Spring Boot Getting Started

Table of Contents

Estimated time: 25 minutes

Requirements

Lab Requirements (/spring-boot-primer/labs-setup)

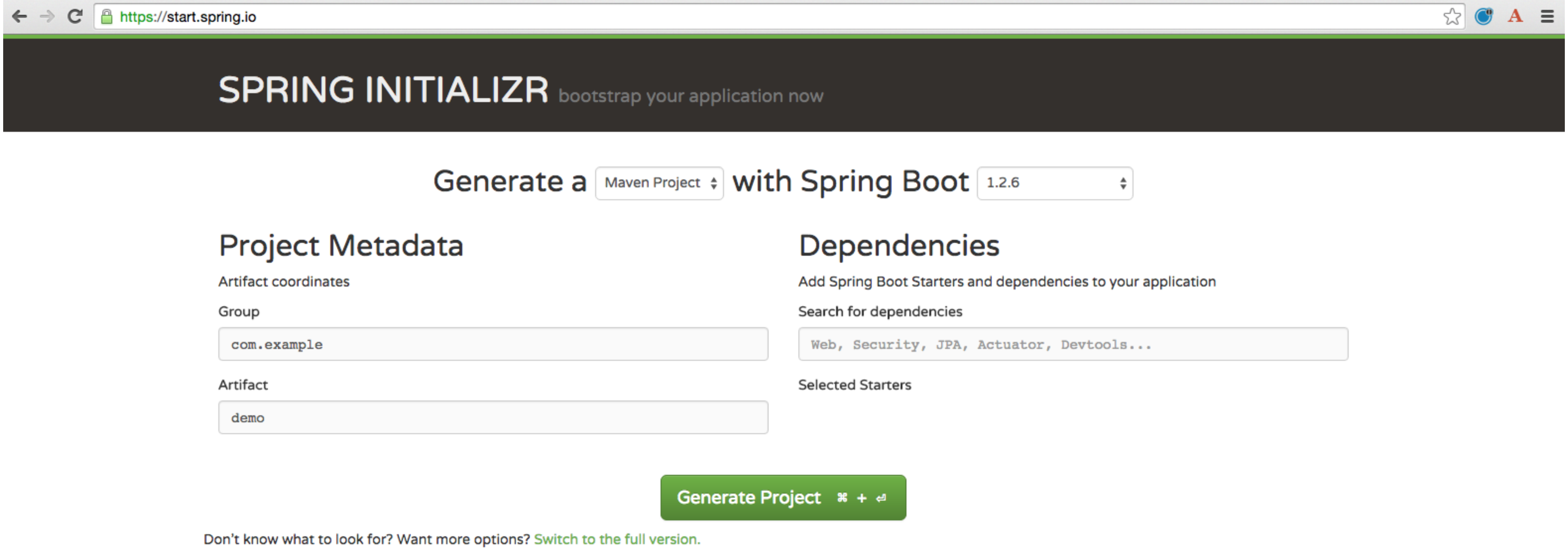
What You Will Learn

- How to create a Spring Boot Project

Exercises

Create A Spring Boot Project

1) Browse to https://start.spring.io/ (https://start.spring.io/)



https://start.spring.io

SPRING INITIALIZR bootstrap your application now

Generate a Maven Project with Spring Boot 1.2.6

Project Metadata

Artifact coordinates

Group

com.example

Artifact

demo

Dependencies

Add Spring Boot Starters and dependencies to your application

Search for dependencies

Web, Security, JPA, Actuator, Devtools...

Selected Starters

Don't know what to look for? Want more options? Switch to the full version.

Fill Out the Form Accordingly:

2) Generate a `Maven Project` with Spring Boot `1.3` (if this version is unavailable then get the latest 1.3.X version, but no SNAPSHOTS).

3) In the **Project Metadata** section, add the following:

Group

```
io.pivotal
```

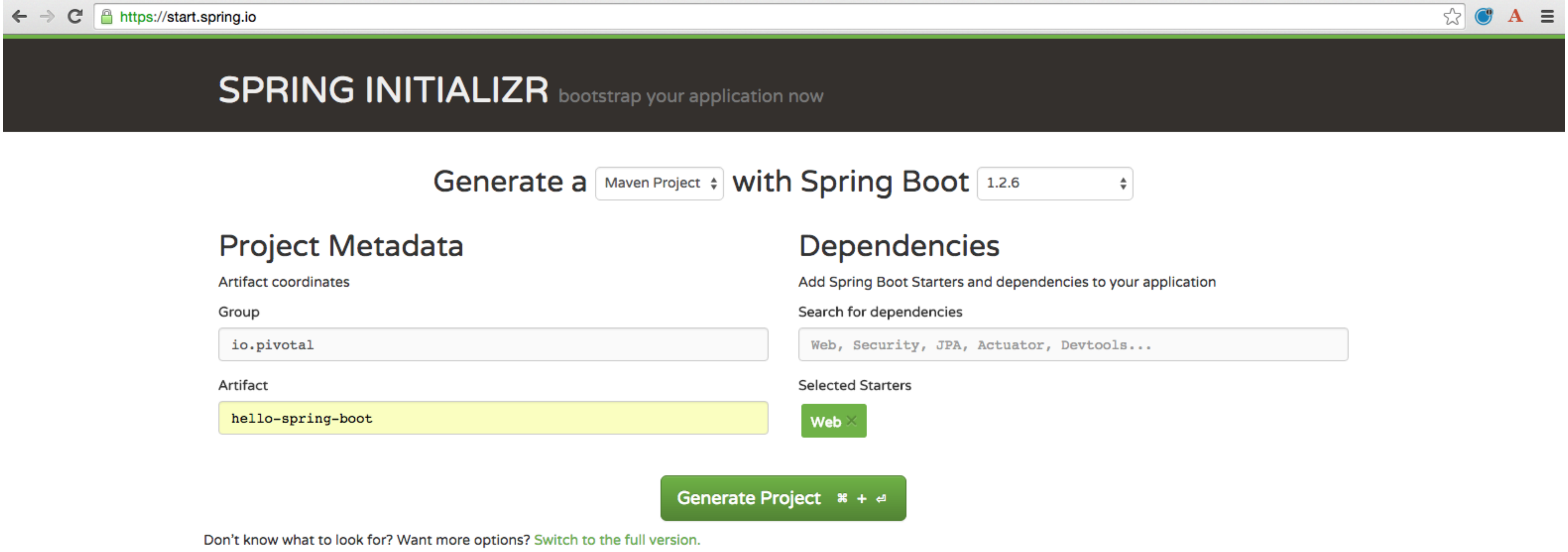
Artifact

```
hello-spring-boot
```

4) In the **Dependencies** section, add the following:

- `Web`

Completed Form:



https://start.spring.io

SPRING INITIALIZR bootstrap your application now

Generate a Maven Project with Spring Boot 1.2.6

Project Metadata

Artifact coordinates

Group: io.pivotal

Artifact: hello-spring-boot

Dependencies

Add Spring Boot Starters and dependencies to your application

Search for dependencies: Web, Security, JPA, Actuator, Devtools...

Selected Starters: Web ×

Don't know what to look for? Want more options? Switch to the full version.

5) Click the Generate Project button. Your browser will download a zip file. Unpack that zip file into the repos directory (`$REPOS_HOME`). If you don't know what `$REPOS_HOME` is then go back and do the setup (../labs-setup).

6) Import the project's `pom.xml` into your editor/IDE of choice.

STS Import Help:

Select File > Import… Then select Maven > Existing Maven Projects. On the Import Maven Projects page, browse to your `$REPOS_HOME/hello-spring-boot` (e.g. `~/repos/hello-spring-boot`).

Add an Endpoint

1) Add a `@RestController` annotation to the class `io.pivotal.HelloSpringBootApplication` (`$REPOS_HOME/hello-spring-boot/src/main/java/io/pivotal/HelloSpringBootApplication.java`).

```
package io.pivotal;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.web.bind.annotation.RestController;

@SpringBootApplication
@RestController
public class HelloSpringBootApplication {

    public static void main(String[] args) {
        SpringApplication.run(HelloSpringBootApplication.class, args);
    }
}
```

STS Shortcut Help:

Need help adding an import?

Use the `organize imports` command:

- **PC:** Ctrl + Shift + O
- **Mac:** Cmd + Shift + O

Not sure how to resolve the problem STS is reporting?

Try the `quick-fix` (magic shortcut) command:

- **PC:** Ctrl + 1
- **Mac:** Cmd + 1

Other helpful shortcuts (https://blog.codecentric.de/en/2012/08/my-top-10-shortcuts-for-eclipse-on-mac-os-x-and-windows-and-how-you-survive-the-change-from-windows-to-mac/).

2) Add the following request handler to the class `io.pivotal.HelloSpringBootApplication` (`$REPOS_HOME/hello-spring-boot/src/main/java/io/pivotal/HelloSpringBootApplication.java`).

```
@RequestMapping("/")
public String hello() {
    return "Hello World!";
}
```

Completed:

```
package io.pivotal;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;

@SpringBootApplication
@RestController
public class HelloSpringBootApplication {

    public static void main(String[] args) {
        SpringApplication.run(HelloSpringBootApplication.class, args);
    }

    @RequestMapping("/")
    public String hello() {
        return "Hello World!";
    }
}
```

Run the `hello-spring-boot` Application

1) Open a terminal window and change to `hello-spring-boot` directory:

```
$ cd $REPOS_HOME/hello-spring-boot
```

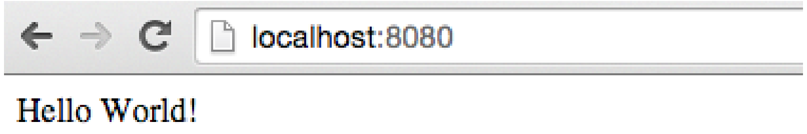
2) Run the application

```
mvn clean spring-boot:run
```

3) You should see the application start up an embedded Apache Tomcat server on port 8080 (review terminal output):

```
2015-10-02 13:26:59.264  INFO 44749 --- [lication.main()] s.b.c.e.t.TomcatEmbeddedServletContainer : Tomcat started on port(s): 8080 (http)
2015-10-02 13:26:59.267  INFO 44749 --- [lication.main()] io.pivotal.hello.HelloSpringBootApplication     : Started HelloSpringBootApplication in 2.541 seconds (JVM running for 9.141)
```

4) Browse to: http://localhost:8080/ (http://localhost:8080/)



Hello World!

5) Stop the `hello-spring-boot` application. In the terminal window: `Ctrl + C`

Congratulations! You’ve just completed your first Spring Boot application.

Back to TOP