

## P15 TRANSCRIPT - SPRING BOOT

01:10

I'm gonna search Spring Boot ***searches “spring boot macos” on google (goes to the official website)***

source: [docs.spring.io/spring-boot](https://docs.spring.io/spring-boot)

9. Installing Spring Boot

Part II. Getting started

Larissa Salerno de Castro

**9.1 Installation instructions for the Java developer**

You can use Spring Boot in the same way as any standard Java library. Simply include the appropriate `spring-boot-* .jar` files on your classpath. Spring Boot does not require any special tools integration, so you can use any IDE or text editor; and there is nothing special about a Spring Boot application, so you can run and debug as you would any other Java program.

Although you *could* just copy Spring Boot jars, we generally recommend that you use a build tool that supports dependency management (such as Maven or Gradle).

**9.1.1 Maven installation**

Spring Boot is compatible with Apache Maven 3.0 or above. If you don't already have Maven installed you can follow the instructions at <http://maven.apache.org>.

01:48

So it seems we have to install Java first and this Maven is one of the package manager I think for Java ***he reads through the page for about 2 minutes***

03:20

Can I see it next year so I can see I can

03:33

So there's a zip file here... **he clicks on the zipfile**

}



## 9.2 Installing the Spring Boot CLI

The Spring Boot CLI is a command line tool that can be used if you want to quickly prototype with Spring. It allows you to run Groovy scripts, which means that you have a familiar Java-like syntax, without so much boilerplate code.

You don't need to use the CLI to work with Spring Boot but it's definitely the quickest way to get a Spring application off the ground.

### 9.2.1 Manual installation

You can download the Spring CLI distribution from the Spring software repository:

- [spring-boot-cli-1.0.2.RELEASE-bin.zip](#)
- [spring-boot-cli-1.0.2.RELEASE-bin.tar.gz](#)

Cutting edge [snapshot distributions](#) are also available.

Once downloaded, follow the [INSTALL.txt](#) instructions from the unpacked archive. In summary: there is a `spring` script (`spring.bat` for Windows) in a `bin/` directory in the `.zip` file, or alternatively you can use `java -jar` with the `.jar` file (the script helps you to be sure that the classpath is set correctly).

### 9.2.2 Installation with GVM

GVM (the Groovy Environment Manager) can be used for managing multiple versions of various Groovy and Java binary packages, including Groovy itself and the Spring Boot CLI. Get `gvm` from [http://gvmtool.net](#) and install Spring Boot with

```
$ gvm install springboot
$ spring --version
Spring Boot v1.0.2.RELEASE
```

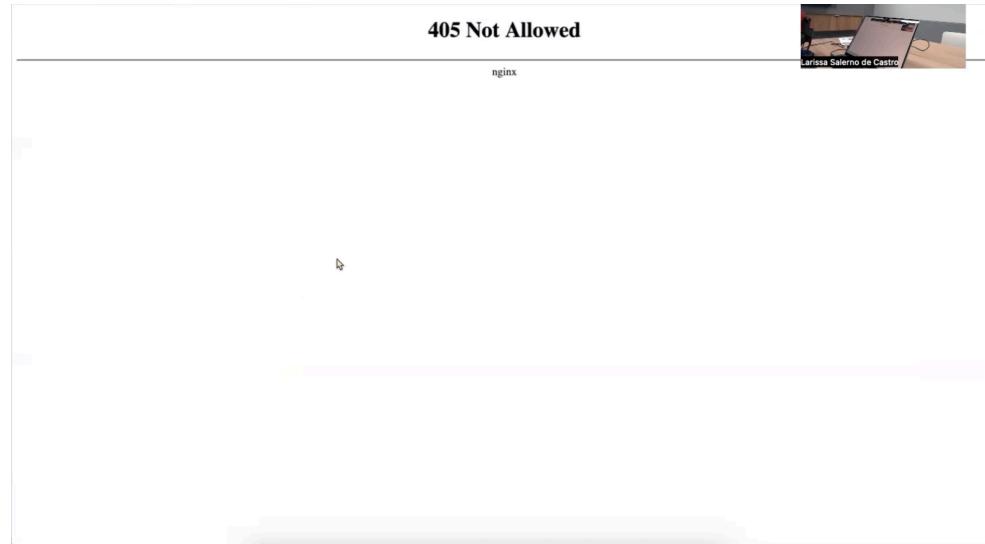
If you are developing features for the CLI and want easy access to the version you just built, follow these extra instructions.

```
$ gvm install springboot-dev /path/to/spring-boot/spring-boot-cli/target/spring-boot-cli-1.0.2.RELEASE-bin/spring-1.0.2.RELEASE/
```

Source: [docs.spring.io/spring-boot](#)

03:39

well the website is broken... *he clicks on the first zip file option and it takes him no an error page*



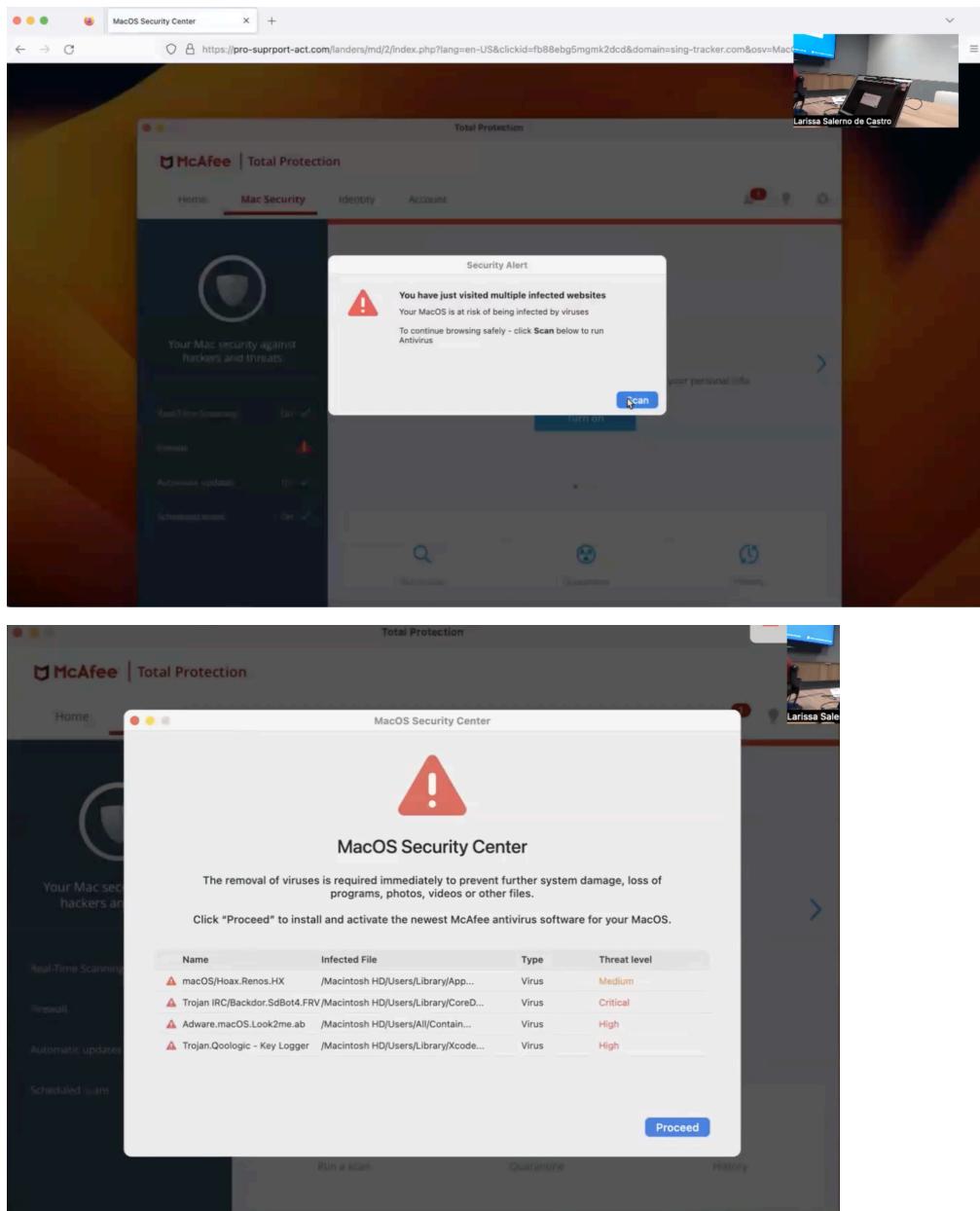
*he goes back to the previous page and reads the instructions again*

*he starts reading section 9.2.2 and decides to install GVM*

04:06

so I would like to install GVM first *clicks on GVM website link, when he clicks on the link, it takes him to a non existent domain (http)*

source: <http://gvmtool.net>



04:18

Oh I think I got blocked from the software

05:22

oh maybe I have to find another way like some post online ***goes to google and searches "install springboot macos" and clicks on a medium post***

source:

<https://medium.com/microservices-architectures/prepare-your-mac-for-java-spring-microservice-projects-install-jdk-brew-maven-and-intellij-7ccb0207ca04>

05:41

**Observer:** When you are installing software development source, Do you usually prefer to follow the official documentation or other sources?

05:53

So, if like is easy to read the document on the official website then I will follow it provide different option that I have not experienced before so, I would prefer to read other documents like from Stack Overflow or from Medium this kind of website and so things on this cache sure rain how to install

06:37

so first need to read how to install... ***he reads through the medium post***

06:59

Hm... so I'm gonna need to check the official one ***goes back to the official website and starts following the instructions from section 10***

10. Installing Spring Boot

Part II. Getting Started

**10. Installing Spring Boot**

Spring Boot can be used with "classic" Java development tools or installed as a command line tool. Either should check your current Java installation by using the following command:

```
$ java -version
```

If you are new to Java development or if you want to experiment with Spring Boot, you might want to try the read on for "classic" installation instructions.

**10.1 Installation Instructions for the Java Developer**

You can use Spring Boot in the same way as any standard Java library. To do so, include the appropriate `spring-boot-*.jar` files on your classpath. Spring Boot does not require any special tools integration, so you can use any IDE or text editor. Also, there is nothing special about a Spring Boot application, so you can run and debug a Spring Boot application as you would any other Java program.

Although you could copy Spring Boot jars, we generally recommend that you use a build tool that supports dependency management (such as Maven or Gradle).

**10.1.1 Maven Installation**

Spring Boot is compatible with Apache Maven 3.2 or above. If you do not already have Maven installed, you can follow the instructions at [maven.apache.org](http://maven.apache.org).

On many operating systems, Maven can be installed with a package manager. If you use OSX Homebrew, try `brew install maven`. Ubuntu users can run `sudo apt-get install maven`. Windows users with Chocolatey can run `choco install maven` from an elevated (administrator) prompt.

Spring Boot dependencies use the `org.springframework.boot` groupId. Typically, your Maven POM file inherits from the `spring-boot-starter-parent`.

## he tries to use the installing command for brew and gets an error message

09:05

"No brew found" So it is still

\*\*\*\*\* WARNING \*\*\*\*\*

This is a University of Melbourne computer system. Access to this computer system, including all related equipment, networks, and network devices (including internet access) and electronic resources at the University of Melbourne is restricted to employees, students, or other individuals authorised by the University or its affiliates.

Use of this system is subject to "MPF1314 Provision and Acceptable Use of IT" This policy can be found at <https://policy.unimelb.edu.au/MPF1314> Unauthorised use is prohibited. If you do not understand this notice, do not proceed further and contact the Service Centre on +(61 3) 834 40888.

By continuing, you acknowledge these Terms of Use and agree to use the University of Melbourne computer facilities in accordance with this notice.

\*\*\*\*\*

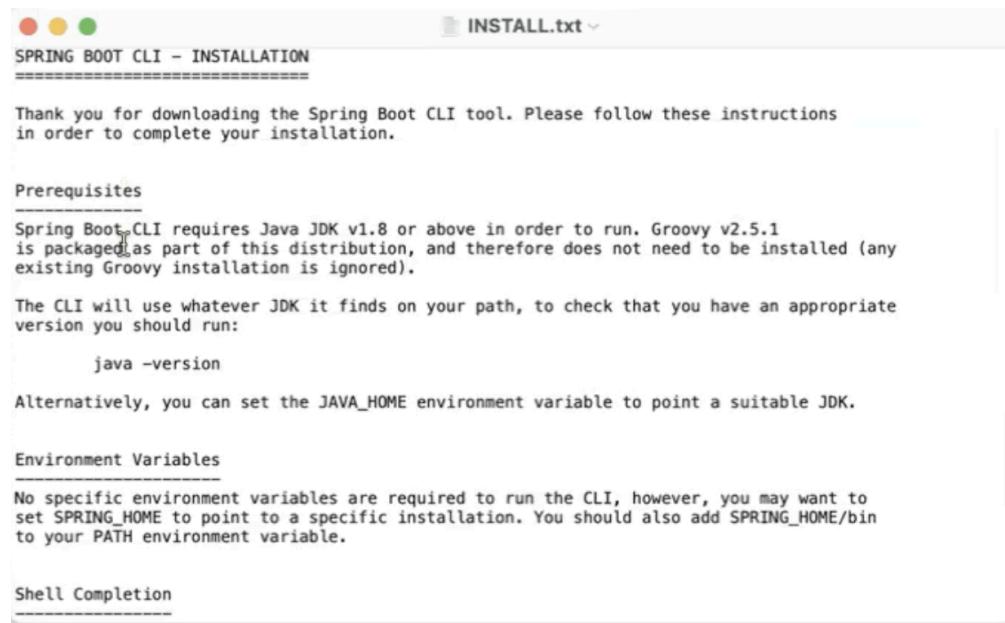
```
lsalernodeca@4180L-209577-M ~ % java --version
The operation couldn't be completed. Unable to locate a Java Runtime.
Please visit http://www.java.com for information on installing Java.

lsalernodeca@4180L-209577-M ~ % brew install maven
zsh: command not found: brew
lsalernodeca@4180L-209577-M ~ %
```

## he installs a zip file from section 10.2.1

11:05

Hmmm instal.txt **he clicks on the file install.txt**



**he reads the file carefully**

12:20

**Observer:** Was that file giving any sort of instructions?

12:25

Yes, so first I need Java JDK version 1.8 or above and then Groovy version 2.5 and... No I don't need to install this one just JDK so to do that I will check the Java is installed in we don't need any environment variable so we can just use a command line **he keeps reading the file carefully**

13:28

Hm... It seems like... **the file tells him to install java and he goes on google and types "jdk download", he clicks on the first option**

source: <https://www.oracle.com/au/java/technologies/downloads/>

The screenshot shows the Oracle Java Downloads page. At the top, there are links for 'Java downloads', 'Tools and resources', and 'Java archive'. A photo of a person working on a laptop is in the top right corner. Below this, a section titled 'JDK Development Kit 20.0.2 downloads' is shown. It states that JDK 20 binaries are free to use in production and free to redistribute, at no cost, under the Oracle No-Fee Terms and Conditions. It also notes that JDK 20 will receive updates under these terms, until September 2023 when it will be superseded by JDK 21. There are tabs for 'Linux', 'macOS' (which is selected), and 'Windows'. A table lists download options:

Product/file description	File size	Download
ARM64 Compressed Archive	177.21 MB	<a href="https://download.oracle.com/java/20/latest/jdk-20_macos-aarch64_bin.tar.gz">https://download.oracle.com/java/20/latest/jdk-20_macos-aarch64_bin.tar.gz</a> (sha256)
ARM64 DMG Installer	176.54 MB	<a href="https://download.oracle.com/java/20/latest/jdk-20_macos-aarch64_bin.dmg">https://download.oracle.com/java/20/latest/jdk-20_macos-aarch64_bin.dmg</a> (sha256)
x64 Compressed Archive	179.54 MB	<a href="https://download.oracle.com/java/20/latest/jdk-20_macos-x64_bin.tar.gz">https://download.oracle.com/java/20/latest/jdk-20_macos-x64_bin.tar.gz</a> (sha256)
x64 DMG Installer	178.87 MB	<a href="https://download.oracle.com/java/20/latest/jdk-20_macos-x64_bin.dmg">https://download.oracle.com/java/20/latest/jdk-20_macos-x64_bin.dmg</a> (sha256)

Below the table, there is a 'Documentation Download' button and a 'Release information' section with links to 'Online Documentation', 'Installation Instructions', and 'Release Notes'.

*he reads through the page trying to understand the difference between the download options offered to him*

**After not understanding the difference between the files, he opens a new tab on the browser and searches for “commandline install springboot macos”**

*he clicks on the first link available*

The screenshot shows the Spring Boot CLI documentation page. The header features the Spring logo and a navigation bar with 'Back to index', '1. Installing the CLI' (which is highlighted in black), and '2. Using the CLI'. The main content is titled 'Spring Boot CLI'. It describes the Spring Boot CLI as a command line tool for bootstrapping projects. Below this, there are two sections: '1. Installing the CLI' and '2. Using the CLI'. The '1. Installing the CLI' section contains instructions for manual installation using SDKMAN! or Homebrew/MacPorts. The '2. Using the CLI' section is partially visible at the bottom. A Mac OS X dock is visible at the bottom of the screen.

source: <https://docs.spring.io/spring-boot/docs/current/reference/html/cli.html>

The screenshot shows a web browser window with the URL <https://docs.spring.io/spring-boot/docs/current/reference/html/getting-started.html#getting-started.installation.cli>. The page content includes:

- A sidebar with links: Back to index, 1. Introducing Spring Boot, 2. System Requirements, 3. Installing Spring Boot (selected), 3.1. Installation Instructions for the Java Developer, 3.2. Installing the Spring Boot CLI (selected), 3.2.1. Manual Installation, 3.2.2. Installation with SDKMAN!, 3.2.3. OSX Homebrew Installation, 3.2.4. MacPorts Installation, 3.2.5. Command-line Completion, 3.2.6. Windows Scoop Installation, 4. Developing Your First Spring Boot Application, and What to Read Next.
- The main content area:
  - 3.2.1. Manual Installation**: You do not need to use the CLI to work with Spring Boot, but it is a quick way to get a Spring application off the ground without an IDE.
  - 3.2.2. Installation with SDKMAN!**: You can download the Spring CLI distribution from one of the following locations:
    - spring-boot-cli-3.1.2-bin.zip
    - spring-boot-cli-3.1.2-bin.tar.gzOnce downloaded, follow the `INSTALL.txt` instructions from the unpacked archive. In summary, there is a `spring` script (`spring.bat` for Windows) in a `bin/` directory in the `.zip` file. Alternatively, you can use `java -jar` with the `.jar` file (the script helps you to be sure that the classpath is set correctly).

source:

<https://docs.spring.io/spring-boot/docs/current/reference/html/getting-started.html#getting-started.installation.cli>

16:46

Yeah so I searched for the keyword for using a commandline to install Springboot among Mac OS then they recommend using the SDKMAN! So I think this is much easier to install this **he clicks on the SDKMAN website**

source: [sdkman.io](https://sdkman.io)

The screenshot shows the [SDKMAN!](https://sdkman.io) website homepage. It features:

- A decorative banner at the top.
- A large button labeled "Get started now!" with the sub-instruction: "Go on, paste and run the following in a terminal:  
`curl -s \"https://get.sdkman.io\" | bash`"
- The title "The Software Development Kit Manager".
- A brief description: "SDKMAN! is a tool for managing parallel versions of multiple Software Development Kits on most Unix based systems. It provides a convenient Command Line Interface (CLI) and API for installing, switching, removing and listing Candidates. Formerly known as GVM the Groovy enVironment Manager, it was inspired by the very useful RVM and rbenv tools, used at large by the Ruby community."
- Two main sections:
  - By Developers, for Developers** (with a red arrow icon): "Making life easier. No more trawling download pages, extracting archives, messing with `_HOME` and `PATH` environment variables."
  - Multi-platform** (with a curly braces icon): "Runs on any UNIX based platforms: macOS, Linux, Cygwin, Solaris and FreeBSD."
- Icons for Java development, APIs, and a broker REST interface.

**he follows the instructions(copy and paste that first command). By executing this command he gets an error message**

This is a University of Melbourne computer system. Access to this computer system, including all related equipment, networks, and network devices (including internet access) and electronic resources at the University of Melbourne is restricted to employees, students, or other individuals authorised by the University or its affiliates.

Use of this system is subject to "MPF1314 Provision and Acceptable Use of IT". This policy can be found at <https://policy.unimelb.edu.au/MPF1314>. Unauthorised use is prohibited. If you do not understand this notice, do not proceed further and contact the Service Centre on +(61 3) 834 40888.

By continuing, you acknowledge these Terms of Use and agree to use the University of Melbourne computer facilities in accordance with this notice.

```
lsalernodeca@4180L-209577-M ~ % java --version
The operation couldn't be completed. Unable to locate a Java Runtime.
Please visit http://www.java.com for information on installing Java.

lsalernodeca@4180L-209577-M ~ % brew install maven
zsh: command not found: brew
lsalernodeca@4180L-209577-M ~ % curl \ -s\ \\"https://get.sdkman.io\\\" \|\ bash
zsh: no such file or directory: curl -s "https://get.sdkman.io" | bash
lsalernodeca@4180L-209577-M ~ %
```

***he goes back to the website and reads the instructions carefully***

***Then, he goes back to spring.io documentation and reads it carefully***

[Back to index](#)

- 1. Introducing Spring Boot
- 2. System Requirements
- 3. Installing Spring Boot
  - 3.1. Installation Instructions for the Java Developer
  - 3.2. Installing the Spring Boot CLI
    - 3.2.1. Manual Installation
    - 3.2.2. Installation with SDKMAN!
    - 3.2.3. OSX Homebrew Installation
    - 3.2.4. MacPorts Installation**
    - 3.2.5. Command-line Completion
    - 3.2.6. Windows Scoop Installation
  - 4. Developing Your First Spring Boot Application
  - 5. What to Read Next

### 3.2.4. MacPorts Installation

If you are on a Mac and use [MacPorts](#), you can install the Spring Boot CLI by using the following command:

```
$ sudo port install spring-boot-cli
```

### 3.2.5. Command-line Completion

The Spring Boot CLI includes scripts that provide command completion for the `BASH` and `zsh` shells. You can source the script (also named `spring`) in any shell or put it in your personal or system-wide bash completion initialization. On a Debian system, the system-wide scripts are in `<installation location>/shell-completion/bash` and all scripts in that directory are executed when a new shell starts. For example, to run the script manually if you have installed by using `SDKMAN!`, use the following commands:

```
$ . ~/.sdkman/candidates/springboot/current/shell-completion/bash/spring
$ spring <HIT TAB HERE>
grab help jar run test version
```

**Note**  
If you install the Spring Boot CLI by using Homebrew or MacPorts, the command-line completion scripts are automatically

***he decides to install using instructions from section 3.2.4 (MacPorts)***

**Quickstart**

1. Install Apple's Command Line Developer Tools: `xcode-select --install`
2. Install MacPorts for your version of the Mac operating system:
  - macOS Ventura v13
  - macOS Monterey v12
  - macOS Big Sur v11
  - macOS Catalina v10.15
  - Older OS? See here.

**Installing MacPorts**

MacPorts version 2.8.1 is available in various formats for download and installation (note, if you are upgrading to a new major release of macOS, see the [migration info page](#)):

- "pkg" in

**he checks the macOS version**

source: [macports.org/install.php](https://www.macports.org/install.php)

18:53

To check the macOS operating version or kernel version ... **he goes to google and searches "macos commandline check version"**

1. `system_profiler` command – Show Apple hardware and software configuration.
2. `sw_vers` command – Show Mac OS X operating system version.
3. `uname` command – Show operating system name and more.

Let us see how to find out macOS version on your Mac.

## Determine macOS version from the command line

Open the terminal application and type the following command:

\$ `sw_vers`



**he copies and paste the first command on the terminal**

source:

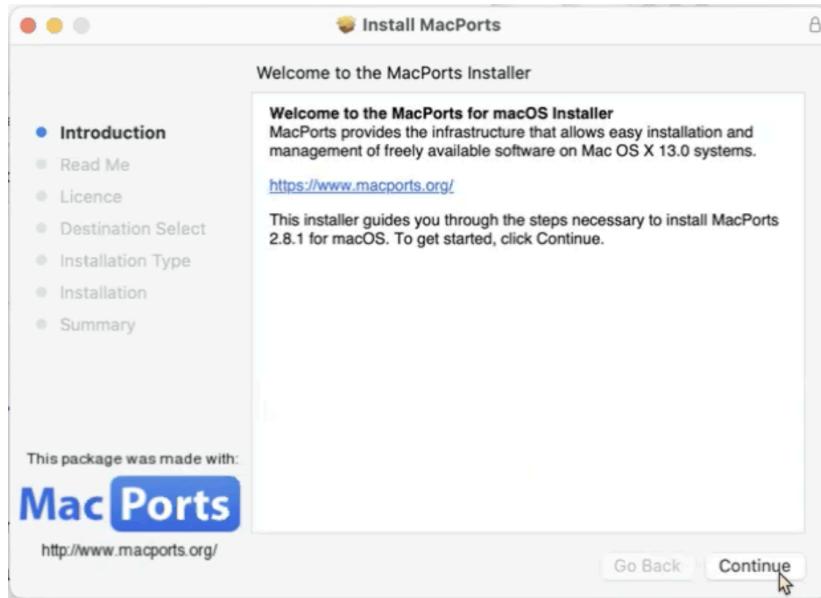
<https://www.cyberciti.biz/faq/mac-osx-find-tell-operating-system-version-from-bash-prompt/>

**he gets the macos version and goes back to MacPorts website and clicks on the Ventura v13 option**

**He downloads the package and clicks on it**

20:19

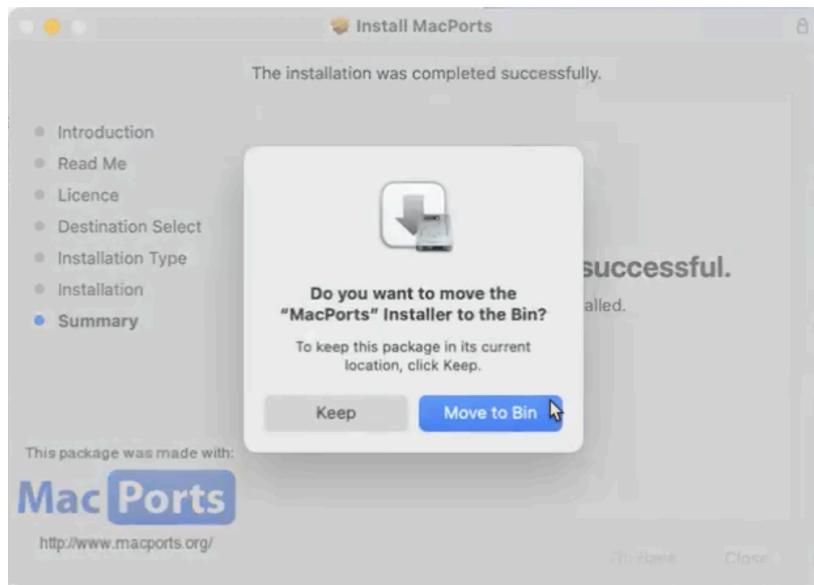
Oh, it's easy to install! **he finds easy to install the exe file**



20:34

This stuff is a package manager or something I'm not pretty sure.

***the installation is complete and another window pops up asking if he would like to move the MacPorts file (the file he has just installed) to the Bin***



21:34

Move to the bin??? **he clicks on "keep"**

**Then, he goes back to the [spring.io](https://spring.io) website and proceeds with the installation instructions**

The screenshot shows a web page with a sidebar containing links like 'Back to index', 'Introducing Spring Boot', 'System Requirements', 'Installing Spring Boot', 'Installation Instructions for the Java Developer', 'Installing the Spring Boot CLI', 'Manual Installation', 'Installation with SDKMAN!', 'OSX Homebrew Installation', 'MacPorts Installation' (which is highlighted with a black box), 'Command-line Completion', 'Windows Scoop Installation', 'Developing Your First Spring Boot Application', and 'What to Read Next'. The main content area has a heading '3.2.5. Command-line Completion' and text explaining the command-line completion scripts for BASH and zsh shells. It includes a code snippet for MacPorts and a note about Homebrew. Below the note is a Mac OS X dock.

**he runs the command “`sudo port install spring-boot-cli` on the terminal and gets an error message**

```
zsh: command not found: $ sudo port install spring-boot-cli
lsalernodeca@4180L-209577-M ~ % sudo port install spring-boot-cli

>Password:
sudo: port: command not found
lsalernodeca@4180L-209577-M ~ % macport
zsh: command not found: macport
lsalernodeca@4180L-209577-M ~ % por
```

23:21

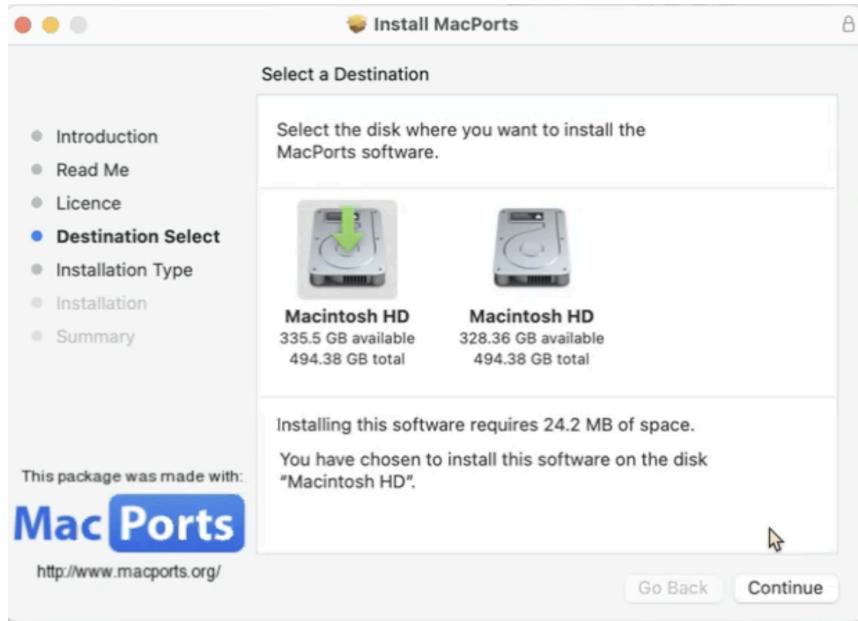
Looks like Macport didn't install correctly... Hmm... Where is it?????

**he clicks on the executable file again and tries to install it again. This time, he reads the information on the window carefully to see if he didn't miss anything**

The screenshot shows a Mac OS X window titled 'Install MacPorts'. On the left is a sidebar with navigation links: 'Introduction' (grey), 'Read Me' (blue, selected), 'Licence' (grey), 'Destination Select' (grey), 'Installation Type' (grey), 'Installation' (grey), and 'Summary' (grey). The main content area has a heading 'Important Information'. It contains sections for 'A Brief Request' (encouraging mpstats port contribution), 'What is MacPorts?' (describing it as an infrastructure for building, installing, and packaging open source software), and 'System Requirements' (noting it's for macOS 13.0.x and requires curl and OpenSSL). At the bottom are buttons for 'Print...', 'Save...', 'Go Back', and 'Continue' (which is highlighted with a cursor).

**he clicks on “Save” and it tries to save a read.me file. He cancels it and then proceeds to continue with the installation.**

**In one of the steps, they ask where he wants to install the application. He gets confused by the options offered since they look the same**



**he then closes that tab and goes back to the folder where he installed spring in the first place.**

**He navigates through the folder and the website multiple times. He's confused.**

Hm... I cant find MacPorts?? Why??

24:57

**Observer:** unfortunately I have to stop right now Have another student. Now there are a few questions that I'm going to ask you about the process. So, can you describe me what challenges you faced when trying to install this tool?

25:16

So, first, I'd have to install the Mac OS, like package manager or something. But I didn't find after I installed it, I didn't find it by typing the command following command to install Spring Boot. So I also tried to install or to follow the official document, recommended to install JDK first, but since I am not pretty sure, what is the hardware or, or or like it is arm or something. So I'm not pretty sure, I can't install any of them. And then I think it should prepare the official document through, like classified into like Mac OS, Linux and different operating systems to the

user to let the client know, very clearly, which one should I pick up. Just don't give it too much, like, option for the client to install. Maybe just give one give me one. Since I'm really comfortable with the common lines, so maybe just provide a common line for professional user, but with the package for normal users. Yeah.

27:04

**Observer:** And what did you do to overcome these challenges? What strategies did you use?

27:14

Um, so I tried to find out if it is possible to use the package manager because I think is an easier way to do it. Also finding out is there if there is an instruction step by step with a comment, like, always comment in a tab in the terminal. But I didn't find very clear way. Like it just tells me that you have to install JDK, but it did not provide me with the command to install the JDK in the same on the same page. So I need to go to the Oracle Java website to find out how to download JDK. So it is now quite convenient for user or client.