

Spring boot code

Amazonec2application.java

```
package com.example.demo;
```

```
import org.springframework.boot.SpringApplication;
```

```
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
import org.springframework.context.annotation.ComponentScan;
```

```
@SpringBootApplication
```

```
@ComponentScan("com.example.demo")
```

```
public class AmazonEc2Application {
```

```
    public static void main(String[] args) {
```

```
        SpringApplication.run(AmazonEc2Application.class, args);
```

```
    }
```

```
}
```

MainController.java

```
package com.example.demo;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController
public class MainController {

    @GetMapping("/")
    public String Hello() {
        return "Welcome to AmazonEC2 Instance online app made with SpringBOOT";
    }
}
```

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/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>2.7.4</version>
    <relativePath/> <!-- lookup parent from repository -->
  </parent>
  <groupId>com.example</groupId>
  <artifactId>AmazonEC2</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>AmazonEC2</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>

    <dependency>
      <groupId>org.springframework.boot</groupId>
      <artifactId>spring-boot-starter-test</artifactId>
      <scope>test</scope>
    </dependency>
  </dependencies>

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

Commands used:

1. Open MobaXterm > goto local terminal
2. Then cd to the folder where you have added your springboot jar file and .pem file of the amazon ec2 instance.
3. Give the ssh command to connect to the ec2 instance i.e. `ssh -i "myapp.pem" ubuntu@ec2-18-212-175-111.compute-1.amazonaws.com`
4. Then you will be connected to ubuntu ec2 instance give \$: `"sudo apt update"` → to update the ec2 instance.
5. Then give `"sudo apt-get install openjdk-8-jdk"` → to install java in ec2 instance.
6. Then give `"sudo apt-get install maven"` → to install maven
7. Then copy the .jar file into the ubuntu home path then give `"java -jar <jar file name>"`
It will start running the app in the in aws ec2 instance.

Steps to create a EC2 instance

1. Goto ec2 dashboard > launch instance > give the instance name.
2. Then select the ubuntu 22.04 version
3. Select instance type t2.micro
4. Then select create new key pair give the keypair name and download key pair
5. Select create security group.
6. Then launch instance
7. After instance is launched goto security tab and click on the security group and then edit inbound rules
 - Then add rule custom tcp: 8080(port): anywhere ip then add rule.

Steps to get the jar file of spring boot app

1. After writing the spring boot code, first run the app in local host
2. Then click on app and run as > maven clean
3. Then click on app and run as > maven build > in goals give "clean install" > apply > run
4. Then click on app and run as > maven install
Then goto amazon ec2 instance.

