

Running a Spring.IO project with XAMPP

Written by Gabriel Charlebois

Tools

- XAMPP (apache & mysql)
- INTELLIJ

Files

- ServerStarter.zip

mySQL

After installing XAMPP on your machine, start  `xampp-control`

Make sure both Apache and MySQL are running, if not start them under actions. We do not need to toy with apache, but it is important to modify mySQL admin account's default values and to add a test database for our project.

We will do that by using the shell that is accessible from XAMPP.

Service	Module	PID(s)	Port(s)	Actions			
	Apache	5648 7032	80, 443	Stop	Admin	Config	Logs
	MySQL	9436	3306	Stop	Admin	Config	Logs
	FileZilla			Start	Admin	Config	Logs

 Shell
 Explorer
 Services

We want to start MySQL in admin mode (with a default install, this is the command).

```
mysql --user=root mysql
```

```
C:\> XAMPP for Windows

Setting environment for using XAMPP for Windows.
Scowl Gulch@DESKTOP-VJSMS9T c:\xampp
# mysql --user=root mysql
```

Now we change the default account's settings

```
GRANT ALL PRIVILEGES ON dbTest.* To 'root'@'localhost' IDENTIFIED BY 'abc123';
```

```
C:\> XAMPP for Windows - mysql -u root -p

MariaDB [(none)]> GRANT ALL PRIVILEGES ON dbTest.* To 'root'@'localhost' IDENTIFIED BY 'abc123';
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]>
```

It's key to keep in mind that from now on, we will start MySQL command line with the new credentials, as the defaults have been overwritten.

```
mysql -u root -pabc123
```

```
C:\> XAMPP for Windows - mysql -u root -pabc123

Setting environment for using XAMPP for Windows.
Scowl Gulch@DESKTOP-VJSMS9T c:\xampp
# mysql -u root -pabc123
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 58
Server version: 10.1.19-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> _
```

Important Note: there is no space between -p and the password. If you put one, MySQL will think you want to access database abc123.

We add a test database to our mySQL installation.

```
CREATE DATABASE dbtest;
```

```
C:\> XAMPP for Windows - mysql -u root -p

Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 46
Server version: 10.1.19-MariaDB mariadb.org binary distribution

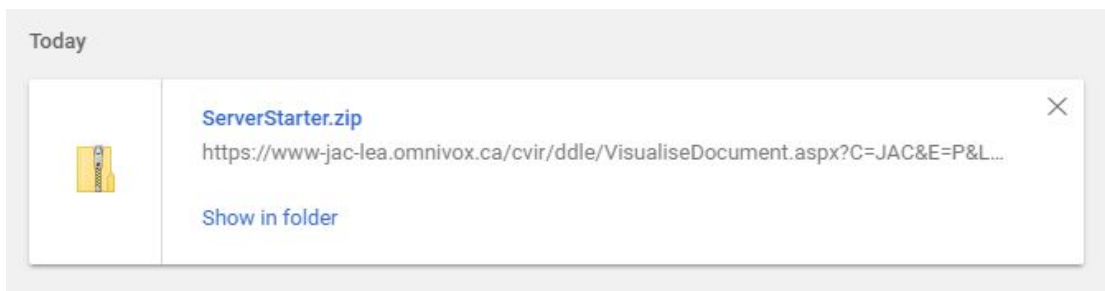
Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE dbtest;_
```

Spring.io

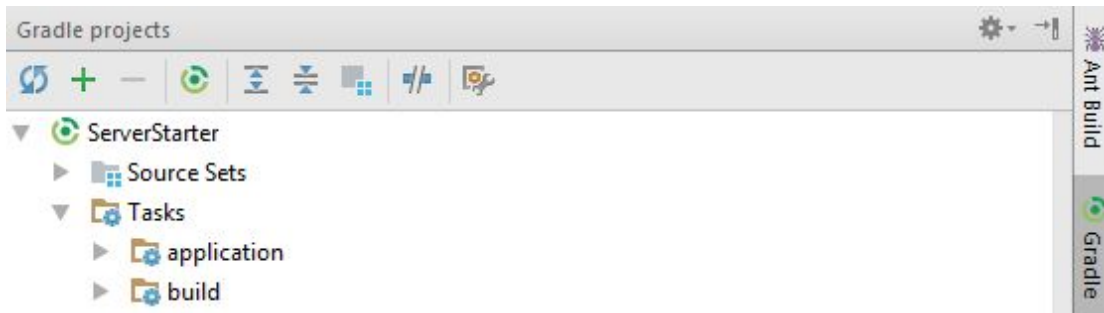
Unzip the ServerStarter.zip into the AndroidProject/ServerStarter



Start INTELLIJ and open the project

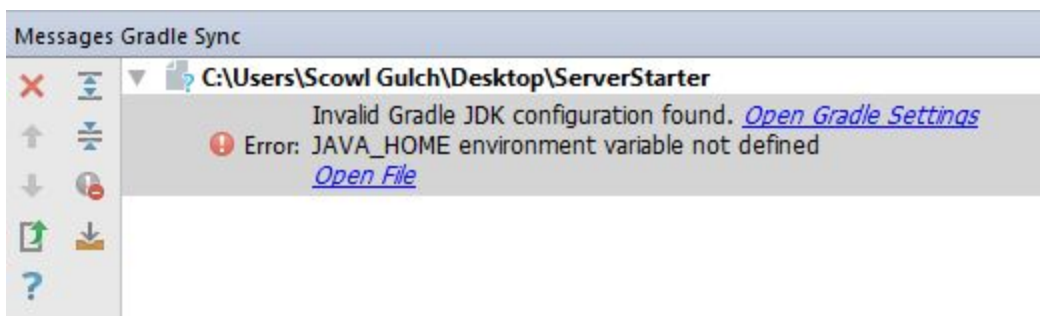


We want to refresh gradle, and will be refreshing it a few more times later on.

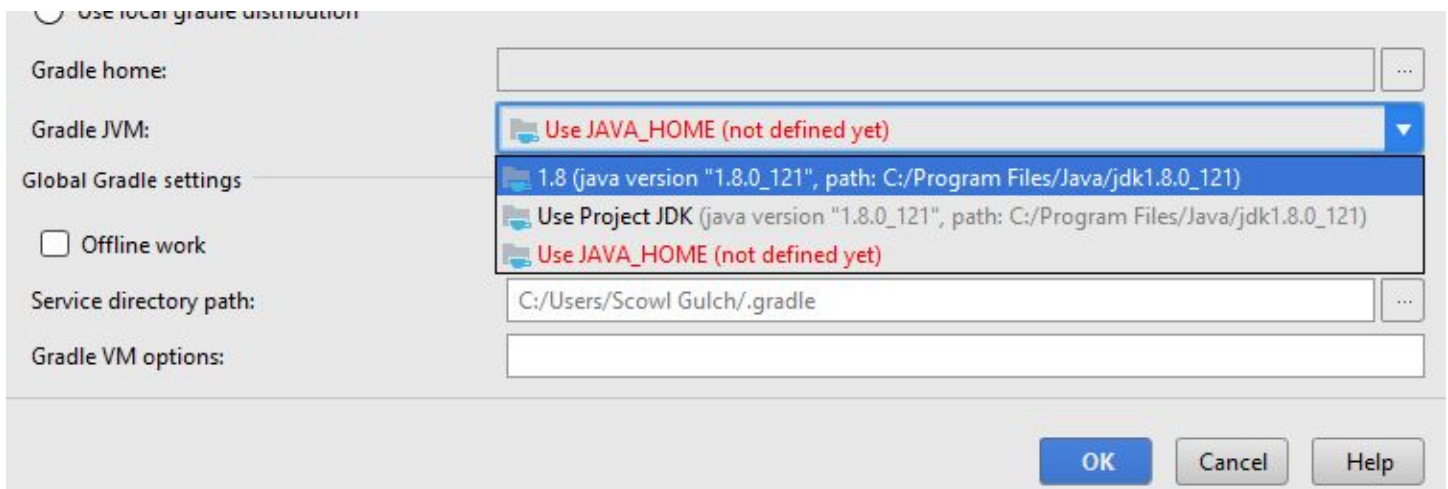


Now's the fun part, you want to error check to see what is wrong with the gradle project. The following are errors that I ran into, but for your installation it might differ. My advice: follow the default solutions that are given, worst case scenario you google.

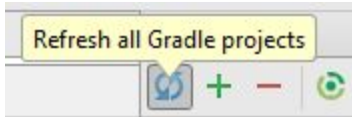
Your Java path might be incorrect, so click the link [Open Gradle Settings](#)



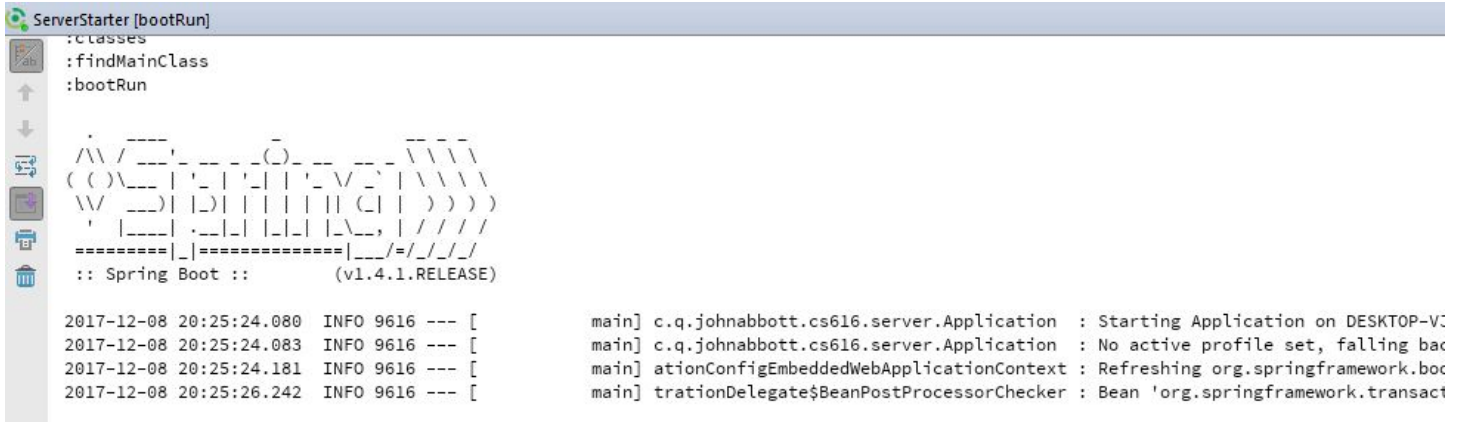
Change your Java path



Refresh gradle.



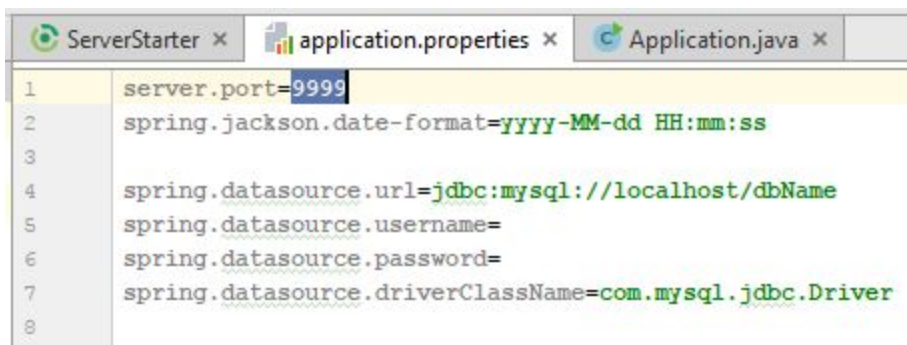
Run the configuration `ServerStarter [bootRun]`. You should see Spring's header.



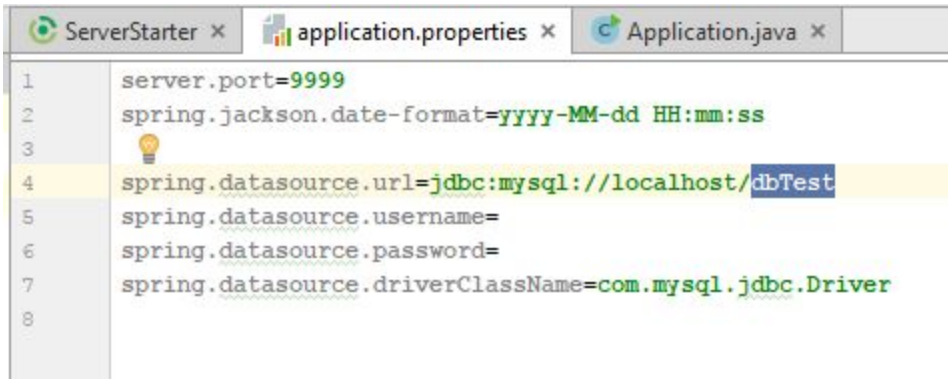
Errors will show up, but this is to make sure gradle did its job.

We will now change `application.properties` to fit the `mySQL` installation from earlier

Changing the port is not necessary for now. Running this on Cloud9 would require you to use port 8081, but for our purposes, 9999 will do.

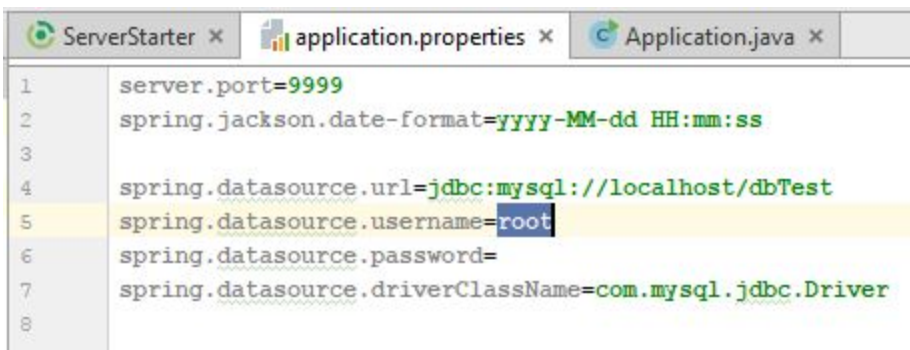


We want to set the URL of our repositories to fit the test database we've created.



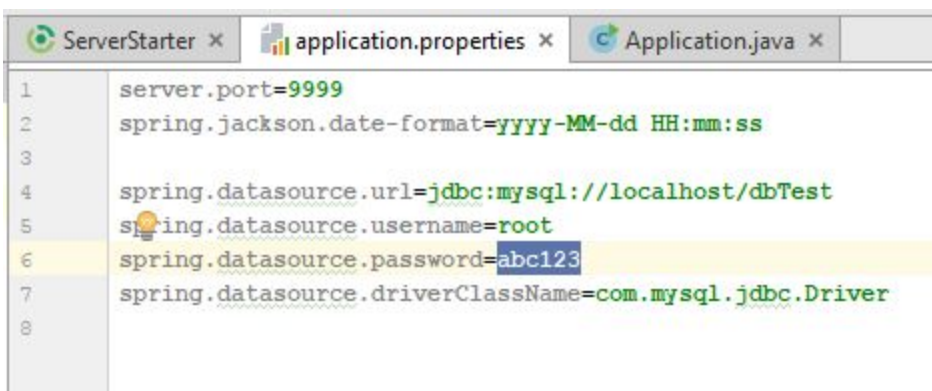
```
ServerStarter x application.properties x Application.java x
1 server.port=9999
2 spring.jackson.date-format=yyyy-MM-dd HH:mm:ss
3
4 spring.datasource.url=jdbc:mysql://localhost/dbTest
5 spring.datasource.username=
6 spring.datasource.password=
7 spring.datasource.driverClassName=com.mysql.jdbc.Driver
8
```

Set the username to root



```
ServerStarter x application.properties x Application.java x
1 server.port=9999
2 spring.jackson.date-format=yyyy-MM-dd HH:mm:ss
3
4 spring.datasource.url=jdbc:mysql://localhost/dbTest
5 spring.datasource.username=root
6 spring.datasource.password=
7 spring.datasource.driverClassName=com.mysql.jdbc.Driver
8
```

Set the password to whatever you set up earlier.



```
ServerStarter x application.properties x Application.java x
1 server.port=9999
2 spring.jackson.date-format=yyyy-MM-dd HH:mm:ss
3
4 spring.datasource.url=jdbc:mysql://localhost/dbTest
5 spring.datasource.username=root
6 spring.datasource.password=abc123
7 spring.datasource.driverClassName=com.mysql.jdbc.Driver
8
```

Save your changes to applications.properties

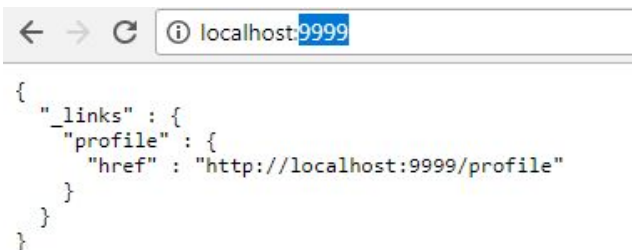
Run the configuration ServerStarter [bootRun]. Scroll down the console, you should see that our application has started.

```
main] o.s.d.r.w.RepositoryRestControllerAdapter : Looking for @ControllerAdvice: org.springframework.boot.context
main] s.w.s.m.m.a.RequestMappingHandlerAdapter : Looking for @ControllerAdvice: org.springframework.boot.context
main] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped "[[/error]]" onto public org.springframework.http.Respon
main] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped "[[/error],produces=[text/html]]" onto public org.spring
main] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/webjars/**] onto handler of type [class org.s
main] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/**] onto handler of type [class org.springfra
main] .m.m.a.ExceptionHandlerExceptionHandlerResolver : Detected @ExceptionHandler methods in repositoryRestExceptionHa
main] o.s.w.s.handler.SimpleUrlHandlerMapping : Mapped URL path [/**/favicon.ico] onto handler of type [class o
main] o.s.j.e.a.AnnotationMBeanExporter : Registering beans for JMX exposure on startup
main] s.b.c.e.t.TomcatEmbeddedServletContainer : Tomcat started on port(s): 9999 (http)
main] c.q.johnabbott.cs616.server.Application : Started Application in 5.242 seconds (JVM running for 5.571)
```

This means that Spring.io is running on your system.

Final words

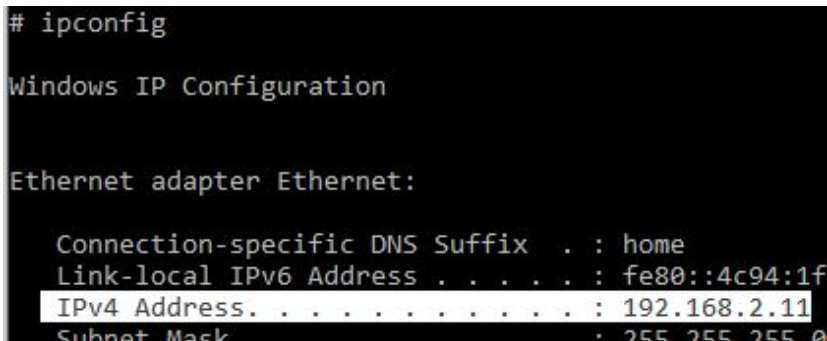
Try to access the repository in a browser



```
{
  "_links" : {
    "profile" : {
      "href" : "http://localhost:9999/profile"
    }
  }
}
```

We can now make some changes to the database using the credentials we have set as well as updating the server starter with proper classes that Spring.io should recognize. You should be able to connect to the your computer's server from any other device on the same network by checking your ip in Windows' command line.

ipconfig



```
# ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : home
    Link-local IPv6 Address . . . . . : fe80::4c94:1f
    IPv4 Address. . . . . : 192.168.2.11
    Subnet Mask . . . . . : 255.255.255.0
```