

Java Programming (CSE1007)

Digital Assignment - 3

Robin Thomas

17BCE1330

Question:

Create a Web Application using Spring-Boot

Web Application Created: A To-Do List

Code:

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/x
sd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>2.2.2.RELEASE</version>
    <relativePath /> <!-- lookup parent from repository -->
  </parent>
  <groupId>com.example</groupId>
  <artifactId>spring-boot</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>spring-boot</name>
  <description>Demo project for Spring Boot</description>

  <properties>
    <java.version>1.8</java.version>
  </properties>

  <dependencies>
    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-web</artifactId>
```

```

</dependency>

<!-- tag::actuator[] -->
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-actuator</artifactId>
</dependency>
<!-- end::actuator[] -->
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-thymeleaf</artifactId>
</dependency>
<!-- tag::tests[] -->
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-test</artifactId>
    <scope>test</scope>
    <exclusions>
        <exclusion>
            <groupId>org.junit.vintage</groupId>
            <artifactId>junit-vintage-engine</artifactId>
        </exclusion>
    </exclusions>
</dependency>
<!-- end::tests[] -->
</dependencies>

<build>
    <plugins>
        <plugin>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-maven-plugin</artifactId>
        </plugin>
    </plugins>
</build>

</project>

```

Controller.java

```

package com.example.springboot;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RestController;
import org.springframework.web.bind.annotation.RequestMapping;

@RestController
public class HelloController {

    @RequestMapping("/")
    public String viewHome() {
        return "To-

```

Do List for JAVA Programming DA3 by Robin Thomas deployed in following link: <https://radia>

```
nt-cliffs-58750.herokuapp.com GitHub Repo for APP: https://github.com/TheRealHazzard/To-Do-list-Version-3 ";
    }
}
```

Application.java

```
package com.example.springboot;

import java.util.Arrays;

import org.springframework.boot.CommandLineRunner;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.ApplicationContext;
import org.springframework.context.annotation.Bean;

@SpringBootApplication
public class Application {

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

}
```

Application.properties:

```
server.contextPath=/example
server.port=8085
```

Steps to Run application:

1) **Run the following command at the root directory:**

```
./mvnw spring-boot:run
```

2) **Open localhost:8085 in any web browser**

3) **Navigate to the link that appears on screen**

4) **You have reached the application page. Use The “+” icon to add a note.**

5) **Tick the checkbox to delete a note.**

GitHub repo: <https://github.com/TheRealHazzard/To-Do-list-Version-3>

Deployed on Heroku at : <https://radiant-cliffs-58750.herokuapp.com>

Output Screenshots:

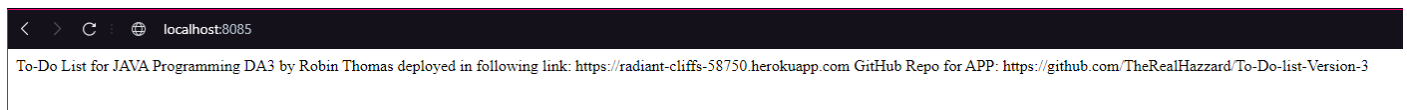
Cli:

```
MINGW64/e:/CODERLYF/Java/DA3/Robin 178CE1330 DA3
rj144@DESKTOP-ULLKQD4 MINGW64 /e:/CODERLYF/Java/DA3/Robin 178CE1330 DA3
$ ./mvnw spring-boot:run
[INFO] Scanning for projects...
[INFO]
[INFO] -----
[INFO] Building spring-boot 0.0.1-SNAPSHOT
[INFO] -----
[INFO]
[INFO] >>> spring-boot-maven-plugin:2.2.2.RELEASE:run (default-cli) > test-compile @ spring-boot >>>
[INFO]
[INFO] --- maven-resources-plugin:3.1.0:resources (default-resources) @ spring-boot ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 1 resource
[INFO] Copying 9 resources
[INFO]
[INFO] --- maven-compiler-plugin:3.8.1:compile (default-compile) @ spring-boot ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 2 source files to E:\CODERLYF\Java\DA3\Robin 178CE1330 DA3\target\classes
[INFO]
[INFO] --- maven-resources-plugin:3.1.0:testResources (default-testResources) @ spring-boot ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resource directory E:\CODERLYF\Java\DA3\Robin 178CE1330 DA3\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.8.1:testCompile (default-testCompile) @ spring-boot ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 2 source files to E:\CODERLYF\Java\DA3\Robin 178CE1330 DA3\target\test-classes
[INFO]
[INFO] <<< spring-boot-maven-plugin:2.2.2.RELEASE:run (default-cli) < test-compile @ spring-boot <<<
[INFO]
[INFO] --- spring-boot-maven-plugin:2.2.2.RELEASE:run (default-cli) @ spring-boot ---
[INFO] Attaching agents: []

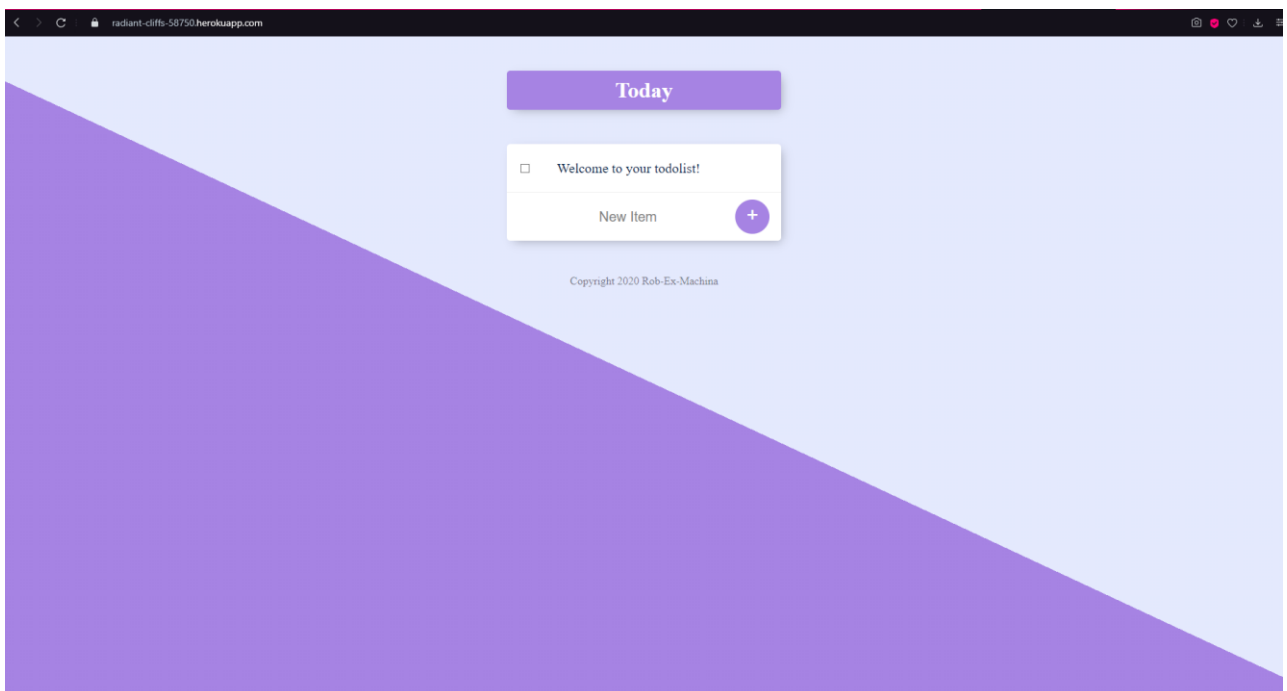
:: Spring Boot :: (v2.2.2.RELEASE)

2020-06-04 11:37:08.598 INFO 5536 --- [main] com.example.springboot.Application : Starting Application on DESKTOP-ULLKQD4 with PID 5536 (started by rj144 in E:\CODERLYF\Java\DA3\Robin 178CE1330 DA3)
2020-06-04 11:37:08.600 INFO 5536 --- [main] com.example.springboot.Application : No active profile set, falling back to default profiles: default
2020-06-04 11:37:09.798 INFO 5536 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8085 (http)
2020-06-04 11:37:09.808 INFO 5536 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2020-06-04 11:37:09.809 INFO 5536 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.29]
2020-06-04 11:37:09.905 INFO 5536 --- [main] o.a.e.c.c.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2020-06-04 11:37:09.905 INFO 5536 --- [main] o.s.web.context.ContextLoader : Root WebApplicationContext: initialization completed in 1233 ms
2020-06-04 11:37:10.191 INFO 5536 --- [main] o.s.s.concurrent.ThreadPoolTaskExecutor : Initializing ExecutorService 'applicationTaskExecutor'
2020-06-04 11:37:10.265 INFO 5536 --- [main] o.s.b.a.w.s.WelcomePageHandlerMapping : Adding welcome page template: index
2020-06-04 11:37:10.300 INFO 5536 --- [main] o.s.b.a.e.web.EndpointLinksResolver : Exposing 2 endpoint(s) beneath base path '/actuator'
2020-06-04 11:37:10.438 INFO 5536 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8085 (http) with context path ''
2020-06-04 11:37:10.441 INFO 5536 --- [main] com.example.springboot.Application : Started Application in 2.155 seconds (JVM running for 2.636)
```

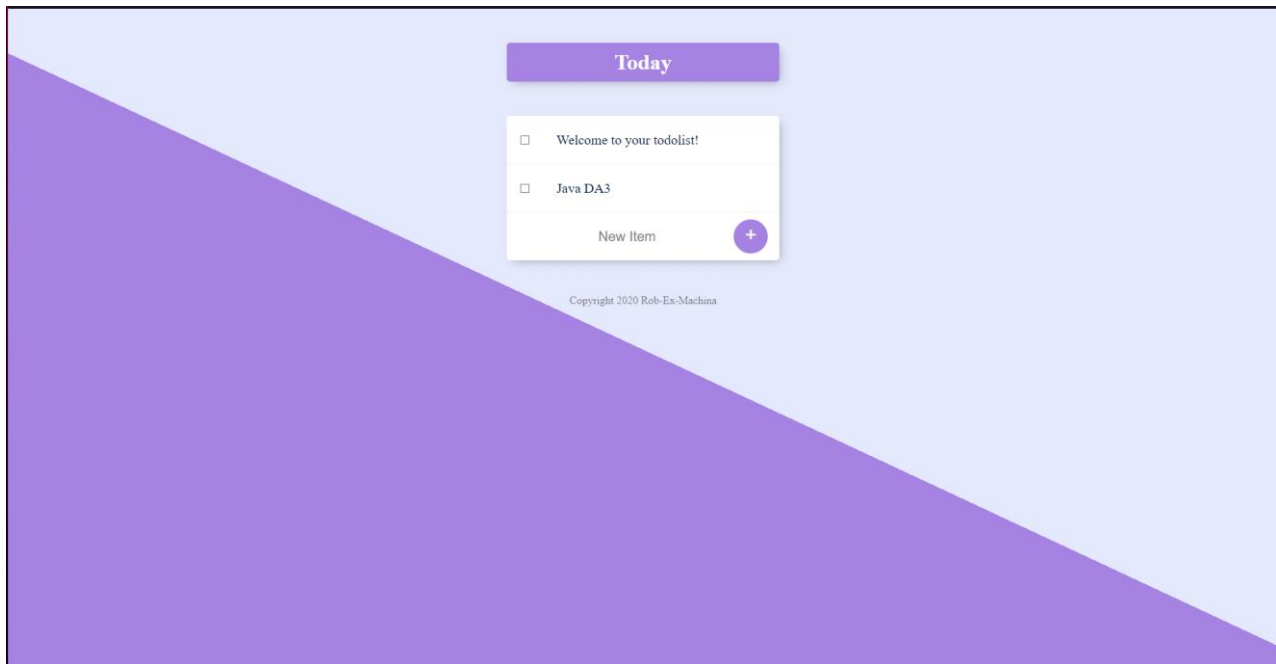
Localhost:8085:



Deployed final app:



Added a list item:



Note: MongoDB atlas is used to store the notes in a database.