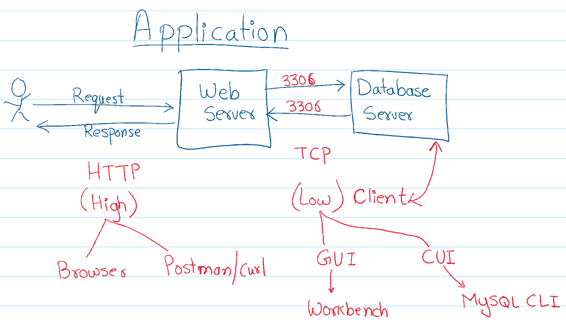
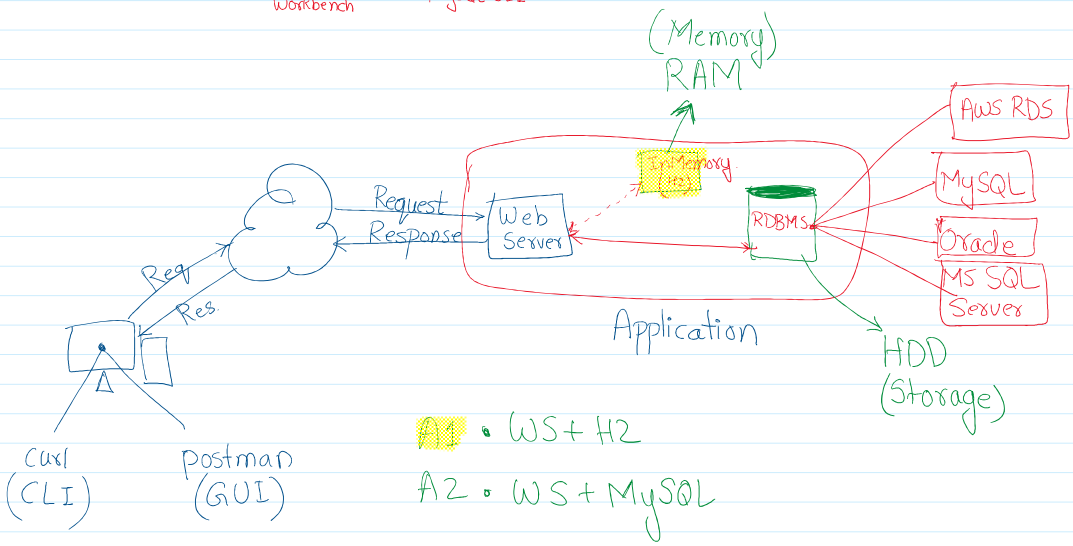
05.15Jul.WebDBServer

Saturday, July 15, 2023 8:57 PM

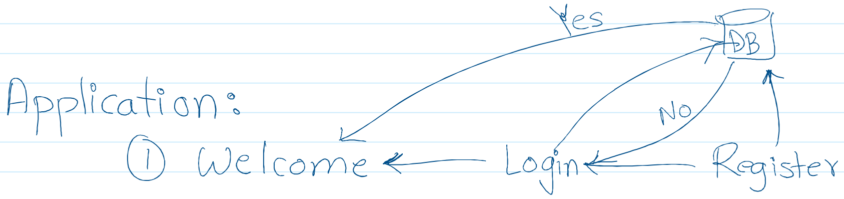




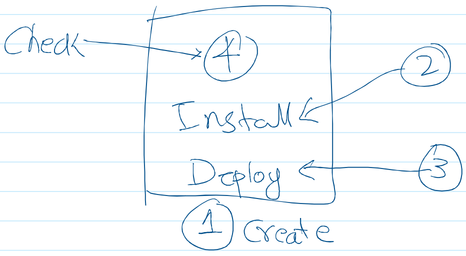
A1 ∘ WS + H2

A2 ∘ WS + MySQL

A3 ∘ WS + RDS(MySQL)



PL	∘	Java (JDK, JRE) = 1.8
BT	∘	Apache Maven.
FW	∘	Spring Boot
Lib	∘	- Web, JPA
DB	∘	In-Memory - H2 Embedded → Console.
Front End	∘	HTML CSS JSP



VCS : github

IDE : VSCode

Project 1: Spring boot with H2 using Maven

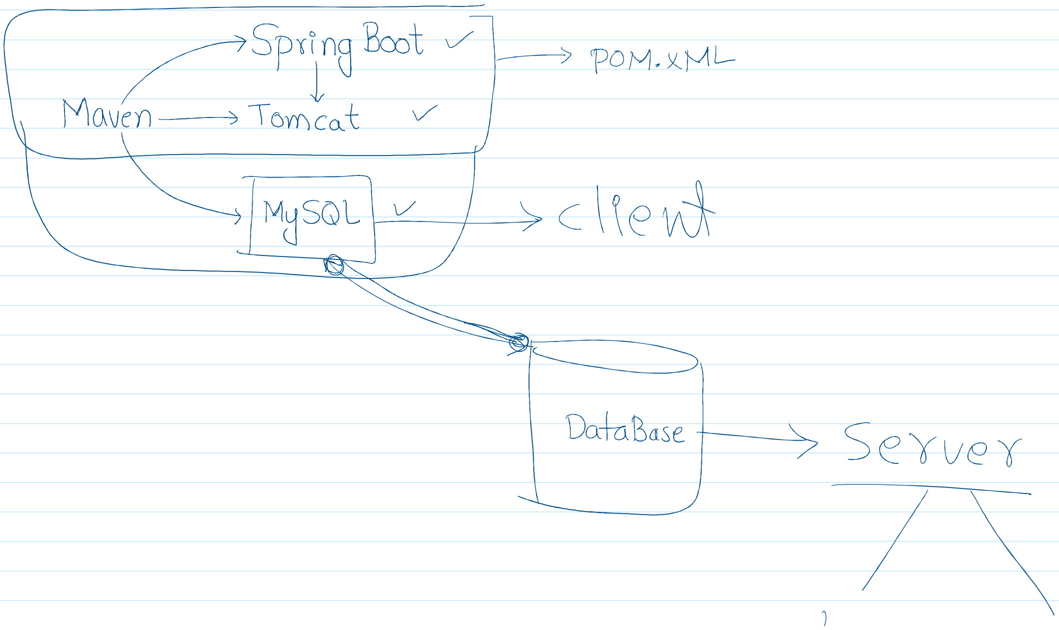
1. Order/Turn on Server
2. Install Java 1.8
   a. # apt update
   b. # apt install openjdk-8-jdk
3. Install Apache Maven
   a. # apt update
   b. # apt install maven -y
4. Clone Git Project in Server
   a. Settings --> Developer Tools --> Classic (PAT) --> Generate
   b. #   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
   c. $ git clone https://oauth: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@github.com/NubeEra-MCO/SpringBoot-H2-LoginReg.git
5. Check All Pre requisites:
   a. $ git --version
   b. $ java -version
   c. $ javac -version
   d. $ mvn --version
6. Build & Run Project
   a. $ mvn clean
   b. $ mvn spring-boot:run
   c. $ java -jar target/*.jar
7. Check Project
   a. Browse Application http://IP:8080
   b. Browse Database http://IP:8080/h2-console
      i. UserName: sa
      ii. Password: 123
8. Delete All Resources

Project 2: Spring boot with MySQL using Maven

1. Order/Turn on Server
2. Install Java 1.8
   a. # apt update
   b. # apt install openjdk-8-jdk
3. Install Apache Maven
   a. # apt update
   b. # apt install maven -y
4. Clone Git Project in Server
   a. Settings --> Developer Tools --> Classic (PAT) --> Generate
   b. #   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
   c. $ git clone https://oauth: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@github.com/NubeEra-MCO/SpringBoot-H2-LoginReg.git
   d. $ git clone oauth: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@https://github.com/NubeEra-MCO/SpringBoot-MySQL-REST-API.git
5. Install Database (MySQL)
   a. $ sudo su
   b. # apt update
   c. # apt install mysql-server -y
   d. # mysql --version
   e. # service mysql status
   f. # mysql_secure_installation
6. Connect & Create Database

7. Check All Application:

```
curl -i -H "Content-Type: application/json" -X POST -d '{"body" : "Lets Learn Java DevOps!"}' http://localhost:8090/api/notes
curl -i -H "Content-Type: application/json" -X GET http://localhost:8090/api/notes
```



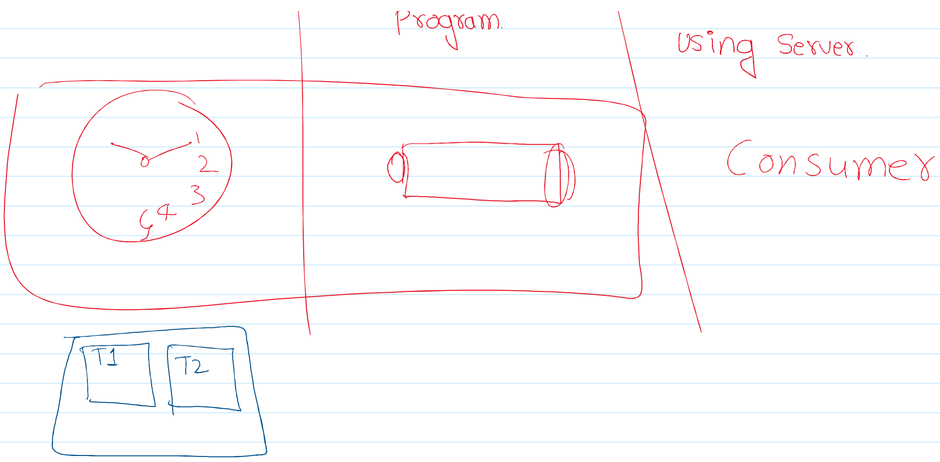
Local Host

Wood Toolkit	Web framework
	SpringBoot Tomcat My SQL Client

Carpenter Maven

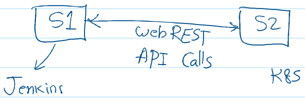
My SQL

① Database	② Server	③ Client
File	Infinite Program.	to Access DB using Server.



mySQL → Server

1. Connect to MySQL Server using MySQL Client
    a. $ mysql -u root
2. Create Database
    a. mysql> create database mydatabase;
3. Select Database
    a. mysql> use mydatabase;
4. Create Table
    a. mysql> create table employee(id int, name varchar(200));
5. See all tables
    a. mysql> show tables;


S1
S2
Web REST
API Calls
Jenkins
K8S