**Micro Services**

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# URLs

<https://start.spring.io/>

<https://github.com/in28minutes/spring-microservices/blob/master/02.restful-web-services/2.3.1.RELEASE-upgrade.md>

<https://github.com/misbaharchitect/suneratech>

# Annotations

@SpringBootApplication

@component

@Autowire

@Entity

@Table(name = "TABLE\_X\_CREDIT\_CARD", schema = "SA")

@Data

@NoArgsConstructor

@AllArgsConstructor

@JsonIgnoreProperties({ "hibernateLazyInitializer", "handler" })

@RestController

@GetMapping(“/hello”)

# Application.properties

Server.port = 8081

# Maven

./mvnw dependency:tree

# Springboot – distributed app

Diagram

Description automatically generated

Diagram

Description automatically generated

Graphical user interface, text, application

Description automatically generated

# Anotations

@RestController

# SpringBootAtuoconfiguration

starter web

DispatcherServlet

DispatcherServletAutoConfiguration

Front controller

/

It know the all the mappings in app

# Path Parameter

@GetMapping("/users/{id}")

@GetMapping("/hello/{user}")

**public** String helloUser(@PathVariable String user) {

# Database

Jpa

H2

# Dependency

--documentation and testing

<dependency>

<groupId>org.springdoc</groupId>

<artifactId>springdoc-openapi-ui</artifactId>

<version>1.6.9</version>

</dependency>

<http://localhost:8082/swagger-ui/index.html>

list of apis we have developed

**Actuator**

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-actuator</artifactId>

</dependency>

# CURL

CURL -X GET <http://localhost:8082/hello/>

CURL -X GET http://localhost:8082/hello2

# Maven

Right click – maven –update project – force update of Snapshot and release

# Filtering json response

Static filtering done at the java bean

@JsonIgnore

Dynamic filtering

In controller user MappingJacksonValue(bean)

And user FilterProvider SimpleBeanPropertyFilter

# Actuator

Gives health info

http://Localhost:8080/actuator

### /src/main/resources/application.properties

management.endpoints.web.exposure.include=\*

http://Localhost:8080/actuator/metrix

http://Localhost:8080/actuator/metrix/onemetrixval

# docker

docker --version

docker run -p 5000:5000 -d in28min/todo-rest-api-h2:1.0.0.RELEASE

docker run -p 5001:5000 -d in28min/todo-rest-api-h2:1.0.0.RELEASE

docker run -p 5000:5000 -d --restart=always in28min/todo-rest-api-h2:1.0.0.RELEASE

docker container pause contid

docker container unpause contid

docker container inspect contid

docker container prune – to delete all stopped containers

-p HOSTPORT:CONTAINERPORT

-d detached

docker logs -f containerid

docker container ls

docker container ls -a

docker container stop containerid – SIGKILL grace full shut down close all others

docker container kill containerid

hub.docker.com – public repository

for company we need private repository

docker pull mysql

docker image remove imageid

docker search mysql

docker image history imageid

docker image inspect imageid

docker images

http://hub.docker.com/r/in28min/todo-rest-api-h2

docker events

docker top contid

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

<configuration>

<image>

<name>gayazahamed/mmv2-${project.artifactId}:${project.version}</name>

</image>

<pullPolicy>IF\_NOT\_PRESENT</pullPolicy>

</configuration>

</plugin>

</plugins>

</build>

project run as maven build

goals

spring-boot:build-image -DskipTests

docker.io/gayazahamed/mmv2-demo:0.0.1-SNAPSHOT

docker run -p 8082:8082 -d gayazahamed/mmv2-demo:0.0.1-SNAPSHOT

# zipkin

<http://127.0.0.1:9411/>

docker run -p 9411:9411 openzipkin/zipkin:2.23