Spring Boot 20/08/24

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Spring Boot in Rest full API (SAP Commerce)

REST MVC API with Spring Boot Microservices

SPING MVC:
Model:- domain model
View:- generate html output
Controller:- render methods
POJO:- plain old java objects

As we provide @Repository
JDBCtEMPLATE,EXCEPTION HANDLEr

MVC pattern result in seprating the different aspect of the application (input logic,business logic, and UI logic), while providing a loose coupling between these element

Dispacher Servlet-> Spring provide by default front controller

Front controller:- Army
Centralized controller pattern:-
put@Controller in top of class likh to
To jub bhi bhi request aiga dispacher servelet ko to wo direct controller dhundhega ki kaha he or call kere ge

Spring boot api/ dispatcher service will handl when to call init, distroy and all

REST:- representational state transfer

REST is Design Pattern
Two protocol
SOAP or REST full services
RESt is veri light in form of HTTP protocol
Media type:- xml,json,html,plain text support all by rest
Soap base spport xml only

Transfer HHTp
State: all resources state info stored at client
Representation:-

Character of REST:
1. Uniform inteface
2. Decouple slient-server interface
3. Stateless
4. Cacheable
5. Layered

REST:- representational state transfer

Http request vs Servlet request

Annotation are by nature interfaces and the implementation of that is implemented by spring boot.

Spring:- light weight container

Interface:- define behavior /blue print

Rest Controller:-
Convenience

Request Mapping
@requestMapping
HTTP Request
URI:- Uniform Request Identifier

Request Parameters
Header value:- HTTPAccept,HTTPcontent,Request parameter contain value is header value

Default method of request mapping is GET

Spring Provide expand internaly
GetMapping
PostMapping:-
DeleteMapping
PutMapping

Spring expresion value {} in curly braces
Which contain variable and must map to to lacal variable using @PathVariable

If variable and local are same then use @PathVariale if not then explicitly mapping

RowMApper we create annonimus class as we don't want to reuse

queryForObject require 3 fields sql,ROWMAPPER,new Object to search

Business Layer Ready:- PODO,services,impl,dao
UI/Controller-> RESTFUL services

Each method should be inko result links or aPI

Post and get path must be same

ORM:- who want to write sql in java then it is used
Object relation mapping

HQL:- hybernate query language
Hyberante api:-sql commands in ORM

JPI:- jaav persistent api

2. Decouple slient-server interface
3. Stateless
4. Cacheable
5. Layered
6. Extensible through code

HQL:- hybernate query language
Hyberante api:-sql commands in ORM

JPI:- jaav persistent api

GET hhtp version
User-agent: browse
Accept: application/json
[CRLF]

201 created
200ok

CastTypeException

SomeObject use for Json Object

1. Request Body
2. ResponseBody
3. HTTPServeletRequest
4. HTTPServeletResponse
5. @ResponseStatus(HTTPStatus.CREATED)// Created=201

@SpringBootAPPLICATION
Enable auto configuaration
@Cofiguration : this class providing some configuartion like BEAN configuration,
@Component Scan

JPA Annotaion
@Entity
@Table
@Id
@colomn
@GeneratedValue
@GeneratedGenerator

Type of Generator
- Assigned
- Auto default generator most of the time sequence is used
- Increment
- Sequence
- Identity
- Hilo: differs by lot
- Native identity or sequence or hilo

Data repository

Data Repository
- Repository
- -crud repo
- Paging and sorting repo
- JPA Repo

Web is used to post on tomcat

Optional is container

Write good meaning full method name

Inter service communication
Services communicate within each other

Amazon communicate for payment with hsbc bank payment services, IcIc bank service, and other banks.

RestTemplate provided spring

RestClient provided by spring 6.1

Non blocking api- web client
Both are synchronus

RestTemplate and RestClient use dfor interprocess communication

RestTemplate.exchange to exchange service data

Every services are set as component in micro service

Interservice communication,exception handling,crud ,JDBC