**Deploy Application on Cloud.**

GitHub url: <https://github.com/AnjaliNambrath/Java_FSD/blob/main/SpringBootAppDeployment.zip>

**WRITEUP**

* Create a simple Spring Boot Application.
* Run the application and check whether it is working or not.
* Download Maven in the local machine and add it to the environment variables in the system.
* Open command prompt and set path to the location where spring boot application is saved.
* Execute 3 Maven Goals:
  + - mvn clean
    - mvn compile
    - mvn package
* Check whether a .jar file is created in the target folder.
* In the Spring boot application add a docker file and add the code below

FROM openjdk:11

COPY target/SpringBoot-with-docker-0.0.1-SNAPSHOT.jar .

CMD ["java","-jar","spring-boot-with-docker-0.0.1-SNAPSHOT.jar"]

* Open AWS account and redirect to S3 buckets.
* Create a bucket with a unique name and keep ACLs enabled.
* In this new bucket upload the jar file.
* Select the uploaded jar file and click on Action 🡪 Make public using ACL.
* Check whether the jar file can be downloaded by copying URL and paste the URL in any browser.
* Now Redirect to EC2 service in AWS account.
* Launch a new Instance and create a new key pair.
* After the instance is running successfully, Click on Connect and copy the SSH client command, then open the Git Bash terminal and set path to the location where the key is downloaded and then paste the command.
* Run the URL in current EC2 instance

wget <https://mybucket-0525.s3.amazonaws.com/SpringBoot-with-docker-0.0.1-> SNAPSHOT.jar

* Install java using the command below

sudo amazon-linux-extras install java-openjdk11

* Run the Application

java -jar SpringBoot-with-docker-0.0.1-SNAPSHOT.jar

* Go to Details Tab in the current instance in AWS account.
* Copy the Public IPv4 address.
* Then go to Security tab in the current instance and click on security group hyperlink.
* Click on edit inbound rules and add rules by adding port range to application port number and source to Anywhere-IPv4 accordingly.
* Hit the copied public IPv4 URL : Port range, in any browser.