

PHASE-4 PROJECT: CI/CD Deployment for Springboot Application. ;

GitHub link :

https://github.com/Sharanbasava98/Phase-5_Simplilearn_Project-CI-CD-Deployment-for-Springboot-Application.git

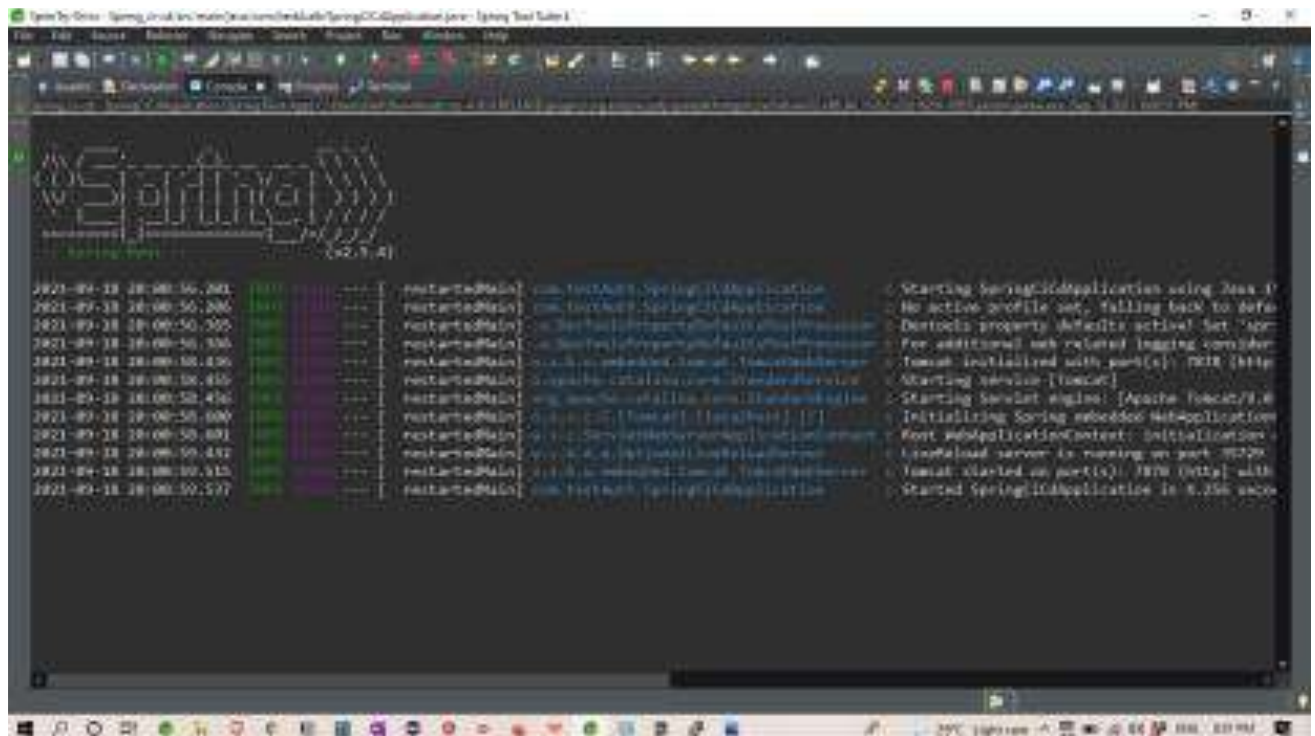
Requirements:

- Eclipse
- GitHub
- Jenkins
- AWS EC2/ Virtual machine

Eclipse 1.

I create Simple Spring boot Application to build a CI/CD pipeline to demonstrate continuous deployment

Output :-



```
2021-09-18 20:00:50.261 [main] INFO org.springframework.boot.SpringApplication -- Starting SpringBootApplication
2021-09-18 20:00:50.266 [main] INFO org.springframework.boot.SpringApplication -- No active profile set, falling back to default
2021-09-18 20:00:50.305 [main] INFO org.springframework.boot.SpringApplication -- Devtools property defaults active! Set <spring
2021-09-18 20:00:50.336 [main] INFO org.springframework.boot.SpringApplication -- For additional web related logging consider
2021-09-18 20:00:50.456 [main] INFO org.springframework.boot.SpringApplication -- Tomcat initialized with port(s): 8080 (http
2021-09-18 20:00:50.456 [main] INFO org.springframework.boot.SpringApplication -- Starting Servlet engine: [Apache Tomcat/9.0
2021-09-18 20:00:50.600 [main] INFO org.springframework.boot.SpringApplication -- Initializing Spring embedded WebApplication
2021-09-18 20:00:50.681 [main] INFO org.springframework.boot.SpringApplication -- Root WebApplicationContext initialized
2021-09-18 20:00:50.812 [main] INFO org.springframework.boot.SpringApplication -- Complete initialization and start WebApplication
2021-09-18 20:00:50.915 [main] INFO org.springframework.boot.SpringApplication -- Tomcat started on port(s): 8080 (http) with
2021-09-18 20:00:50.937 [main] INFO org.springframework.boot.SpringApplication -- Started SpringBootApplication in 6.256 secs
```

Jenkins : Run Jenkins

```
shred@: $sudo ./war -noVeto
2021-09-16 06:35:47.577+0000 [12-1] INFO org.eclipse.jetty.util.log.Log4JInitializer: logging initialized REMotes to org.eclipse.jetty.util.log.JsonUtilLog
2021-09-16 06:35:47.730+0000 [12-1] INFO vinstone.jagwordloglistener: Beginning extraction from war file
2021-09-16 06:35:48.806+0000 [12-1] WARNING s.a.j.a.handler.ContextClassLoaderContextPath: Empty contextPath
2021-09-16 06:35:48.175+0000 [12-1] INFO org.eclipse.jetty.server.Server$Handler: jetty-9.4.43.v20230620; built: 2021-06-30T10:07:22.254Z; git: 52008edaf3d71a
2021-09-16 06:35:48.214+0000 [12-1] INFO s.a.j.v.StandardDescriptorProcessor$Handler: No JEP support for /, did not find org.eclipse.jetty-jsp.JettyJspLevel
2021-09-16 06:35:52.572+0000 [12-1] INFO s.a.j.s.s.DefaultHandler$Manager$Handler: DefaultHandler$Manager$Handler started
2021-09-16 06:35:52.573+0000 [12-1] INFO s.a.j.s.s.DefaultHandler$Manager$Handler: No SessionManager set, using default
2021-09-16 06:35:52.578+0000 [12-1] INFO s.a.j.s.s.s.SessionManager$Handler: added SessionManager every 60000ms
2021-09-16 06:35:54.879+0000 [12-1] INFO hudson.WebAppMain$Initializer: Jenkins home directory C:\Users\hell/.jenkins found at: /Users/hell/.jenkins
2021-09-16 06:35:55.779+0000 [12-1] INFO s.a.j.a.handler.ContextClassLoaderContextPath: Started v.9.4.43.v20230620/jenkins v2.389.2, file:///C:/Users/hell/.jenkins/war/WEB-INF/lib/
2021-09-16 06:35:55.730+0000 [12-1] INFO s.a.j.s.s.s.SessionManager$Handler: Started SessionManager$Handler$Handler v2.389.2, file:///C:/Users/hell/.jenkins/war/WEB-INF/lib/
2021-09-16 06:35:55.833+0000 [12-1] INFO org.eclipse.jetty.server.Server$Handler: Started #10000
2021-09-16 06:35:55.858+0000 [12-1] INFO vinstone.jagwordloglistener: Vinstone Servlet Engine running: controlPort=disabled
2021-09-16 06:35:56.877+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Started initialization
2021-09-16 06:35:58.742+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Listed all plugins
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by com.google.inject.internal.cglib$2.$Method$Handler (file:/C:/Users/hell/.jenkins/war/WEB-INF/lib/guice-4.0.jar) to method java.
any.ClassLoader.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain)
WARNING: Please consider reporting this to the maintainers of com.google.inject.internal.cglib$2.$Method$Handler
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: --illegal-access=warn will be denied in a future release
2021-09-16 06:36:08.918+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Prepared all plugins
2021-09-16 06:36:09.868+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Started all plugins
2021-09-16 06:36:13.308+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Requested all extensions
2021-09-16 06:36:23.559+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: System config loaded
2021-09-16 06:36:23.558+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: System config adapted
2021-09-16 06:36:23.775+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Loaded all jobs
2021-09-16 06:36:23.772+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Configuration for all jobs updated
2021-09-16 06:36:24.278+0000 [12-1] INFO hudson.model.AsyncPeriodicWork$1$Handler: Started Download metadata
2021-09-16 06:36:34.511+0000 [12-1] INFO hudson.model.AsyncPeriodicWork$1$Handler: Finished Download metadata, 278 ms
2021-09-16 06:36:34.577+0000 [12-1] INFO jenkins.InitReactorRunner$1$Handler: Completed initialization
2021-09-16 06:36:34.652+0000 [12-1] INFO hudson.WebAppMain$Handler: Jenkins is fully up and running
```

CREATE THREE JENKINS PROJECT DEPLOYMENT:-

DEPLOYMENT-TESTING-PRODUCTION

TESTING

PRODUCTION

3) in Jenkins I create three build for continues deployment And pipeline them

build a CI/CD pipeline to demonstrate continuous deployment

AWS EC2

1. First I create EC2 instance.
2. Create Spring boot Application jar file.(Spring_CI-CD-deployment-exe.jar)
3. then its store in s3 bucket.
4. then open command line and deploy Application in EC2 Instance.
5. Application Started running with Port no 7878
- 6. Last host the application on AWS EC2 instance.**

Application running with this URL:-
ec2-18-221-78-17.us-east
2.compute.amazonaws.com:7878/