



INTRODUCTION TO SPRING BOOT FRAMEWORK

David Corral Plaza

CONTENTS

- Introduction to Spring
- Spring Boot
- Preparing workspace
- Creating an REST API
- Persistence in REST API
- Deploying on Heroku
- Bibliography

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WHAT IS SPRING FRAMEWORK?



- Spring Framework is a Java platform that provides comprehensive infrastructure support for developing Java applications.
- Spring handles the infrastructure so you can focus on your application.
- It is based on JAVA.

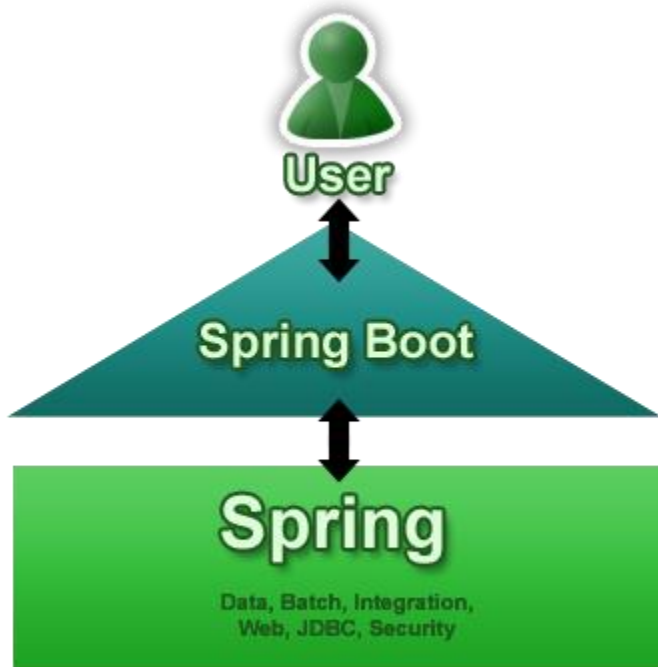
MAIN ADVANTAGES

- Spring Framework is lightweight with respect to size and transparency.
- Easy to test, thanks to existing libraries.
- 'Pre-created' projects that make us easier to build applications like REST API, i.e., Spring Boot.
- Allows to perform Dependency Injection easily thanks to the concept of Inversion of Control (IoC)

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WHAT IS SPRING BOOT?



- Spring Boot aims to make it easy to create Spring apps.
- You can use it to create stand-alone Java applications that can be started using *'java -jar'*.

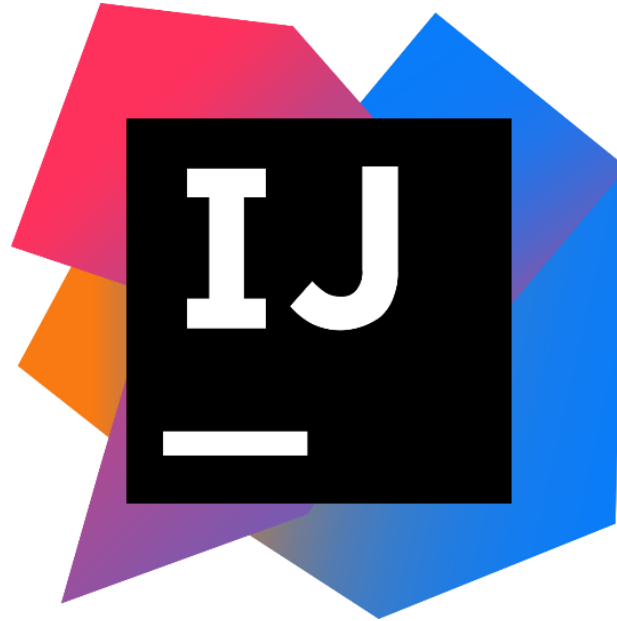
MAIN ADVANTAGES

- Create stand-alone Spring applications.
- Embed Tomcat, Jetty or Undertow directly (no need to deploy WAR files).
- Provide opinionated 'starter' POMs to simplify your Maven configuration.
- Automatically configure Spring whenever possible.
- Provide production-ready features such as metrics, health checks and externalized configuration.
- Absolutely no code generation and no requirement for XML configuration.

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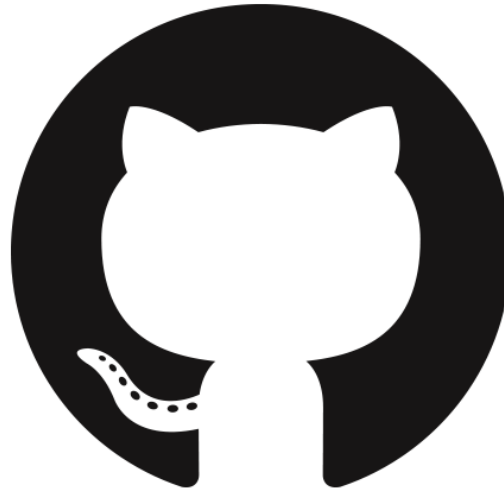
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1- INTELLIJ IDEA



Ultimate edition, in order to save us from download all the stuff.

2- GITHUB ACCOUNT



To store our application.

3- HEROKU ACCOUNT



To deploy our application on the cloud.

4- MLAB ACCOUNT

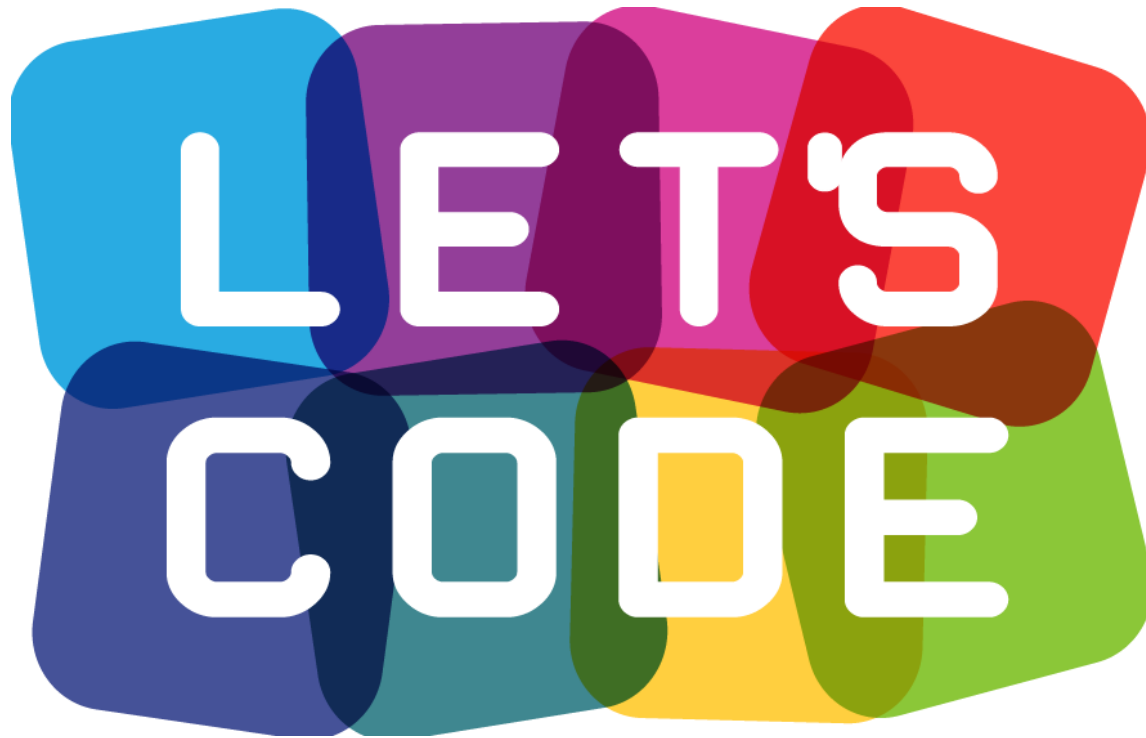


To create our Mongo database.

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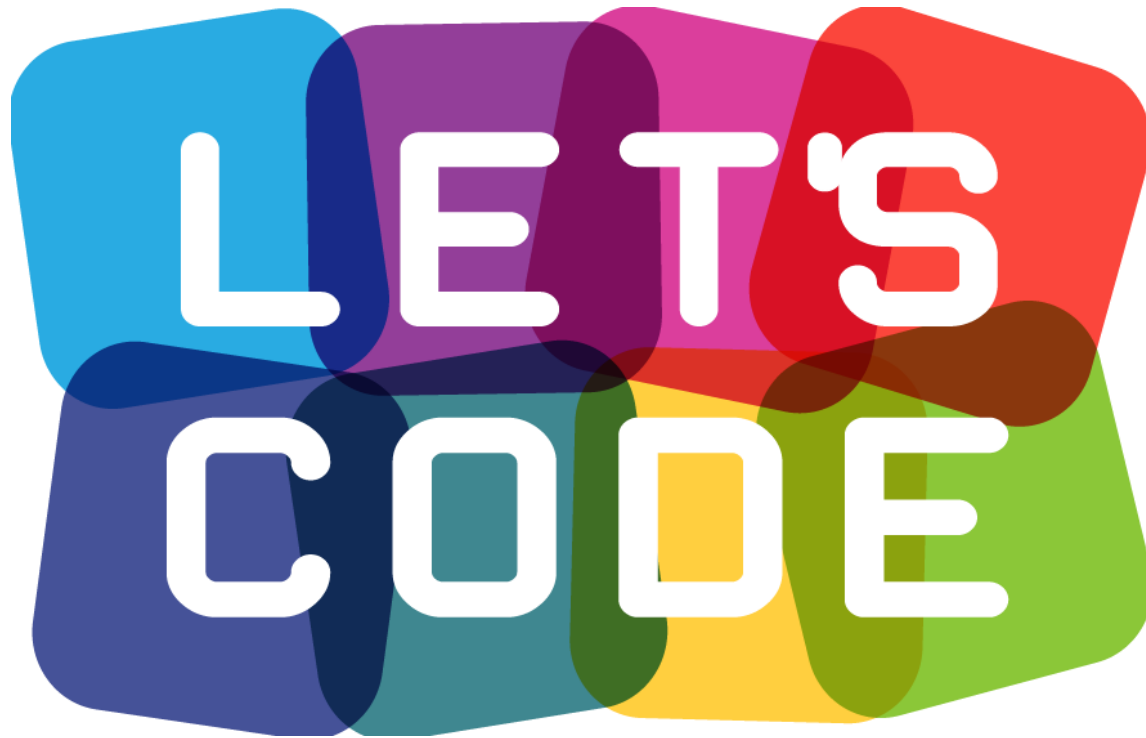
LET'S CODE: Package com.example.demo



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LET'S CODE: Package com.example.persistence



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STEP 1

1.- Create a GitHub repository and upload your code.

The screenshot shows a GitHub repository page for 'DavidCorral94 / Spring-Training-2018'. The repository is private and has 1 commit, 1 branch, 0 releases, and 1 contributor. The repository description is 'A brief introduction to Spring Boot Framework'. The repository contains several files and folders, including .mvn/wrapper, src, .gitignore, README.md, mvnw, mvnw.cmd, and pom.xml. The README.md file is open, showing the title 'SPRING BOOT TRAINING 2018' and the content 'Just a simple introduction to Spring Boot Framework. How to initialize a project, create an REST API, store in databases, etc.'

DavidCorral94 / Spring-Training-2018 Private

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

A brief introduction to Spring Boot Framework Edit

Add topics

5 commits 1 branch 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download

DavidCorral94 Minor changes Latest commit dc826af 39 minutes ago

.mvn/wrapper	First commit!	20 hours ago
src	Minor changes	39 minutes ago
.gitignore	First commit!	20 hours ago
README.md	Minor changes	39 minutes ago
mvnw	First commit!	20 hours ago
mvnw.cmd	First commit!	20 hours ago
pom.xml	Jar file with maven	17 hours ago

README.md

SPRING BOOT TRAINING 2018

Just a simple introduction to Spring Boot Framework. How to initialize a project, create an REST API, store in databases, etc.

STEP 2

2.- Create a Heroku application

Create New App


App name

my-spring-app-2018


✓

my-spring-app-2018 is available

Choose a region

 Europe

⌵

 Add to pipeline...

Create app

STEP 3

3.- Click on 'Deploy' tab and connect your app with your GitHub account.

The screenshot shows the Heroku web interface for the application 'spring-training-dcp'. The 'Deploy' tab is selected in the top navigation bar. The page is divided into two main sections: 'Add this app to a pipeline' and 'Deployment method'.

Add this app to a pipeline: This section provides instructions on how to add the app to a pipeline. It includes a dropdown menu labeled 'Choose a pipeline'.

Deployment method: This section shows the available deployment methods. The 'GitHub' option is highlighted with a red circle and a green checkmark, indicating it is the selected method. Other options include 'Heroku Git', 'Dropbox', and 'Container Registry'.

App connected to GitHub: Below the deployment methods, a message states 'App connected to GitHub'. It provides details about the connection, including the repository 'DavidCorral94/Spring-Training-2018' and the user 'DavidCorral94'. A 'Disconnect...' button is also visible.

STEP 4



4.- Configure MONGODB URI environment variable. Click on 'Settings' and put you MLAB URI on 'Config Vars'.

Config Vars

Config vars change the way your app behaves. In addition to creating your own, some add-ons come with their own.

Config Vars

Hide Config Vars

MONGODB_URI	mongodb://<user>:<password>@ds161790.mlab	 
KEY	VALUE	Add

STEP 5 & 6


5.- Click on 'Deploy Brach' with master selected

Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

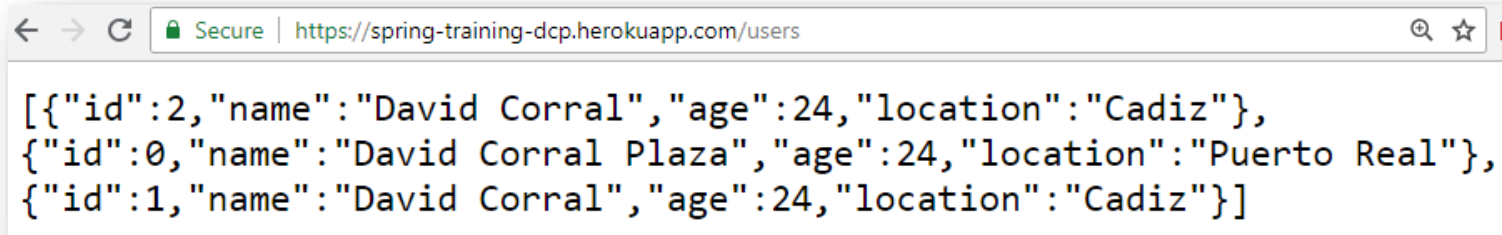
This will deploy the current state of the branch you specify below. [Learn more.](#)

 master

Deploy Branch

6.- Check on the browser:

`https://<app-name>.herokuapp.com/users`



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FOR YOUR INTEREST

- <http://www.baeldung.com/spring-requestmapping>
- <http://www.baeldung.com/spring-data-mongodb-tutorial>
- <https://devcenter.heroku.com/articles/deploying-spring-boot-apps-to-heroku>
- <https://docs.spring.io/spring/docs/3.0.x/spring-framework-reference/html/overview.html>



THANK YOU VERY MUCH!

David Corra Plaza