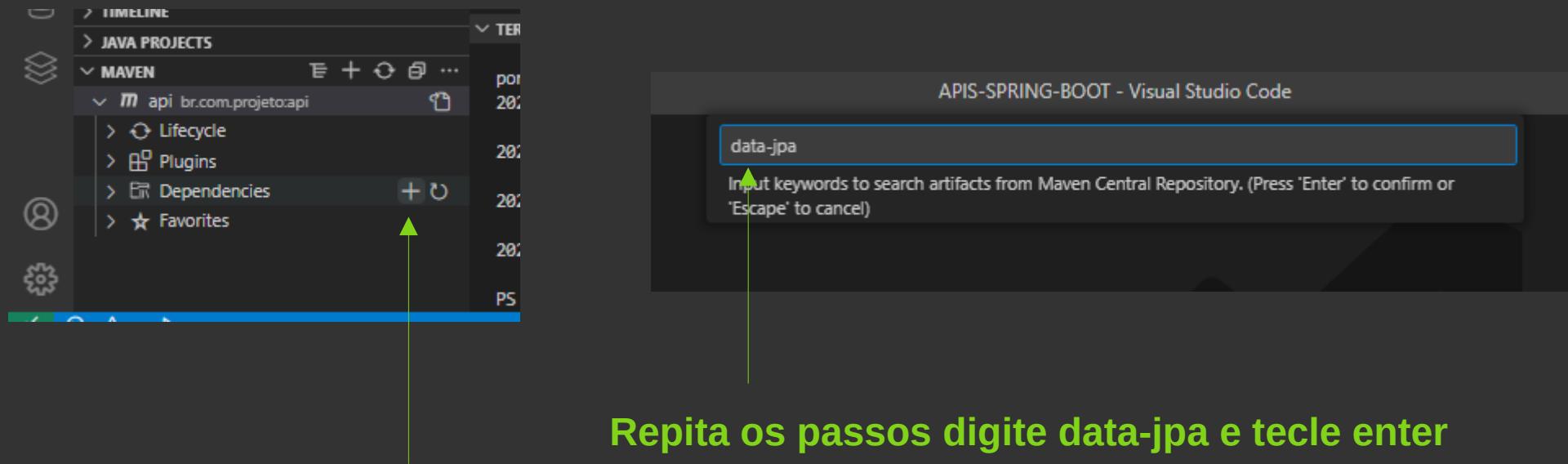
TERMINAL

```
port(s): 8080 (http) with context path ''
2023-01-23T11:23:14.611-03:00  INFO 6540 --- [ restartedMain] br.com.projeto.api.ApiApplication
: Started ApiApplication in 11.71 seconds (process running for 14.239)
2023-01-23T11:23:15.963-03:00  INFO 6540 --- [on(2)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/]
: Initializing Spring DispatcherServlet 'dispatcherServlet'
2023-01-23T11:23:16.063-03:00  INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet
: Initializing Servlet 'dispatcherServlet'
2023-01-23T11:23:16.087-03:00  INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet
: Completed initialization in 2 ms
PS E:\APIS-SPRING-BOOT>
```

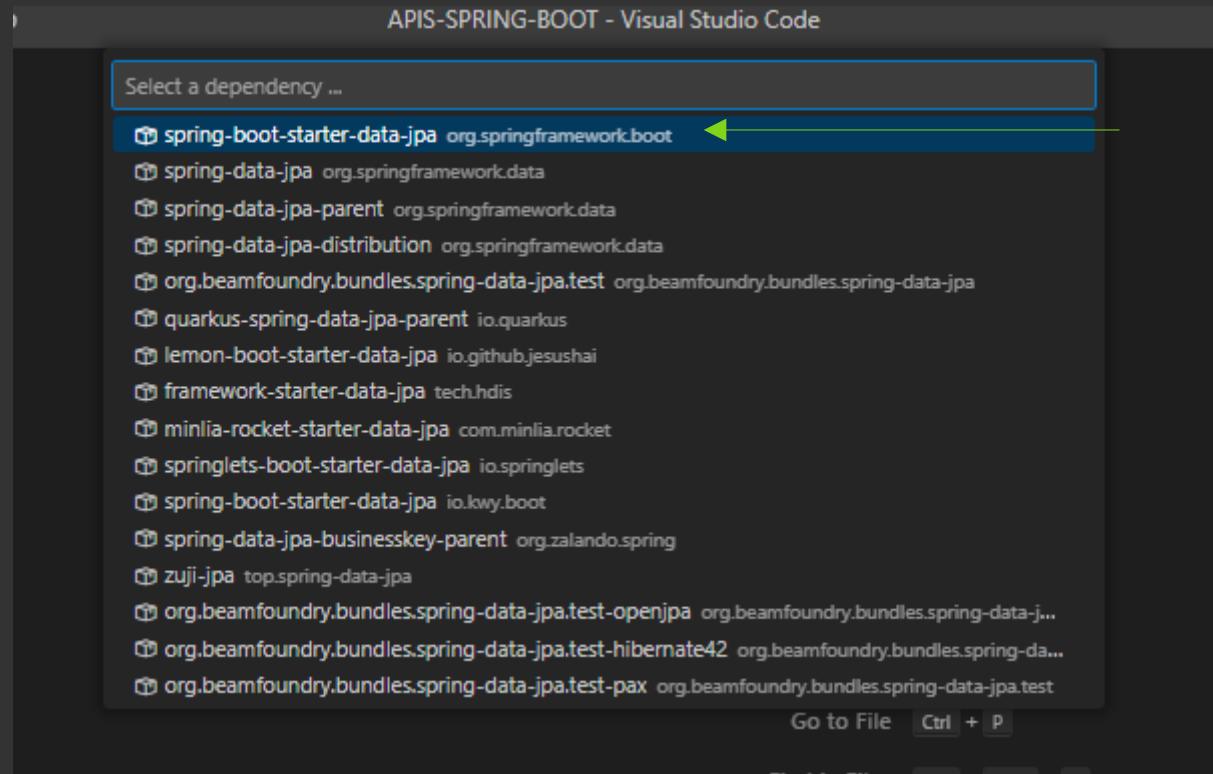
Run: ApiAp...
Run: ApiAp...

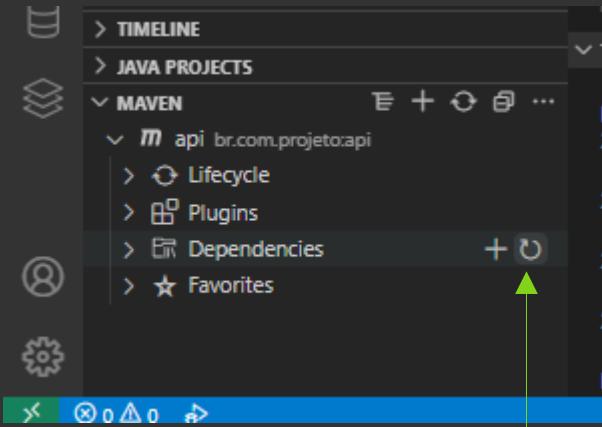
DEBUG CONSOLE

Essa dependencia serve para dar acesso ao banco de dados
Vamos agora instalar a dependencia jpa



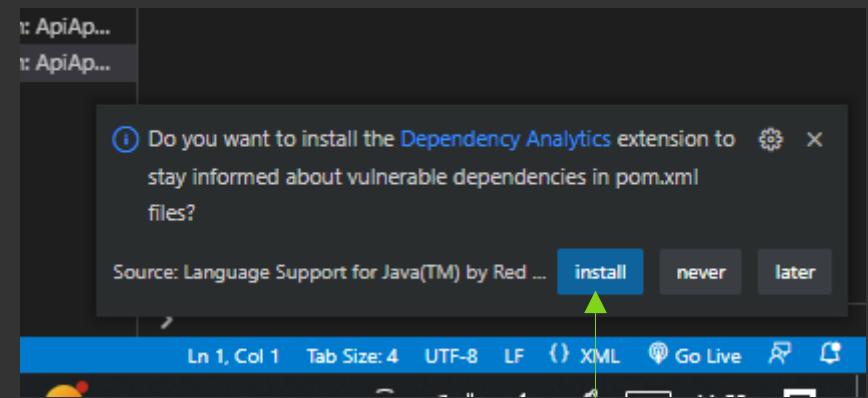
Repita os passos digite **data-jpa** e tecle enter





Se não estiver baixando tente um refresh

Repita os passos para baixar a dependencia depois do refresh



File Edit Selection View Go Run Terminal Help • pom.xml - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER API-SPRING-BOOT

api > pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>3.0.2</version>
    <relativePath/> <!-- lookup parent from repository -->
  </parent>
  <groupId>br.com.projeto</groupId>
  <artifactId>api</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>api</name>
  <description>Demo project for Spring Boot</description>
  <properties>
    <java.version>17</java.version>
  </properties>
  <dependencies>

    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-data-jpa</artifactId>
      <version>3.0.2</version>
    </dependency>
  </dependencies>

```

Se deu tudo ok a dependencia aparece no pom.xml

OUTLINE

PROBLEMS

TERMINAL

MAVEN

MAVEN

port(s): 8080 (http) with context path ''
2023-01-23T11:23:14.611-03:00 INFO 6540 --- [restartedMain] br.com.projeto.api.ApiApplication
: Started ApiApplication in 11.71 seconds (process running for 14.239)
2023-01-23T11:23:15.963-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/]
: Initializing Spring DispatcherServlet 'dispatcherServlet'
2023-01-23T11:23:16.063-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet
: Initializing Servlet 'dispatcherServlet'
2023-01-23T11:23:16.087-03:00 INFO 6540 --- [on(2)-127.0.0.1] o.s.web.servlet.DispatcherServlet
: Completed initialization in 2 ms
PS E:\APIS-SPRING-BOOT>

Ln 1, Col 1 Tab Size: 4 UTF-8 LF { XML Go Live

Existe outro jeito de instalar dependencias?

Sim sopie e cole elas dentro do arquivo pom.xml

Ex:

```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-data-jpa</artifactId>
    <version>3.0.2</version>
  </dependency>
```

Adicionando assim temos ela instalada

Não esqueça de salvar o arquivo pom.xml depois de instalar a dependencia

Essas duas dependencias já nos da o acesso ao banco de dados e ao jpa

#12

Configurando o modelo pessoa pra gerar tabelas



File Edit Selection View Go Run Terminal Help

Pessoa.java - APIS-SPRING-BOOT - Visual Studio Code



EXPLORER



APIS-SPRING-BOOT



Pessoa.java 1 X

api > src > main > java > br > com > projeto > api > modelo > Pessoa.java > Pessoa

```
1 package br.com.projeto.api.modelo;
2
3 public class Pessoa {
4
5     // Atributos
6     private int codigo; ←
7     private String nome;
8     private String idade;
9
10    // Get e Set
11    public String getName() {
12        return nome;
13    }
14    public String getIdade() {
15        return idade;
16    }
17    public void setName(String nome) {
18        this.nome = nome;
19    }
20    public void setIdade(String idade) {
21        this.idade = idade;
22    }
23
24
25 }
```

Crie um novo
atributo codigo

The screenshot shows the VS Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Pessoa.java - APIS-SPRING
- Explorer View:** Shows the project structure under APIS-SPRING-BOOT, including main, java, br, com, projeto, api, controle, modelo, resources, static, templates, application.properties, test, target, and editorconfig.
- Editor View:** The file Pessoa.java is open at line 1. The code is as follows:

```
1 package br.com.projeto.api.modelo;
2
3 public class Pessoa {
4
5     // Atributos
6     private int codigo;
```
- Context Menu (Quick Fix...):** A context menu is open over the line "private int codigo;". It contains the following options:
 - Remove 'codigo', keep assignments with side effects
 - More Actions...
 - Generate Getter and Setter for 'codigo' (selected)
 - Generate Getter for 'codigo'
 - Generate Setter for 'codigo'
 - Generate Constructors...
 - Add final modifier for 'codigo'

Selecione a linha todo e click na lampada pra gerar os getters e setters desse atributo

Run Terminal Help

Pessoa.java - APIS-SPR

...

Pessoa.java X

api > src > main > java > br > com > projeto > api > modelo > Pessoa.java

```
6     private int codigo;
7     private String nome;
8     private String idade;
9
10
11    // Get e Set
12    public String getNome() {
13        return nome;
14    }
15    public String getIdade() {
16        return idade;
17    }
18    public void setNome(String nome) { ←
19        this.nome = nome;
20    }
21    public void setIdade(String idade) {
22        this.idade = idade;
23    }
24    public int getCodigo() {
25        return codigo;
26    }
27    public void setCodigo(int codigo) {
28        this.codigo = codigo;
29    }
30
31 }
```

**Recortei e colei no lugar certo
Pois ele aparece logo abaixo da próxima
vou prestar atenção onde o cursor esta
ficando**

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Explorer:** Shows the project structure under "APIS-SPRING-BOOT".
- Code Editor:** The file "Pessoa.java" is open. The code is as follows:

```
1 package br.com.projeto.api.modelo;
2
3 @Entity
4 public class Pessoa {
5     // ...
6 }
7
8
9
10
11
12
13
14
15
16
```

A tooltip is displayed over the `@Entity` annotation, providing information about the Jakarta Persistence API:

- jakarta.persistence.Entity**
- Description:** Specifies that the class is an entity. This annotation is applied to the entity class.
- Since:** 1.0

Adicione a anotation e seu import

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

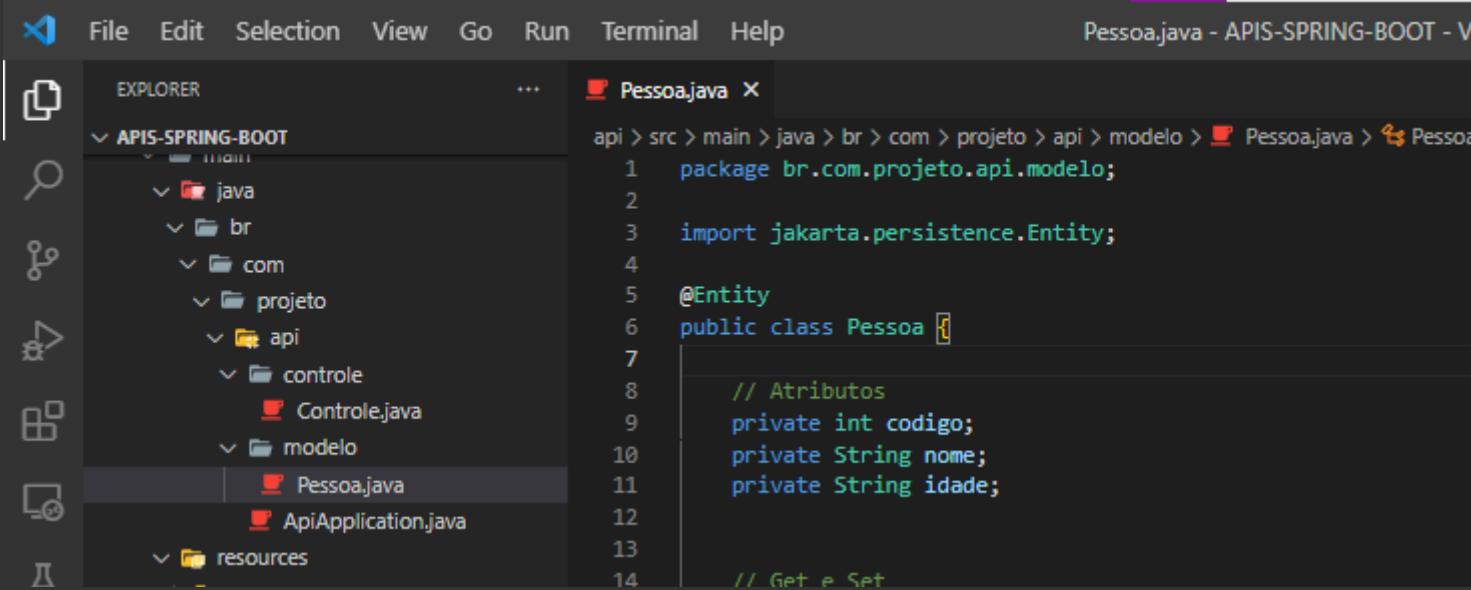
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor:** The active file is `Pessoa.java` from the `APIS-SPRING-BOOT` project. The code is as follows:

```
3 import jakarta.persistence.Entity; ←
4
5 @Entity ←
6 public class Pessoa {←
7
8     // Atributos
9     private int codigo;
10    private String nome;
11    private String idade;
12
13    // Get e Set
14    public String getName() {←
15
```

Explorer: Shows the project structure:

- `APIS-SPRING-BOOT` (selected)
- `src`
 - `java`
 - `br`
 - `com`
 - `projeto`
 - `api`
 - `controle`
 - `Controle.java`
 - `modelo`
 - `Pessoa.java` (selected)
 - `ApiApplication.java`
 - `resources`

Pra que serve o @Entity? Ele especifica a criação da tabela



The screenshot shows a Java IDE interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor Title:** Pessoa.java - APIS-SPRING-BOOT - Vi
- Explorer View:** Shows the project structure:
 - APIS-SPRING-BOOT
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - modelo
 - Pessoa.java
 - ApiApplication.java
- Code Editor:** The file Pessoa.java is open, showing the following code:

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4
5 @Entity
6 public class Pessoa {
7
8     // Atributos
9     private int codigo;
10    private String nome;
11    private String idade;
12
13    // Get e Set
14 }
```

Nesse caso ele criaria uma tabela com os campos **codigo nome idade**
Por padrão a tabela segue o nome da classe **Pessoa**

E se eu quiser trocar o nome dessa tabela posso?

**Sim adicionando o @Table e seu importe e passando dentro dos parentesis o nome da
tabela que você quer**

@Table(name = "pessoas")



EXPLORER

APIS-SPRING-BOOT

```
src
  main
    java
      br
        com
          projeto
            api
              controle
                Controle.java
              modelo
                Pessoa.java
                ApiApplication.java
            resources
              static
              templates
              application.properties
    test
    target
    .gitignore
    HELP.md
    mvnw
```

Pessoa.java 1

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4
5 @Entity
6 @Table
7 public class Pessoa {
8     @Table(name = "pessoas")
9     @Id
10    @GeneratedValue(strategy = GenerationType.IDENTITY)
11    private Long id;
12
13    @Column(name = "nome")
14    private String nome;
15
16    @Column(name = "idade")
17    private Integer idade;
18
19    public String getIdade() {
20        return idade;
21    }
22
23    public void setNome(String nome) {
24        this.nome = nome;
25    }
26}
```

jakarta.persistence.Table

Specifies the primary table for the annotated entity. Additional tables may be specified using SecondaryTable or SecondaryTables annotation.

If no Table annotation is specified for an entity class, the default values apply.

Example:

```
@Entity
@Table(name="CUST", schema="RECORDS")
public class Customer { ... }
```

Since:

1.0

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Pessoajava - APIS-SPRING-BOOT - Visual Studio
- Explorer View:** Shows the project structure under "APIS-SPRING-BOOT":
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java
 - modelo
 - Pessoajava (selected)
 - ApiApplication.java
 - resources
 - static
- Code Editor:** Displays the content of Pessoajava.java:

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4 import jakarta.persistence.Table; ←
5
6 @Entity
7 @Table(name = "pessoas") ←
8 public class Pessoa {
9
10    // Atributos
11    private int codigo;
12    private String nome;
13    private String idade;
14}
```

A yellow bracket highlights the annotations @Entity and @Table.

Com essa annotation damo o nome de pessoas a nossa tabela
E caso não queria mudar o nome da tabela não precisaria dessa
linha

Vamos adicionar a chave primaria

Adicione a annotation @Id e seu importe lembre que é do pacote javax.persistence



EXPLORER

APIS-SPRING-BOOT

java
br
com
projeto
api
controle
Controle.java
modelo
Pessoa.java
ApiApplication.java
resources
static
templates
application.properties
test
target
.gitignore

Pessoa.java 1

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4 import jakarta.persistence.Table;
5
6 @Entity
7 @Table(name = "pessoas")
8 public class Pessoa {
9
10     // Atributos
11     @Id
12     private Id - jakarta.persistence
13     private Id - org.springframework.data.annotation
14     private IdClass - jakarta.persistence
15         -> IdGeneratorType - org.hibernate.annotations
16         -> RowId - org.hibernate.annotations
17         -> Index - org.hibernate.annotations
18     public -> IndexColumn - org.hibernate.annotations
19         -> Index - jakarta.persistence
20     } -> Indexed - org.springframework.stereotype
21     public -> JsonIdentityInfo - com.fasterxml.jackson.annotation
```

jakarta.persistence.Id

Specifies the primary key of an entity. The field or property to which the `Id` annotation is applied should be one of the following types: any Java primitive type; any primitive wrapper type; `String`; `java.util.Date`; `java.sql.Date`; `java.math.BigDecimal`; `java.math.BigInteger`.

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Pessoajava - API-SPRING-BOOT - Visual Studio Code.
- Explorer View:** Shows the project structure under "APIS-SPRING-BOOT":
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle (containing Controle.java)
 - modelo (containing Pessoa.java)
 - resources
 - static
 - templates
 - application.properties
- Code Editor:** The file "Pessoajava.java" is open, showing Java code for an Entity class named "Pessoa". The code includes annotations for Entity, Table, and Id, and defines attributes for codigo, nome, and idade.

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4 import jakarta.persistence.Id;
5 import jakarta.persistence.Table;
6
7 @Entity
8 @Table(name = "pessoas")
9 public class Pessoa {
10
11     // Atributos
12     @Id
13     private int codigo;
14     private String nome;
15     private String idade;
16
17 }
```

Podemos pedir um auto-increment
Adicionando a annotation `@GeneratedValue` e seu importe e
dentro passamos o strategy = `GenerationType.AUTO`

```
11 // Atributos
12 @Id
13 @Generated
14 private int o Generated - jakarta.annotation
15 private String o Generated - javax.annotation.processing
16 private String o Generated - org.hibernate.annotations
17     o GeneratedColumn - org.hibernate.annotations
18     o GeneratedColumn - org.hibernate.annotations.Diale...
19 // Get e o GeneratedColumns - org.hibernate.annotations.Dial...
20 public String o GeneratedValue - jakarta.persistence
21     return o GeneratorType - org.hibernate.annotations
22 }
23 public String getIdade() {
24     return idade;
25 }
```

The `Generated` annotation is used to mark source code that has been generated. It can also be used to differentiate user written code from generated code in a single file.

The `value` element must have the name of the code generator. The recommended convention is to use the fully qualified name of the code generator in the value field, for example `com.company.package.classname`.

Pessoa.java ●

api > src > main > java > br > com > projeto > api > modelo > Pessoa.java > Pesso... > Pesso... > cod...

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4 import jakarta.persistence.GeneratedValue; ←
5 import jakarta.persistence.Id;
6 import jakarta.persistence.Table;
7
8 @Entity
9 @Table(name = "pessoas")
10 public class Pessoa {
11
12     // Atributos
13     @Id
14     @GeneratedValue
15     private int codigo;
16     private String nome;
17     private String idade;
18 }
```

api > src > main > java > br > com > projeto > api > modelo > Pessoajava > Pessoa > codigo

```
2  
3 import jakarta.persistence.Entity;  
4 import jakarta.persistence.GeneratedValue;  
5 import jakarta.persistence.GenerationType; ←  
6 import jakarta.persistence.Id;  
7 import jakarta.persistence.Table;  
8  
9 @Entity  
10 @Table(name = "pessoas")  
11 public class Pessoa {  
12  
13     // Atributos  
14     @Id  
15     @GeneratedValue(strategy = GenerationType.)  
16     private int codigo;  
17     private String nome;  
18     private String idade;  
19  
20     // Get e Set  
21     public String getNome() {  
22         return nome;  
23     }  
24     public String getIdade() {  
25         return idade;  
26     }  
27     public void setNome(String nome) {
```

➤ AUTO : GenerationType
➤ IDENTITY : GenerationType
➤ SEQUENCE : GenerationType
➤ TABLE : GenerationType
➤ UUID : GenerationType
↳ class : Class<jakarta.persistence.GenerationType>
□ cast
□ var

➤ GenerationType.AUTO : GenerationType x

Indicates that the persistence provider should pick an appropriate strategy for the particular database. The AUTO generation strategy may expect a database resource to exist, or it may attempt to create one. A vendor may provide documentation on how to create such resources in the event that it does not support schema generation or cannot create the schema resource at runtime.

Pessoa.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

src

main

java

br

com

projeto

api

controle

Controle.java

modelo

Pessoa.java

ApiApplication.java

resources

static

templates

application.properties

test

target

.gitignore

HELP.md

mvnw

mvnw.cmd

pom.xml

README.md

Pessoa.java

```
1 package br.com.projeto.api.modelo;
2
3 import jakarta.persistence.Entity;
4 import jakarta.persistence.GeneratedValue;
5 import jakarta.persistence.GenerationType;
6 import jakarta.persistence.Id;
7 import jakarta.persistence.Table;
8
9 @Entity
10 @Table(name = "pessoas")
11 public class Pessoa {
12
13     // Atributos
14     @Id
15     @GeneratedValue(strategy = GenerationType.IDENTITY) ←
16     private int codigo;
17     private String nome;
18     private String idade;
19
20
21     // Get e Set
22     public String getNome() {
23         return nome;
24     }
25     public String getIdade() {
26         return idade;
27     }
28 }
```

Adicione as anotações e seus imports que serve para auto increment

#13

Conexão com mysql

Para configurar a conexão temos que usar o arquivo application.properties

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Active Editor:** application.properties - API
- Explorer:** Shows the project structure:
 - API-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help
- Active File:** application.properties - APIS-SPRING-BOOT - Visual Studio Code
- Explorer View:** Shows the project structure:
 - APIS-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md
- Terminal:** Not visible in the screenshot.
- Text Editor:** Displays the contents of application.properties:

```
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.
2 spring.jpa.hibernate.ddl-auto=update
3
4 # Acesso ao banco de dados
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:3306/nome_base_de_dados
6
7 # Usuário do banco de dados
8 spring.datasource.username=usuário
9
10 # Senha do banco de dados
11 spring.datasource.password=senha
12
```

Digite essa estrutura dentro do arquivo

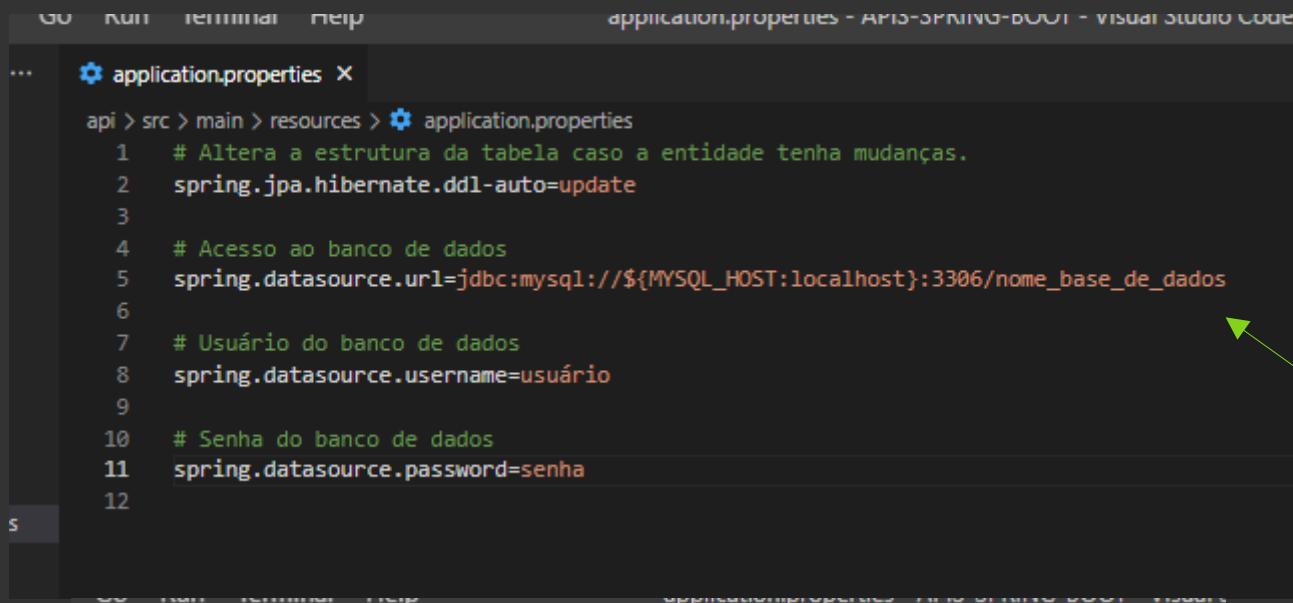
Se o arquivo pom.xml marcar um erro feche o vscode e abra novamente

The screenshot shows the Visual Studio Code interface with the application.properties file open. The file contains configuration for a Spring Boot application, specifically for a MySQL database connection. The code is as follows:

```
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.
2 spring.jpa.hibernate.ddl-auto=update
3
4 # Acesso ao banco de dados
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:3306/nome_base_de_dados
6
7 # Usuário do banco de dados
8 spring.datasource.username=usuário
9
10 # Senha do banco de dados
11 spring.datasource.password=senha
12
```

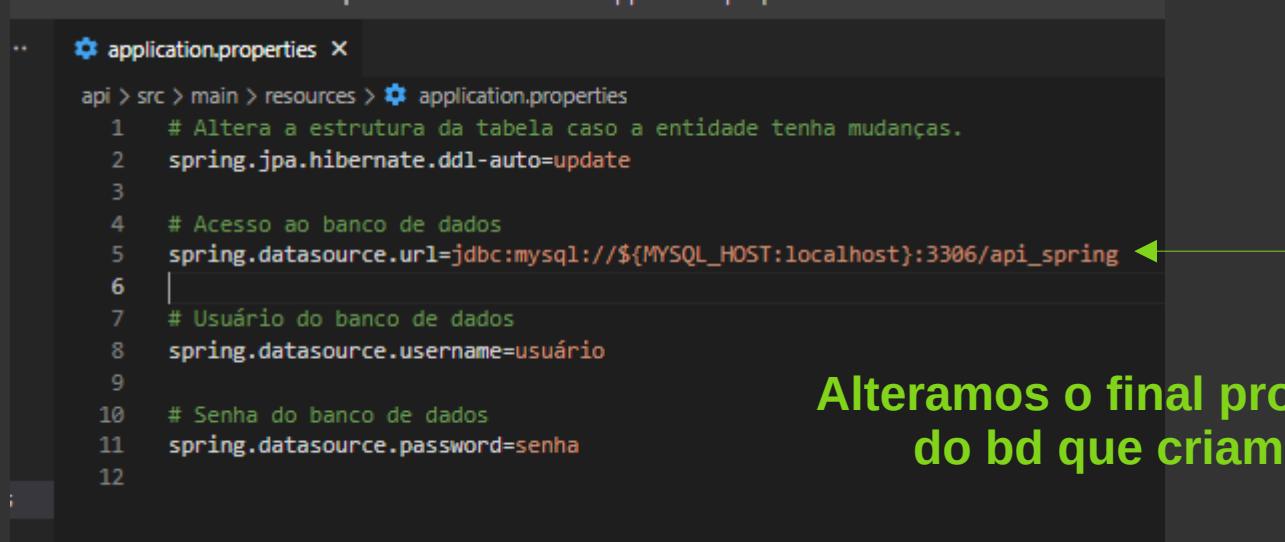
Annotations are present in the bottom right corner of the code editor:

- A green arrow points from the word "senha" to the line "spring.datasource.password=senha".
- A green arrow points from the word "usuário" to the line "spring.datasource.username=usuário".
- A green arrow points from the word "String de conexão" to the line "spring.datasource.url=jdbc:mysql://\${MYSQL_HOST}:3306/nome_base_de_dados".



application.properties - API-SPRING-BOOT - visual studio code

```
... application.properties X  
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:localhost}:3306/nome_base_de_dados  
6  
7 # Usuário do banco de dados  
8 spring.datasource.username=usuário  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=senha  
12
```



application.properties X

```
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:localhost}:3306/api_spring ←  
6 |  
7 # Usuário do banco de dados  
8 spring.datasource.username=usuário  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=senha  
12
```

Alteramos o final pro nome
do bd que criamos

```
.. application.properties X  
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:localhost}:3306/api_spring  
6  
7 # Usuário do banco de dados  
8 spring.datasource.username=usuário ←  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=senha  
12
```

v Go Run Terminal Help application.properties - APIS-SPRING-BOOT - Visual Studio Code

```
.. application.properties X  
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:localhost}:3306/api_spring  
6  
7 # Usuário do banco de dados  
8 spring.datasource.username=root ←  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=senha  
12
```

es

Lembrando que esses dados
são do mysql quando
inicialmente configuramos
Nele o usuário é root

Connect

Connect to server

Name: Connection Name Connection Scope: Global Premium Only

Group: Group Connect Timeout: 5000 Read Only: Save Password: Forever

Note: This extension needs to be [pay](#) to unlock all features.

Server Type:

MySQL MariaDB PostgreSQL SQL Server Oracle SQLite DM8 ClickHouse Redshift

SSH Docker Redis ElasticSearch MongoDB S3/Minio FTP Neo4j JDBC(Beta)

* Host: 127.0.0.1 * Port: 3306

* Username: root * Password:

Database: Connection database

SSH Tunnel Use SSL Socket Path: e.g. /var/run/mysql/mysqld.sock Use

Desses dados que
estou falando

Senha:
Akilles101

```
application.properties X  
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql:// ${MYSQL_HOST}:localhost}:3306/api_spring  
6  
7 # Usuário do banco de dados  
8 spring.datasource.username=root  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=senha ←  
12
```

Go Run Terminal Help • application.properties - APIS-SPRING-BOOT - Visual Studio Code

```
application.properties ●  
api > src > main > resources > application.properties  
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.  
2 spring.jpa.hibernate.ddl-auto=update  
3  
4 # Acesso ao banco de dados  
5 spring.datasource.url=jdbc:mysql:// ${MYSQL_HOST}:localhost}:3306/api_spring  
6  
7 # Usuário do banco de dados  
8 spring.datasource.username=root  
9  
10 # Senha do banco de dados  
11 spring.datasource.password=Akilles101 ←  
12
```

Akilles101

The screenshot shows the MySQL Workbench application. On the left, there's a sidebar with icons for File, Edit, Selection, View, Go, Run, Terminal, Help, and a Database browser. The Database browser shows a connection to '127.0.0.1@3306' with databases 'dbagenda', 'sakila', and 'world'. The main area has tabs for 'Connect' and 'create-db-template.sql'. The 'create-db-template.sql' tab is active, displaying the following SQL code:

```
C: > Users > brito > AppData > Roaming > Code > User > globalStorage > cweijan.vscode-mysql-client  
      ⚡ Active Connection  
      -- Active: 1674406792944@127.0.0.1@3306 MySQL  
      ▷ Execute  
2 CREATE DATABASE api_spring ←  
3   DEFAULT CHARACTER SET = 'utf8mb4';
```

Pra não deixar duvidas sobre o nome do banco de dados `api_spring`

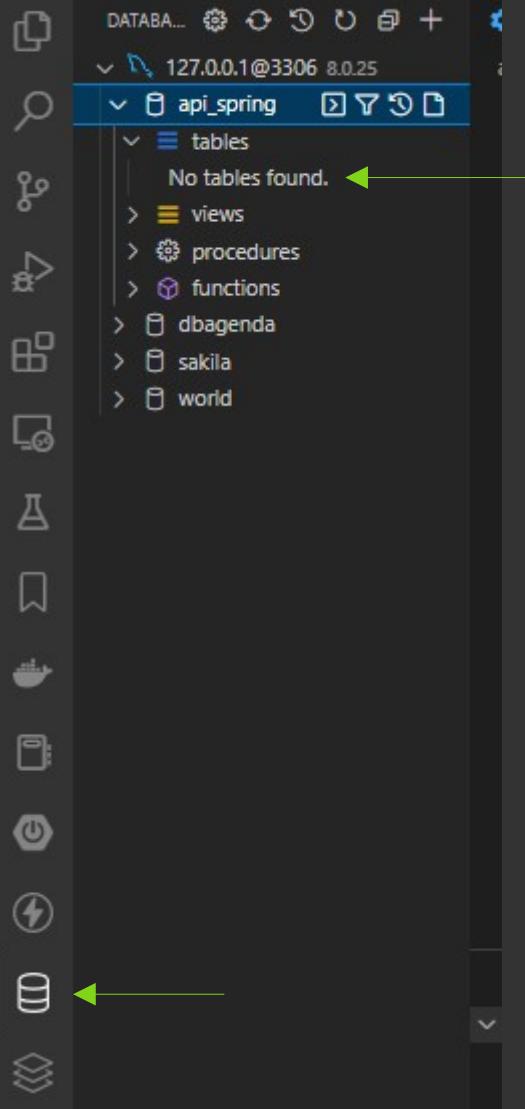
The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** application.properties - API-SPRING-BOOT - Visual
- Explorer View:** Shows the project structure:
 - APIS-SPRING-BOOT
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md
- Editor View:** Displays the content of the application.properties file.

```
api > src > main > resources > application.properties
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.
2 spring.jpa.hibernate.ddl-auto=update
3
4 # Acesso ao banco de dados
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:3306/api_spring
6
7 # Usuário do banco de dados
8 spring.datasource.username=root
9
10 # Senha do banco de dados
11 spring.datasource.password=Akilles101
12 |
```

Salve os dados

File Edit Selection View Go

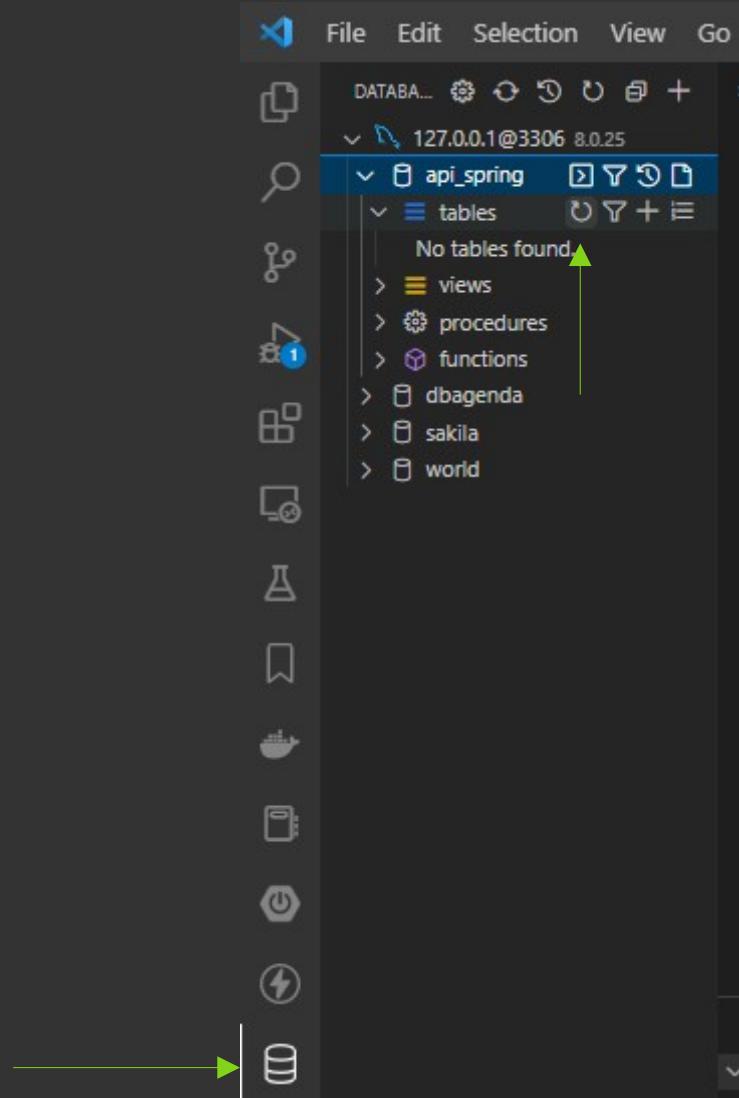


Abra o bad pra ver que ainda não existem tabelas

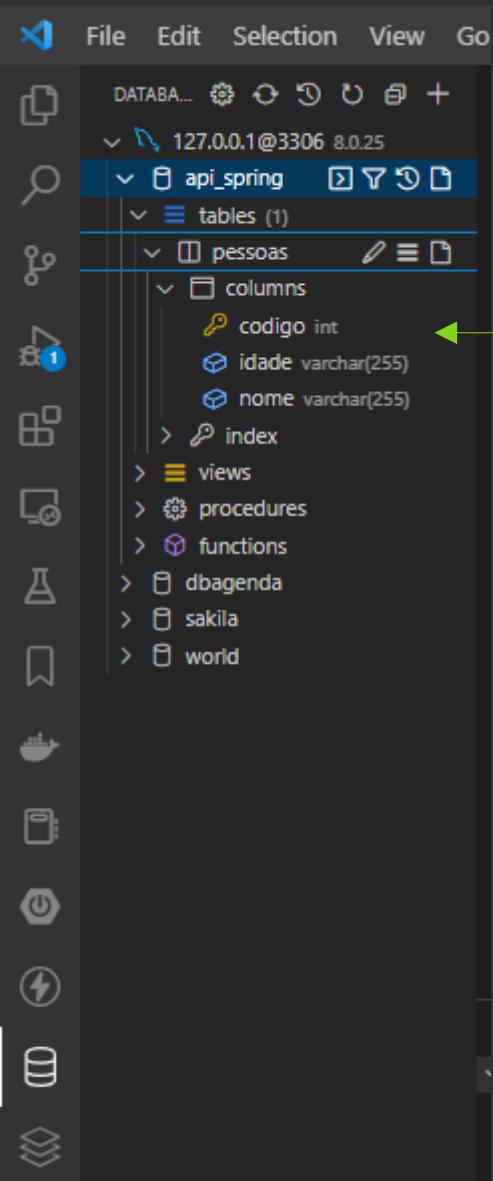
The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor Title:** application.properties - APIS-SPRING-BOOT - Visual Studio Code
- Left Sidebar:** Shows a tree view of the project structure under "APPS": SPRING BOOT DASHBOARD, ... (disabled), and api (selected). It also includes icons for file operations like Open, Save, Find, and Refresh.
- Right Editor Area:** Displays the contents of the application.properties file:

```
1 # Altera a estrutura da tabela caso a entidade tenha mudanças.
2 spring.jpa.hibernate.ddl-auto=update
3
4 # Acesso ao banco de dados
5 spring.datasource.url=jdbc:mysql://${MYSQL_HOST}:3306/api_spring
6
7 # Usuário do banco de dados
8 spring.datasource.username=root
9
10 # Senha do banco de dados
11 spring.datasource.password=Akilles101
12
```
- Bottom Status Bar:** Shows a green arrow icon pointing right, followed by a power button icon, and a lightning bolt icon.
- Center Message:** Execute o projeto (Execute the project).



Depois de executar
atualize refresh



Os dados foram criados

#14
Criando repositorio

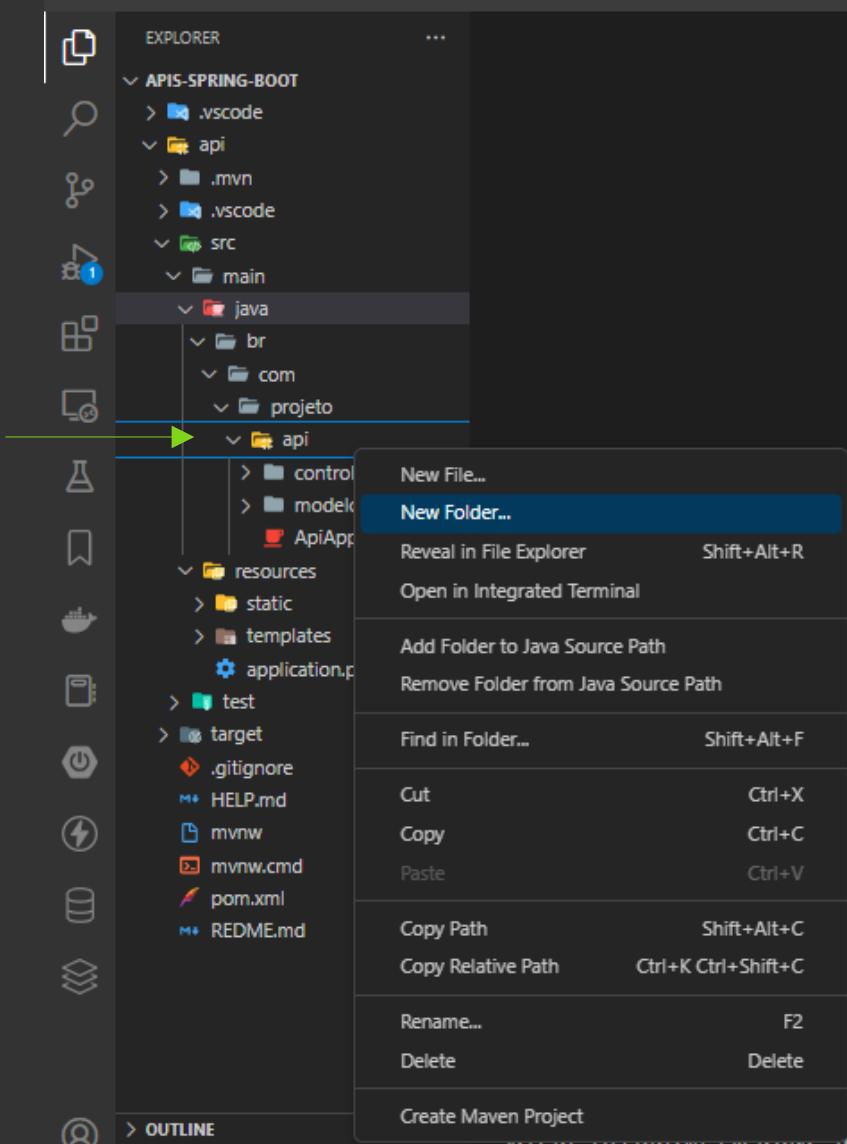
o que é um repositorio?

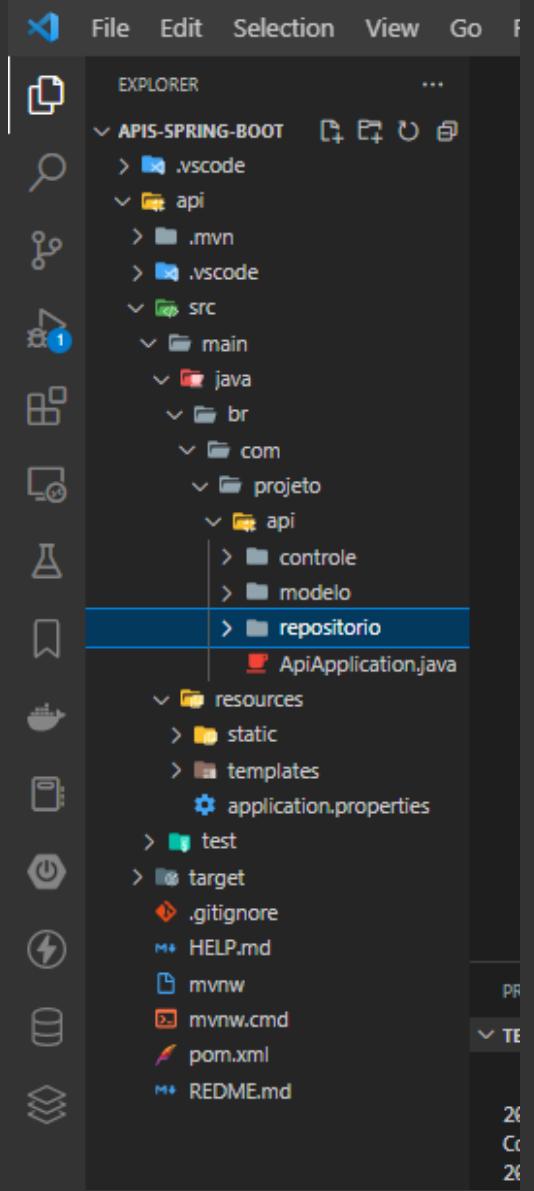
Uma camada de persistencia

O que é uma camada de persistencia?

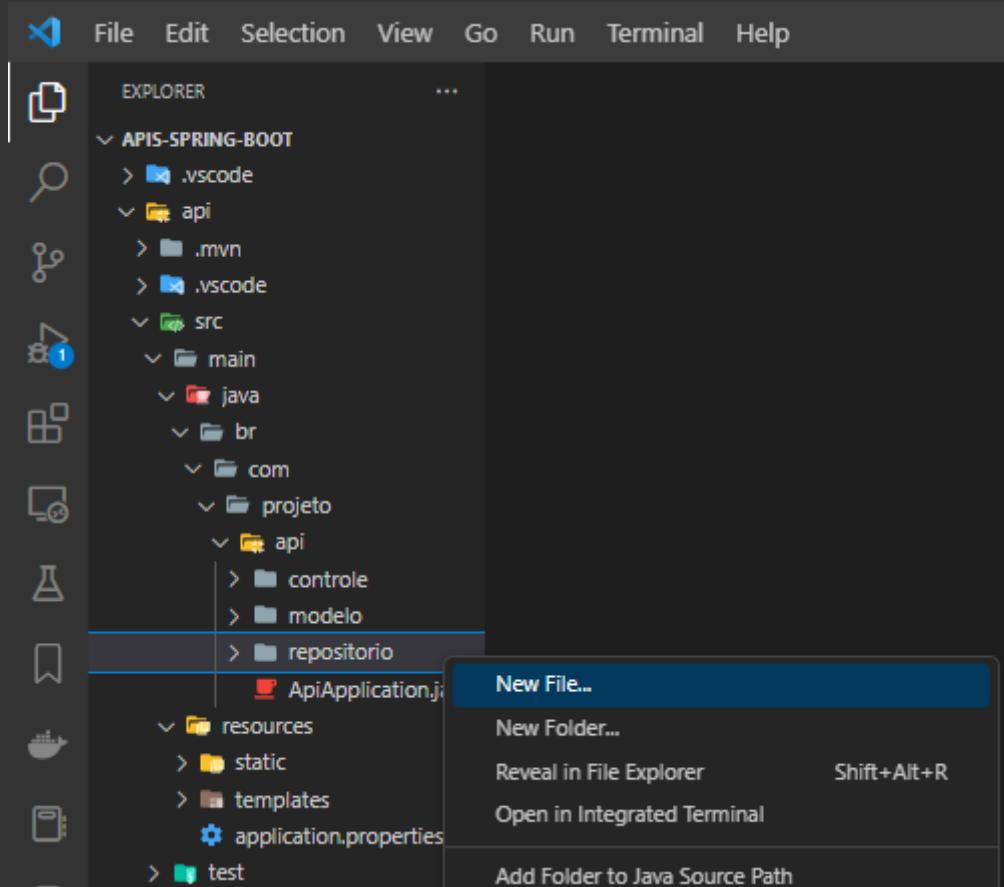
Parte do projeto onde fazemos as ações do banco de dados

Os chamados cruds





Crie a pasta
repositorio



File Edit Selection View Go Run Terminal Help

• Repositorio.java - APIS-SPRING-BOOT - Visual Studio C

REPOSITORY

APIS-SPRING-BOOT

.vscode .mvn .vscode

api

src

main

java

br

com

projeto

api

controle

modelo

repositorio

Repositorio.java

ApiApplication.java

resources

static

templates

application.properties

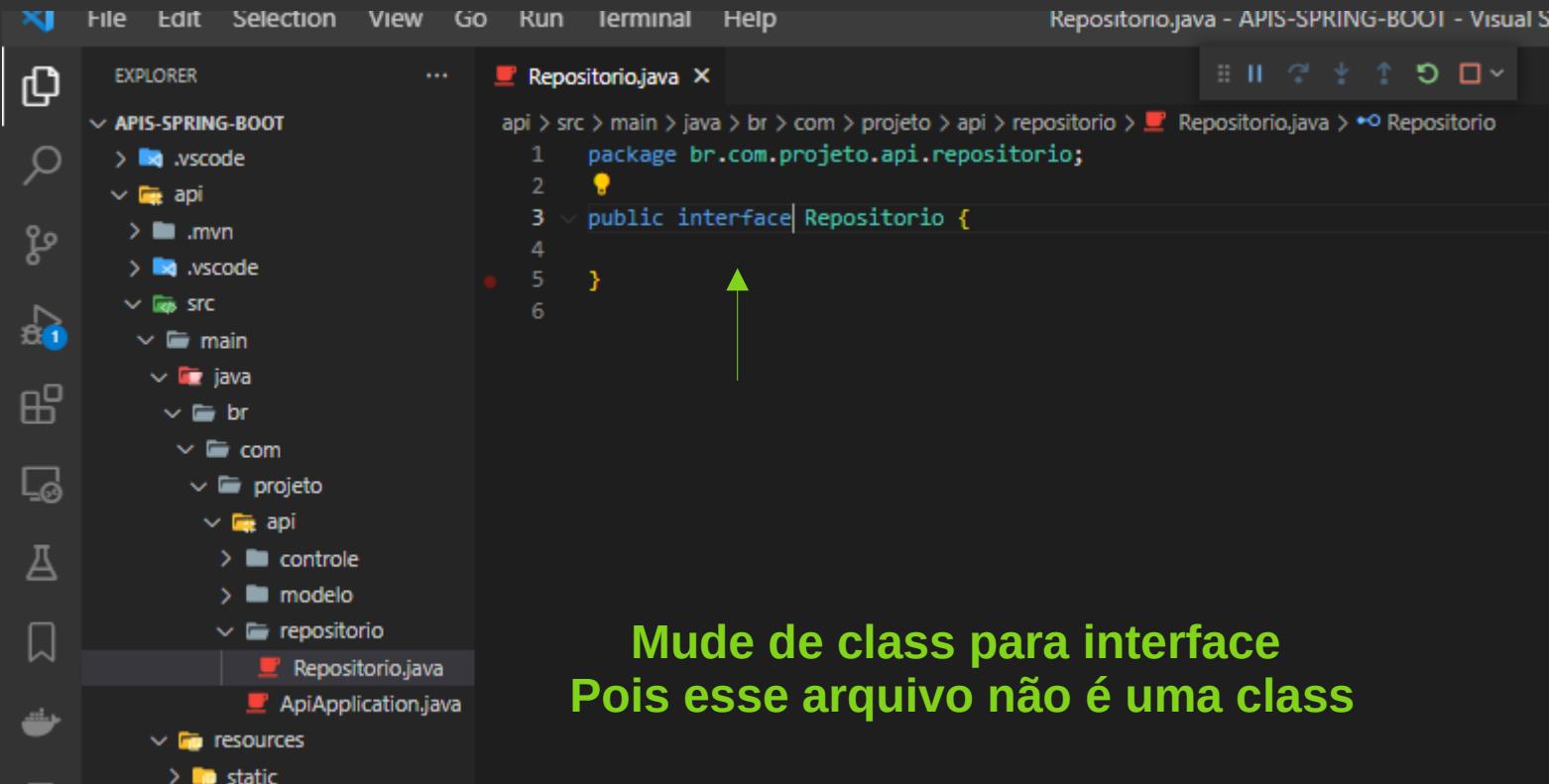
test

Repositorio.java

```
1 package br.com.projeto.api.repositorio;
2
3 public class Repositorio {
4
5 }
```

class Repositorio
interface Repositorio
enum Repositorio
record Repositorio()
abstract class Repositorio
@interface Repositorio

Dentro de repositorio crie
Repositorio.java



```
api > src > main > java > br > com > projeto > api > repositorio > Repositorio.java > Repositorio
1 package br.com.projeto.api.repositorio;
2
3 public interface Repositorio {
4
5 }
6
```

Mude de class para interface
Pois esse arquivo não é uma class

Para o spring saber que é um repositorio adicionamos a
anotation @Repository e seu import

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Repository.java - APIS-SPRING-BOOT - Visual Studio Code
- Explorer View:** Shows the project structure under "APIS-SPRING-BOOT": .vscode, api, src (with main and java folders), and java (with br, com, projeto, and api subfolders).
- Code Editor:** Displays the file "Repository.java".

```
1 package br.com.projeto.api.repository;
2
3 @Reposito
4 public <--> Repository - org.springframework.stereotype.Repository
5
6 }
```
- Tooltip:** A tooltip is displayed over the "@Reposito" part of the code, listing the stereotype's methods:
 - o Repository - org.springframework.stereotype.Repository
 - o RepositoryDefinition - org.springframework.data.r...
 - o NoRepositoryBean - org.springframework.data.repos...
 - o EnableJpaRepositories - org.springframework.data...
 - o ConditionalOnRepositoryType - org.springframework...
- Description:** Below the tooltip, there are two descriptive paragraphs:
 - Indicates that an annotated class is a "Repository", originally defined by Domain-Driven Design (Evans, 2003) as "a mechanism for encapsulating storage, retrieval, and search behavior which emulates a collection of objects".
 - Teams implementing traditional Jakarta EE patterns such as "Data Access Object" may also apply this stereotype to DAO classes, though care should be taken to understand the distinction between Data Access Object and DDD-style repositories before...

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

- File Bar:** File Edit Selection View Go Run Terminal Help
- Title Bar:** Repositorio.java - API-SPRING-BOOT
- Explorer View:** Shows the project structure under "APIS-SPRING-BOOT":
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - control
 - Code Editor:** The file "Repositorio.java" is open, showing the following code:

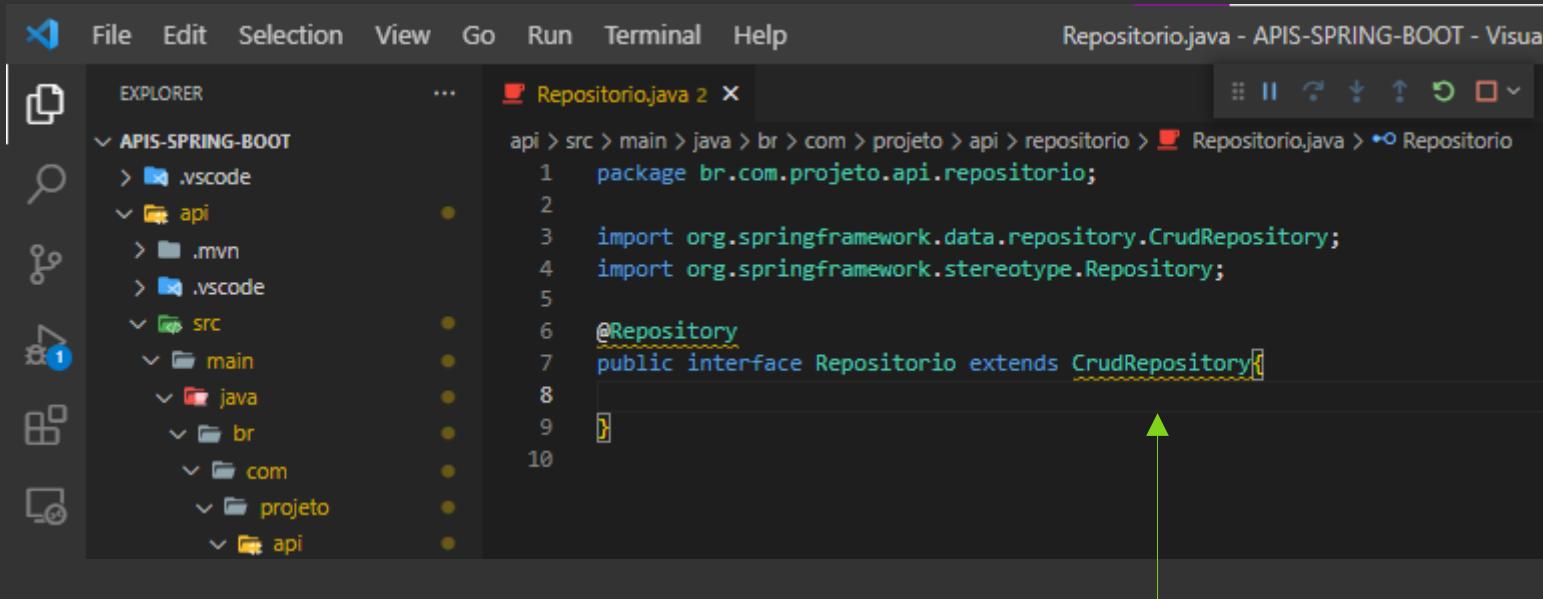
```
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.stereotype.Repository;
4
5 @Repository
6 public interface Repositorio {
7
8 }
9
```

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Repository.java - APIS-SPRING-BOOT - Visual Studio Code.
- Explorer View:** Shows the project structure under APIS-SPRING-BOOT, including .vscode, api, src (main, java, br, com, projeto, api, controle, modelo, repositorio), resources, static, templates, application.properties, test, and target.
- Code Editor:** Displays the following Java code:

```
api > src > main > java > br > com > projeto > api > repositorio > Repository.java > Repository
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.stereotype.Repository;
4
5 @Repository
6 public interface Repository extends Crud[
```
- IntelliJ IDEA Completion Screenshot:** A modal window shows completion suggestions for the word "Crud". The suggestions include:
 - o CrudMethodMetadata - org.springframework.data.jpa...
 - o CrudMethods - org.springframework.data.repository...
 - o CrudRepository - org.springframework.data.repository...
 - o CriteriaUpdate - jakarta.persistence.criteria...
 - o CurrentTenantIdentifierResolver - org.hibernate.c...
 - o CoroutineCrudRepository - org.springframework.dat...
 - o CriteriaBuilder - jakarta.persistence.criteria...
 - o CreateViewOrBuilder - com.mysql.cj.x.protobuf.Mys...
 - o CachedResultSetMetaData - com.mysql.cj.jdbc.result...
 - o ContributableDatabaseObject - org.hibernate.boot...
 - o ConstructorBinding - org.springframework.boot.con...
 - o ConstructorBinding - org.springframework.boot.con...
- Right Panel:** Shows the full documentation for the CrudMethodMetadata interface, including the interface itself, its author (Oliver Gierke, Thomas Darimont, Christoph Strobl, Mark Paluch, Jens Schauder, Greg Turnquist), and its purpose: "Interface to abstract CrudMethodMetadata that provide the LockModeType to be used for query execution."

Usando extends criamos uma herança do metodo crudrepository que disponibiliza vários métodos para usarmos



The screenshot shows a dark-themed interface of the Visual Studio Code code editor. In the top navigation bar, the tabs "File", "Edit", "Selection", "View", "Go", "Run", "Terminal", and "Help" are visible. The active tab is "File". To the right of the tabs, the file name "Repositorio.java - APIS-SPRING-BOOT - Visual" is displayed. Below the tabs is a toolbar with icons for file operations like Open, Save, and Close, along with other icons for search, refresh, and zoom.

The left side of the screen features the "EXPLORER" view, which shows the project structure:

- APIS-SPRING-BOOT
- .vscode
- api
 - .mvn
 - .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api

The main workspace contains the code for the "Repositorio.java" interface:

```
1 package br.com.projeto.api.repository;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 @Repository
7 public interface Repositorio extends CrudRepository<{
8
9 }
10 }
```

A green arrow points upwards from the bottom of the slide towards the code editor window.

Esse erro é gerado pois temos que passar para o crud o modelo que queremos trabalhar e o tipo de dado que é a nossa chave primaria vamos fazer

Primeiro adicionamos o modelo Pessoa e importamos

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

- File Explorer:** Shows the project structure under "API-SPRING-BOOT". The "src/main/java" folder contains packages for ".api", "br.com.projeto", and "br.com.projeto.api.repository". Inside "br.com.projeto.api.repository", there are files named "Repositorio.java" and "Repositorio.j...".
- Code Editor:** The current file is "Repositorio.java". The code defines an interface "Repositorio" that extends "CrudRepository<Pessoa>".

```
1 package br.com.projeto.api.repository;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 @Repository
7 public interface Repositorio extends CrudRepository<Pessoa>{}
```
- IntelliSense / Hover:** A tooltip is displayed over the word "Pessoa", showing its definition: "br.com.projeto.api.modelo.Pessoa". The tooltip also lists other related classes from the Spring Framework and Hibernate.
- Terminal:** No terminal tab, there is a single entry: "• Repositorio.java - API-SPRING-BOOT - Visual Studio Code".

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

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor:** The active file is `Repositorio.java`, located at `api > src > main > java > br > com > projeto > api > repositorio > Repositorio.java`. The code is as follows:

```
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 import br.com.projeto.api.modelo.Pessoa;
7
8 @Repository
9 public interface Repositorio extends CrudRepository<Pessoa, Long> {
10
11 }
```

O próximo dado é o tipo que sempre vai ter que ser uma classe que definimos no nosso modelo como int e o crudrepository não aceita tipos primitivos
Por isso utilizamos a classe interger vamos fazer

File Edit Selection View Go Run Terminal Help

REPOSITORY.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - modelo
 - repositorio
- Repositorio.java
- ApiApplication.java
- resources
 - static
 - templates
- application.properties

Repositorio.java

```
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 import br.com.projeto.api.modelo.Pessoa;
7
8 @Repository
9 public interface Repositorio extends CrudRepository<Pessoa, Integer>{
10
11 }
```

The `Integer` class wraps a value of the primitive type `int` in an object. An object of type `Integer` contains a single field whose type is `int`.

In addition, this class provides several methods for converting an `int` to a `String` and a `String` to an `int`, as well as other constants and methods useful when dealing with an `int`.

This is a value-based class; programmers should treat instances that are equal as interchangeable and should not use instances for synchronization.

Integer - java.lang
IntegerDataType - com.mysql.cj.protocol.a.NativeC...
IntegerDescriptor - org.hibernate.internal.util.t...
IntegerDeserializer - com.fasterxml.jackson.databa...
IntegerJavaType - org.hibernate.type.descriptor.j...
IntegerJdbcType - org.hibernate.type.descriptor.j...
IntegerPrimitiveArrayType - org.hibernate.type.typ...
IntegerProperty - com.mysql.cj.conf
IntegerPropertyDefinition - com.mysql.cj.conf
IntegerSerializer - com.fasterxml.jackson.databind...
IntegerSyntax - javax.print.attribute
IntegerTokenConverter - ch.qos.logback.core.rolli...

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

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Repositorio.java - APIS-SPRING-BOOT - Visual Studio Code.
- Explorer (Left Panel):** Shows the project structure of "APIS-SPRING-BOOT".
 - Root: .vscode, .mvn, .vscode
 - api: .vscode
 - src: main (java, br, com, projeto, api, controle, modelo, repositorio)
 - resources: static, templates, application.properties
 - test
 - target, .gitignore
 - HELP.md, mvnw, mvnw.cmd, pom.xml, README.md
- Editor (Center Panel):** The file "Repositorio.java" is open.

```
1 package br.com.projeto.api.repository;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 import br.com.projeto.api.modelo.Pessoa;
7
8 @Repository
9 public interface Repositorio extends CrudRepository<Pessoa, Integer> {
10
11 }
12
```
- Terminal (Bottom Panel):** Shows the output of a recent command.

```
2023-01-23T13:32:20.116-03:00 INFO 9796 --- [ restartedMain] o.s.b.d.a.OptionalLiveRelo
LiveReload server is running on port 35729
2023-01-23T13:32:20.147-03:00 INFO 9796 --- [ restartedMain] o.s.b.a.web.EndpointLinks

```

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

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Repositorio.java - APIS-SPRING-BOOT - Visual Studio
- Explorer:** Shows the project structure under "APIS-SPRING-BOOT".
 - .vscode
 - api
 - .mvn
 - .vscode
 - src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - modelo
 - repository
 - resources
 - static
 - templates
 - application.properties
 - test
 - target
 - .gitignore
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - README.md
- Editor:** The file "Repositorio.java" is open, showing Java code for a repository interface.

```
1 package br.com.projeto.api.repository;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 import br.com.projeto.api.modelo.Pessoa;
7
8 @Repository
9 public interface Repositorio extends CrudRepository<Pessoa, Integer>{
10
11 }
```
- Terminal:** Shows log output from a recent run.

```
2023-01-23T13:36:43.358-03:00 INFO 9796 --- [ restartedMain] o.s.b.d.a.OptionalLiveReload
LiveReload server is running on port 35729
```

Pela cor e sublinhado temos erros no
{@repository} vamos resolver
Abrimos o arquivo pom.xml

File Edit Selection View Go Run Terminal Help pom.xml - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - modelo
 - repositorio
 - Repositorio... 1
 - ApiApplication.java
- resources
 - static
 - templates
 - application.properties
- test
- target
- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- REDME.md

REPOSITORY

OUTLINE

TIMELINE

JAVA PROJECTS

MAVEN

File 0 Δ 1 Spring Boot-ApiApplication<api> (APIS-SPRING-BOOT)

Repository.java 1 pom.xml

api > pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>3.0.2</version>
    <relativePath/> 
  </parent>
  <groupId>br.com.projeto</groupId>
  <artifactId>api</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>api</name>
  <description>Demo project for Spring Boot</description>
  <properties>
    <java.version>17</java.version>
  </properties>
  <dependencies>
    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-data-jpa</artifactId>
      <version>3.0.2</version>
    </dependency>
  </dependencies>

```

PROBLEMS 1 OUTPUT TERMINAL

TERMINAL

```
2023-01-23T13:36:43.358-03:00 INFO 9796 --- [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2023-01-23T13:36:43.365-03:00 INFO 9796 --- [ restartedMain] o.s.b.a.e.web.EndpointLinksResolver : Exposing 1 endpoint(s) beneath base path '/actuator'
2023-01-23T13:36:43.403-03:00 INFO 9796 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''
2023-01-23T13:36:43.411-03:00 INFO 9796 --- [ restartedMain] br.com.projeto.api.ApiApplication : Started ApiApplication in 1.815 seconds (process running for 2111.557)
2023-01-23T13:36:43.414-03:00 INFO 9796 --- [ restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation unchanged
```

DEBUG CONSOLE

- Run: ApiApplication
- Run: ApiApplication

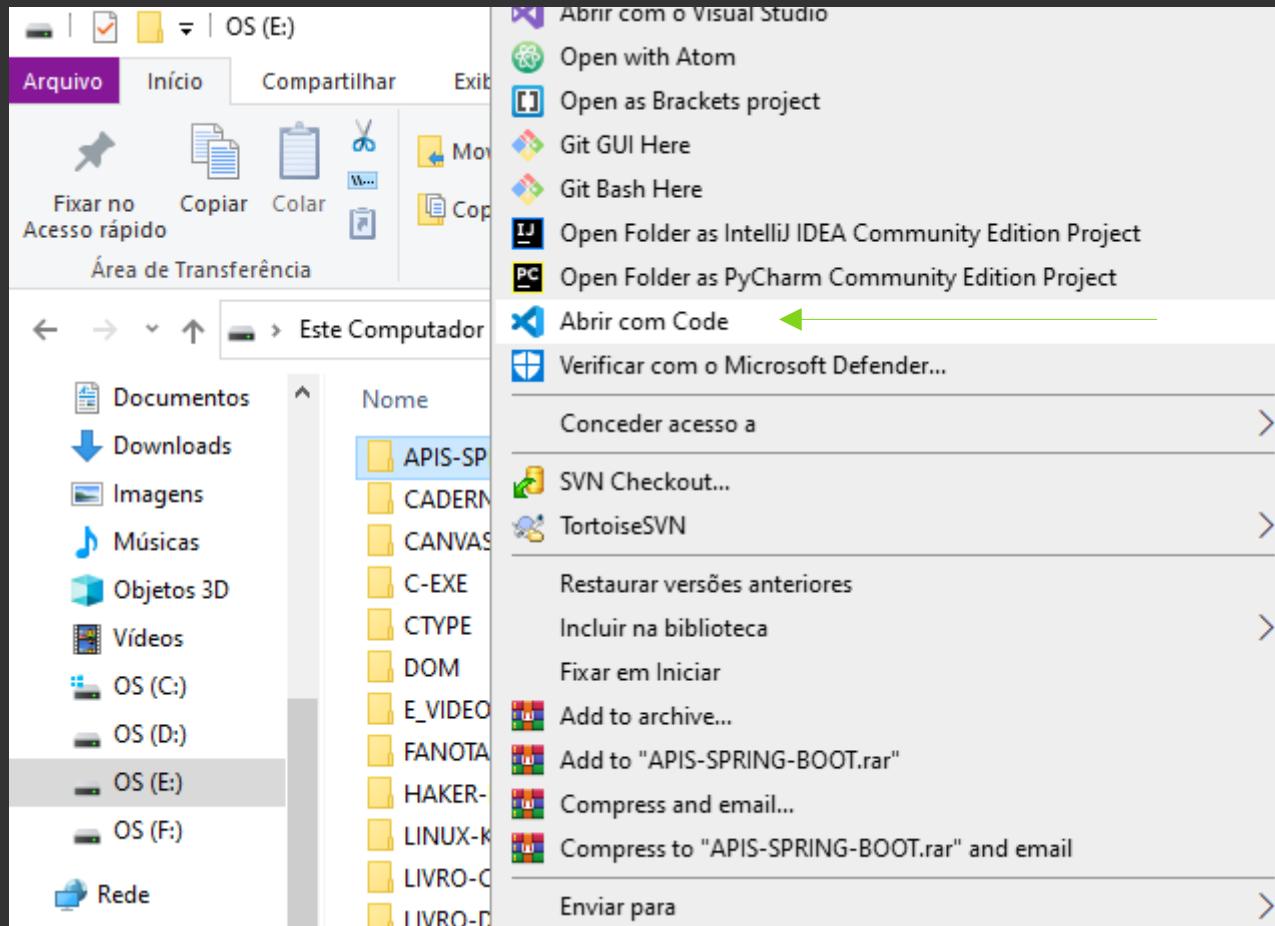
Do you want to install the Dependency Analytics extension to stay informed about vulnerable dependencies in pom.xml files?

Source: Language Support for Java(TM) by Red Hat ... [install](#) [never](#) [later](#)

Ln 22, Col 56 Tab Size: 4 UTF-8 { XML Go Live

**Essa solução não funcionou nem tirando a versão da dependencia
Lendo a pagina mandaram fechar o spring e abrir novamente vamos tentar fechar
e reabrir**

Fechei e abri de novo o vscode



A screenshot of the Visual Studio Code interface. The top bar shows the title "Repository.java - APIS-SPRING-BOOT - Visual Studio Code". The left sidebar contains icons for File, Edit, Selection, View, Go, Run, Terminal, and Help. Below these are sections for EXPLORER, OUTLINE, TIMELINE, JAVA PROJECTS, and MAVEN. The EXPLORER section shows a project structure for "APIS-SPRING-BOOT" with folders like ".vscode", "api", ".mvn", ".vscode", "src", "main", "java", "br", "com", "projeto", "api", "controle", "modelo", "repositorio", and files like "Repository.java", "ApiApplication.java", "application.properties", "mvnw", "mvnw.cmd", "pom.xml", and "README.md". The main area shows the code for "Repository.java":

```
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.data.repository.CrudRepository;
4 import org.springframework.stereotype.Repository;
5
6 import br.com.projeto.api.modelo.Pessoa;
7
8 @Repository
9 public interface Repositorio extends CrudRepository<Pessoa, Integer>{
10
11 }
```

The status bar at the bottom shows "Ln 12, Col 1" and "Spaces: 4 UTF-8 CRLF {} Java Go Live". A large green text overlay "E o erro sumiu voltou o erro" is centered in the middle of the screen.



EXPLORER

...

APIS-SPRING-BOOT

> .vscode

< api

> .mvn

> .vscode

< src

< main

< java

< br

< com

< projeto

< api

> controle

> modelo

< repositorio

< Repositorio.java

< ApiApplication.java

< resources

> static

> templates

application.properties

> test

> target

.gitignore

HELP.md

mvnw

mvnw.cmd

pom.xml

REDME.md

Repositorio.java X pom.xml

api > src > main > java > br > com > projeto > api > repositorio > Repositorio.java > Language Support for Java

```
1 package br.com.projeto.api.repositorio;
2
3 import org.springframework.data.jpa.repository.JpaRepository;
4 //import org.springframework.data.repository.CrudRepository;
5 //import org.springframework.stereotype.Repository;
6
7 import br.com.projeto.api.modelo.Pessoa;
8 import jakarta.transaction.Transactional;
9
10 //@Repository
11 @Transactional
12 public interface Repositorio extends JpaRepository<Pessoa, Integer>{
13
14 }
```

PROBLEMS OUTPUT TERMINAL

No problems have been detected in the workspace.

O único jeito que o erro sumiu até agora
vou deixar os links para futuras pesquisas

<https://spring.io/blog/2011/02/10/getting-started-with-spring-data-jpa>

<https://www.youtube.com/watch?v=ReZG1Cv60Bs>

Podemos ir na pagina do tutorial e na pagina da api
Qualquer erro podemos voltar a versao antiga mas o próprio professor disse não existir
problemas

#15
ANNOTATION @Autowired

Pra que ela serve a @AutoWired?

**Para o desenvolvedor não precisar instanciar objetos pra ter acesso a determinados
metodos isso é chamado de injeção de dependencias**

Adicione o @AutoWired e seu import

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

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Controle.java - APIS-SPRING-BOOT - Visual Studio Code.
- Explorer View:** Shows the project structure under APIS-SPRING-BOOT, including .vscode, api, .mvn, .vscode, src, main, java, br, com, projeto, api, controle, Controle.java, modelo, repositorio, Repositorio.java, ApiApplication.java, resources, static, templates, application.properties, test, target, .gitignore, and HPI P.mld.
- Code Editor:** The file Controle.java is open. The code defines a REST controller with a single endpoint that returns a welcome message. A tooltip for the @Auto annotation is displayed, providing information about its usage and the org.springframework.boot.autoconfigure package.
- Bottom Status Bar:** Shows the status bar with the text "HPI P.mld".

```
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;

import br.com.projeto.api.modelo.Pessoa;

@RestController
public class Controle {

    @GetMapping("/pessoa")
    public Pessoa pessoa(@RequestBody Pessoa nome) {
        return "Seja bem vindo(a) " + nome;
    }
}
```

Completion Suggestion: The suggestion for the @Auto annotation is shown in the tooltip:

org.springframework.boot.autoconfigure.x
AutoConfigureOrder
Auto-configuration specific variant of Spring Framework's @Order annotation. Allows auto-configuration classes to be ordered among themselves without affecting the order of configuration classes passed to AnnotationConfigApplicationContext.register(Class).
As with standard @Configuration classes, the order in which auto-configuration classes are applied only affects the order in which their beans are defined. The order in which those beans are subsequently created is unaffected and is determined by each bean's dependencies and any @DependsOn relationships.

File Edit Selection View Go Run Terminal Help

• Controle.java - APIS-SPRING-BOOT - Visual Studio Code



REPOSITORY Repository.java Controle.java ●

```
api > src > main > java > br > com > projeto > api > controle > Controle.java > Language Support for Java(TM) by Red Hat > Controle > mensagem  
1 package br.com.projeto.api.controle;  
2  
3 import org.springframework.beans.factory.annotation.Autowired; ←  
4 import org.springframework.web.bind.annotation.GetMapping;  
5 import org.springframework.web.bind.annotation.PathVariable;  
6 import org.springframework.web.bind.annotation.PostMapping;  
7 import org.springframework.web.bind.annotation.RequestBody;  
8 import org.springframework.web.bind.annotation.RestController;  
9  
10 import br.com.projeto.api.modelo.Pessoa;  
11  
12 @RestController  
13 public class Controle {  
14     @Autowired  
15     @GetMapping("/")  
16     public String mensagem(){  
17         return "Hello World";  
18     }  
19 }  
20
```

File Edit Selection View Go Run Terminal Help • Controle.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
 - main
 - java
 - br
 - com
 - projeto
 - api
 - controle
 - Controle.java- modelo
- repositorio
 - Repositorio.java
 - ApiApplication.java
- resources
 - static
 - templates
 - application.properties
- test
- target
 - .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- REDME.md

Repositorio.java 2 ●

```
2
3     import org.springframework.beans.factory.annotation.Autowired;
4     import org.springframework.web.bind.annotation.GetMapping;
5     import org.springframework.web.bind.annotation.PathVariable;
6     import org.springframework.web.bind.annotation.PostMapping;
7     import org.springframework.web.bind.annotation.RequestBody;
8     import org.springframework.web.bind.annotation.RestController;
9
10    import br.com.projeto.api.modelo.Pessoa;
11
12    @RestController
13    public class Controle {
14
15        @Autowired
16        private Repositorio
17        @GetMapping("/")
18        public String me
19            return "Hell"
20        }
21
22        @GetMapping("/bo
23        public String bo
24            return "Seja"
25        }
26
27        @GetMapping("/bo
28        public String boasVindas(@PathVariable String nome){
29            return "Seja bem vindo(a) " + nome;
30
31    }
```

PROBLEMS 2 OUTPUT TERMINAL

TERMINAL

Estamos criando um objeto de forma privada

Repositories - org.springframework.data.repository...
RepositoriesPopulatedEvent - org.springframework...
Repositorio - br.com.projeto.api.repositorio
Repository - org.apache.catalina.startup.ClassLo...
Repository - org.aspectj.apache.bcel
Repository - org.aspectj.apache.bcel.util
Repository - org.springframework.boot.actuate.aut...
Repository - org.springframework.data.repository
Repository - org.springframework.stereotype
RepositoryAwareMethodLookup - org.springframework...
RepositoryBeanDefinitionParser - org.springframew...
RepositoryBeanDefinitionRegistrarSupport - org.sp...

org.springframework.data.repository.sup...
port.Repositories
Wrapper class to access repository instances obtained from a ListableBeanFactory.

- Author:
 - Oliver Gierke
 - Thomas Darimont
 - Thomas Eizinger
 - Christoph Strobl
 - Alessandro Nistico
 - Johannes Englmeier

CONSOLE

File Edit Selection View Go Run Terminal Help Controle.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER Repository.java Controle.java 1 X

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
- main
- java
- br
- com
- projeto
- api
- controle
- Controle.java
- modelo
- repositorio
- Repositorio.java
- ApiApplication.java

resources

- static
- templates
- application.properties

test

target

- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- REDME.md

PROBLEMS 1 OUTPUT TERMINAL

TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. Todos os direitos reservados.
Experimente a nova plataforma cruzada PowerShell <https://aka.ms/pscore6>
PS E:\APIS-SPRING-BOOT> []

Ln 17, Col 30 Spaces: 4 UTF-8 CRLF Java Go Live

Criamos o objeto e adicionamos seu import

```
3     import org.springframework.beans.factory.annotation.Autowired;
4     import org.springframework.web.bind.annotation.GetMapping;
5     import org.springframework.web.bind.annotation.PathVariable;
6     import org.springframework.web.bind.annotation.PostMapping;
7     import org.springframework.web.bind.annotation.RequestBody;
8     import org.springframework.web.bind.annotation.RestController;
9
10    import br.com.projeto.api.modelo.Pessoa;
11    import br.com.projeto.api.repositorio.Repositorio; ◀
12
13    @RestController
14    public class Controle {
15
16        @Autowired
17        private Repositorio acao; ◀
18
19        @GetMapping("/")
20        public String mensagem(){
21            return "Hello World";
22        }
23
24        @GetMapping("/boasVindas")
25        public String boasVindas(){
26            return "Seja bem vindo(a) ";
27        }
28
29        @GetMapping("/boasVindas/{nome}")
30        public String boasVindas(@PathVariable String nome){
31            return "Seja bem vindo(a) " + nome;
32        }
33
```

**Qual o tipo do objeto criado?
É do tipo Repository**

**E porque tivemos que criar um obejto do tipo repositorio?
Porque ele contem as ações do nosso banco de dados
Quais são essas ações?
Selecionar cadastrar deletar excluir updat o chamado crud**

File Edit Selection View Go Run Terminal Help Controle.java - APIS-SPRING-BOOT - Visual Studio Code

EXPLORER Repository.java Controle.java 1

APIS-SPRING-BOOT

- .vscode
- api
- .mvn
- .vscode
- src
- main
- java
- br
- com
- projeto
- api
- controle
- Controle.java

modelos

repositorio

Repositorio.java

ApiApplication.java

resources

static

templates

application.properties

test

target

.gitignore

HELP.md

mvnw

mvnw.cmd

pom.xml

REDME.md

PROBLEMS 1 OUTPUT TERMINAL

TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. Todos os direitos reservados.
Experimente a nova plataforma cruzada PowerShell <https://aka.ms/pscore6>
PS E:\APIS-SPRING-BOOT>

3 import org.springframework.beans.factory.annotation.Autowired;
4 import org.springframework.web.bind.annotation.GetMapping;
5 import org.springframework.web.bind.annotation.PathVariable;
6 import org.springframework.web.bind.annotation.PostMapping;
7 import org.springframework.web.bind.annotation.RequestBody;
8 import org.springframework.web.bind.annotation.RestController;
9
10 import br.com.projeto.api.modelo.Pessoa;
11 import br.com.projeto.api.repositorio.Repositorio;
12
13 @RestController
14 public class Controle {
15
16 @Autowired
17 private Repositorio acao; 
18
19 @GetMapping("/")
20 public String mensagem(){
21 return "Hello World";
22 }
23
24 @GetMapping("/boasVindas")
25 public String boasVindas(){
26 return "Seja bem vindo(a) ";
27 }
28
29 @GetMapping("/boasVindas/{nome}")
30 public String boasVindas(@PathVariable String nome){
31 return "Seja bem vindo(a) " + nome;
32 }

Nesse caso o objeto acao pode chamar esses metodos crud's

E onde esta a instancia onde esta o new para criar um novo objeto?

O spring mesmo faz isso com a anotatio @AutoWired

#16
Efetuando cadastros com save

