CI/CD Deployment for SpringBootApplication.

(Source Code)

Version History:

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Purpose	Project Source Code
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Contents.

1.	GitHub Link	. 3
2.	Flow Chart	. 3
3.	Folder Structure	5
4.	Project Files	. 6

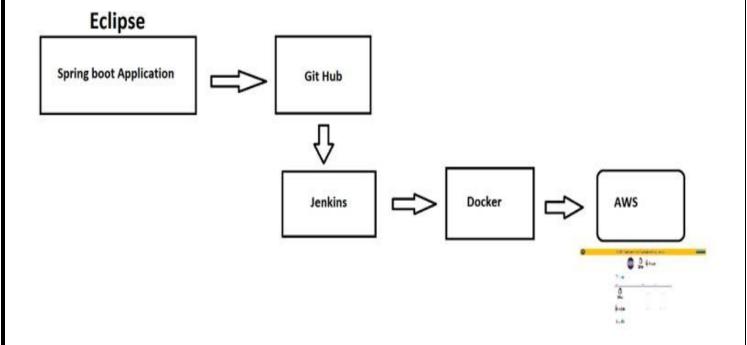
1. GitHub Link

https://github.com/amanlogin/Phase-5-CI-CD-Deployment

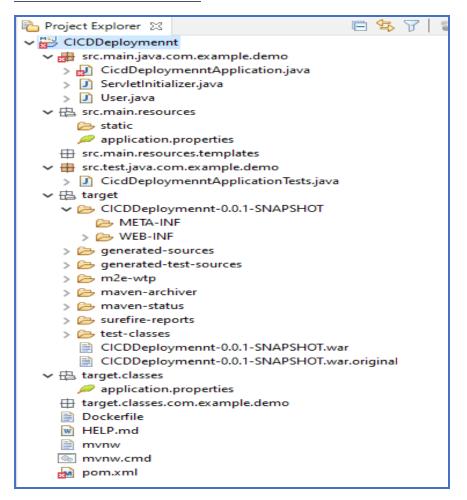
• Host server app to view the deployed application:

http://3.91.182.20:7000/

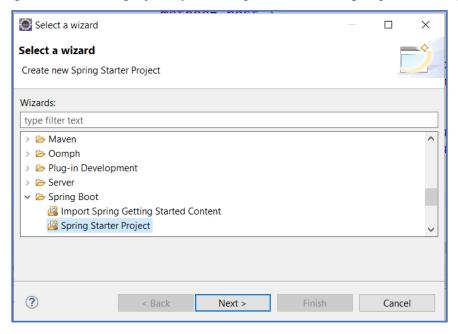
2. Flow Chart



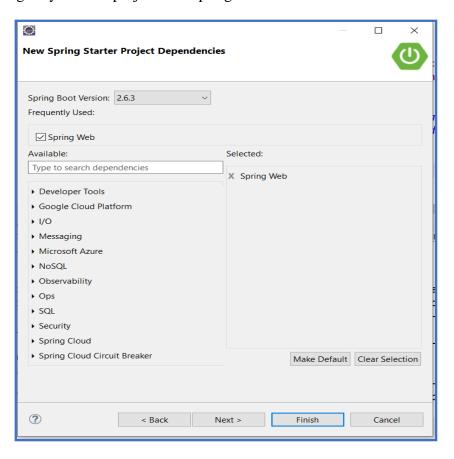
3. Folder Structure.



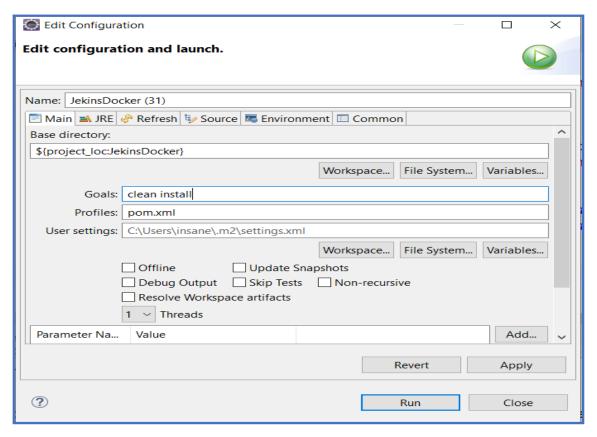
• In Eclipse create a new project by choosing File > New > Spring Starter Project.



• The Configure your new project as a Spring Web and finish



• After programming the Spring Boot Application using maven to build the WAR file.



4. Project Files.

a. Docker File.

```
Dockerfile 
□ User.java pplication.properties □ CICDDeploymennt-0.0.1-SNAPSHOT.war

1 FROM openjdk:8
2 EXPOSE 8087
3 ADD target/CICDDeploymennt-0.0.1-SNAPSHOT.war CICDDeploymennt-0.0.1-SNAPSHOT.war
4 ENTRYPOINT ["java","-jar", "/CICDDeploymennt-0.0.1-SNAPSHOT.war"]
```

b. Users.java

```
    User.java 
    □ Dockerfile

                      application.properties
                                           CICDDeploymennt-0.0.1-SNAPSHOT.war
1 package com.example.demo;
3 3 import org.springframework.stereotype.Controller;
7 @Controller
8 public class User {
10⊖
        @ResponseBody
      @RequestMapping("/")
211
12 public String init ()
 13
 14
             return "CI-CD Deployment using Jenkins+Docker into AWS EC2.";
 15
 16
17
        }
 18
 19 }
```

c. Application Properties

```
papplication.properties 
server.port=7000
2
```

d. Pom.xml

```
M CICDDeploymennt/pom.xml ⋈
0 1 <?xml version="1.0" encoding="UTF-8"?>
 2@cproject xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XML5chema-instance"
xsi:schemalocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
 4
       <modelVersion>4.0.0</modelVersion>
 5⊖
       <parent>
            <groupId>org.springframework.boot
 6
            <artifactId>spring-boot-starter-parent</artifactId>
 7
 8
            <version>2.6.3
 9
            <relativePath/> <!-- lookup parent from repository -->
 10
       <groupId>com.example
11
       <artifactId>CICDDeploymennt</artifactId>
12
       <version>0.0.1-SNAPSHOT</version>
13
 14
        <packaging>war</packaging>
15
        <name>CICDDeploymennt</name>
16
        <description>Demo project for Spring Boot</description>
179
        properties>
            <java.version>1.8</java.version>
18
19
        </properties>
209
        <dependencies>
219
            <dependency>
22
                <groupId>org.springframework.boot
23
                <artifactId>spring-boot-starter-web</artifactId>
24
            </dependency>
25⊖
            <dependency>
26
                <groupId>org.springframework.boot</groupId>
27
                <artifactId>spring-boot-starter-tomcat</artifactId>
28
                <scope>provided</scope>
 29
            </dependency>
 300
            <dependency>
 31
               <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-starter-test</artifactId>
 32
 33
                <scope>test</scope>
 34
            </dependency>
35
       </dependencies>
36
379
        <build>
389
            <plugins>
 39⊖
                <plugin>
                   <groupId>org.springframework.boot
40
41
                   <artifactId>spring-boot-maven-plugin</artifactId>
42
                </plugin>
 43
            </plugins>
44
        </build>
45
 46 </project>
```