Q-1

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://java.sun.com/xml/ns/javaee"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"* id=*"WebApp\_ID"* version=*"3.0"*>

<display-name>SpringRest-Assignment1</display-name>

<welcome-file-list>

<welcome-file>HelloWorld.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>rest-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>rest-dispatcher</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

</web-app>

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<beans xmlns=*"http://www.springframework.org/schema/beans"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns:context=*"http://www.springframework.org/schema/context"*

xsi:schemaLocation=*"*

*http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd*

*http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context.xsd"*>

<context:component-scan base-package=*"com.spring.rest"*></context:component-scan>

<context:annotation-config></context:annotation-config>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name=*"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name=*"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

package com.nishanth.rest;

import org.springframework.stereotype.Controller;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

import org.springframework.web.servlet.ModelAndView;

@Controller

public class Hello {@RequestMapping(value="/hello",method=RequestMethod.GET)

public ModelAndView getHello() {

ModelAndView model = new ModelAndView("helloworld");

return model;

}

}

Hello World!!

q-2

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd"* id=*"WebApp\_ID"* version=*"4.0"*>

<display-name> SpringRest-Assignment2</display-name>

<welcome-file-list>

<welcome-file>login.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>rest-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>restQ2-dispatcher</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

</web-app>

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<beans xmlns=*"http://www.springframework.org/schema/beans"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns:context=*"http://www.springframework.org/schema/context"*

xsi:schemaLocation=*"*

*http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd*

*http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context.xsd"*>

<context:component-scan base-package=*"com.spring.rest"*></context:component-scan>

<context:annotation-config></context:annotation-config>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name=*"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name=*"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

package com.super.rest;

import java.util.ArrayList;

import org.springframework.stereotype.Controller;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

import org.springframework.web.bind.annotation.RequestParam;

import org.springframework.web.servlet.ModelAndView;

@Controller

public class UserController {

@RequestMapping(value="/login",method=RequestMethod.GET)

public ModelAndView getLogin() {

ModelAndView model = new ModelAndView("login");

return model;

}

@RequestMapping(value="/logincheck",method=RequestMethod.POST)

public ModelAndView checkAuthentication(@RequestParam("user") String u,@RequestParam("password") String p) {

ArrayList<User>l = new ArrayList<User>();

ModelAndView mv = new ModelAndView();

User user1 = new User();

User user2 = new User();

user1.setUser("nishanth");

user1.setPassword("super");

user2.setUser("chintu");

user2.setPassword("win");

l.add(user1);

l.add(user2);

for(User t: l) {

if(u.equals(t.getUser()) && p.equals(t.getPassword())) {

ModelAndView model = new ModelAndView("success");

return model;

}

Else

{

ModelAndView model = new ModelAndView("error");

return model;

}

}

return null;

}

}

**package** com.spring.rest;

**import** java.util.ArrayList;

**public** **class** UserDB {

**public** ArrayList<User>l = **new** ArrayList<User>();

**public** ArrayList setDatabase() {

User user1 = **new** User();

User user2 = **new** User();

user1.setUser("nishanth");

user1.setPassword("super");

user2.setUser("chintu");

user2.setPassword("win");

l.add(user1);

l.add(user2);

**return** l;

}

}

**package** com.spring.rest;

**public** **class** User {

**public** String user;

**public** String password;

**public** String getUser() {

**return** user;

}

**public** **void** setUser(String user) {

**this**.user = user;

}

**public** String getPassword() {

**return** password;

}

**public** **void** setPassword(String password) {

**this**.password = password;

}

}

<html>

<body>

<form action=*"/rest-assignment/logincheck"* method =*"post"*>

<table>

<tr>

<td> UserName : </td><td><input type=*"text"* name=*"user"*/></td>

</tr>

<tr>

<td> Password : </td><td><input type=*"text"* name=*"password"*/></td>

</tr>

<tr><td><input type=*"submit"* value=*"login"*/></td></tr>

</table>

</form>

</body>

</html>

Login Successful!!

Wrong Credentials!! Please try again:)

Q-3

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd"* id=*"WebApp\_ID"* version=*"4.0"*>

<display-name>Rest-assignmentQ9</display-name>

<servlet>

<servlet-name>restQ9-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>restQ9-dispatcher</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

<context-param>

<param-name>contextConfigLocation</param-name>

<param-value>/WEB-INF/restQ9-dispatcher-servlet.xml</param-value>

</context-param>

<listener>

<listener-class>

org.springframework.web.context.ContextLoaderListener

</listener-class>

</listener>

</web-app>

package com.spring.Rest03;

import java.util.ArrayList;

import java.util.List;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

import org.springframework.web.bind.annotation.RequestParam;

import org.springframework.web.bind.annotation.RestController;

@RestController

public class CountryController

{

@RequestMapping(value="/country/{zipcode}",method= RequestMethod.GET,headers="Accept=application/json")

public Countrymodel getCountryById(@PathVariable int zipcode)

{

List<Countrymodel> listOfCountries= new ArrayList();

listOfCountries=createCountryList();

for(Countrymodel country:listOfCountries)

{

if(country.getZipcode()==zipcode)

return country;

}

return null;

}

@RequestMapping("/getInfo")

public Countrymodel getCountry(@RequestParam("code") String zcode)

{

long zipcode=Integer.parseInt(zcode);

List<Countrymodel> listOfCountries= new ArrayList();

listOfCountries=createCountryList();

for(Countrymodel country:listOfCountries)

{

if(country.getZipcode()==zipcode)

return country;

}

return null;

}

private List createCountryList()

{

Countrymodel m1=new Countrymodel(506015,"Telengana","Warangal","India");

Countrymodel m2=new Countrymodel(506014,"AP","Guntur","India");

Countrymodel m3=new Countrymodel(506013,"Maharastra","Mumbai","India");

Countrymodel m4=new Countrymodel(506031,"TN","Chennai","India");

List<Countrymodel> listOfCountries = new ArrayList();

listOfCountries.add(m1);

listOfCountries.add(m2);

listOfCountries.add(m3);

listOfCountries.add(m4);

return listOfCountries;

}

}

**package** com.spring.Rest03;

**public** **class** Countrymodel {

**private** **int** zipcode;

**private** String city;

**private** String state;

**private** String country;

**public** **int** getZipcode() {

**return** zipcode;

}

**public** **void** setZipcode(**int** zipcode) {

**this**.zipcode = zipcode;

}

**public** String getCity() {

**return** city;

}

**public** **void** setCity(String city) {

**this**.city = city;

}

**public** String getState() {

**return** state;

}

**public** **void** setState(String state) {

**this**.state = state;

}

**public** String getCountry() {

**return** country;

}

**public** **void** setCountry(String country) {

**this**.country = country;

}

@Override

**public** String toString() {

**return** "CountryModel [zipcode=" + zipcode + ", city=" + city + ", state=" + state + ", country=" + country

+ "]";

}

**public** CountryModel(**int** zipcode, String city, String state, String country) {

**super**();

**this**.zipcode = zipcode;

**this**.city = city;

**this**.state = state;

**this**.country = country;

}

}

|  |
| --- |
| <html> |
|  | <body> |
|  | <h2>Information Of a ZipCode</h2> |
|  | <form action="/springREST3/getInfo"> |
|  |  |
|  | <table> |
|  | <tr> |
|  | <td>Zipcode</td> |
|  | <td><input type="text" name="code"/></td> |
|  | </tr> |
|  |  |
|  | <tr> |
|  | <td colspan="2"><button type="submit">Get Info</button> |
|  | </td> |
|  | </tr> |
|  |  |
|  | </table> |
|  |  |
|  |  |
|  |  |
|  | </form> |
|  |  |
|  | </body> |
|  | </html> |

Q-4

**package** com.spring.rest4;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RequestMethod;

**import** org.springframework.web.bind.annotation.RequestParam;

**import** org.springframework.web.bind.annotation.RestController;

@RestController

**public** **class** CreditCardValidator {

@Autowired

CreditService service;

@RequestMapping(value="/validate", method=RequestMethod.***PUT***)

**public** CreditCard validate(@RequestParam("credit\_card") String card) {

CreditCard check = service.validate(card);

**return** check;

}

@RequestMapping("/check")

**public** String checking() {

String s = service.check();

**return** s;

}

**package** com.spring.rest4;

**public** **class** CreditCard {

**private** **boolean** valid = **false**;

**private** String type = "NoType";

**public** CreditCard()

{

}

**public** CreditCard(**boolean** valid, String type) {

**super**();

**this**.valid = valid;

**this**.type = type;

}

**public** **boolean** isValid() {

**return** valid;

}

**public** **void** setValid(**boolean** valid) {

**this**.valid = valid;

}

**public** String getType() {

**return** type;

}

**public** **void** setType(String type) {

**this**.type = type;

}

@Override

**public** String toString() {

**return** "CreditCard [valid=" + valid + ", type=" + type + "]";

}

}

**package** com.spring.rest4;

**public** **class** CreditService {

**private** CreditCard card1=**new** CreditCard();

**public** CreditCard validate(String number) {

//parse the individual string values to int

**if**(number.length() == 15) {

//for JCB card

//There are validations that can be applied for JCB card

//apply validations and return results

card1.setType("JCB");

card1.setValid(**true**);

}

**else** **if**(number.length() <=19 && number.length()>=16) {

//for Master and Visa

**if**(number.length()==16) {

//for visa

card1.setType("Visa");

card1.setValid(**true**);

}

card1.setType("MasterCard");

card1.setValid(**true**);

}

**return** card1;

}

**public** String check() {

**return** "Working Fine";//card2.toString();

}

}

**ackage** com.spring.rest4;

@SpringApllication

**public** **class** Application {

**public** **static** **void** main(String[] args)

{

// **TODO** Auto-generated method stub

SpringApplication.run(App.**class**, args);

}

}

Q-5

package com.spring.rest5;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

import org.springframework.web.bind.annotation.RestController;

import com.spring.rest5.Employee;

@RestController

public class EmployeeController {

@Autowired

private EmployeeService employeeService;

@RequestMapping("/employees")

public List<Employee> getAllEmployees() {

return employeeService.getAllEmployees();

}

@RequestMapping("/employees/{id}")

public Employee getEmployee(@PathVariable String id) {

return employeeService.getEmployee(id);

}

@RequestMapping(method=RequestMethod.POST, value="/employees")

public void addEmployee(@RequestBody Employee employee) {

employeeService.addEmployee(employee);

}

@RequestMapping(method=RequestMethod.PUT, value="/employees/{id}")

public void updateEmployee(@RequestBody Employee employee, @PathVariable String id) {

employeeService.updateEmployee(id, employee);

}

@RequestMapping(method=RequestMethod.DELETE, value="/employees/{id}")

public Employee deleteEmployee(@PathVariable String id) {

return employeeService.getEmployee(id); }

}

**package** com.spring.rest5;

**public** **class** Employee {

**private** String id;

**private** String name;

**private** String department;

**private** String designation;

**private** String salary;

**public** Employee() {

}

**public** Employee(String id, String name, String department, String designation, String salary) {

**super**();

**this**.id = id;

**this**.name = name;

**this**.department = department;

**this**.designation = designation;

**this**.salary = salary;

}

**public** String getDepartment() {

**return** department;

}

**public** **void** setDepartment(String department) {

**this**.department = department;

}

**public** String getDesignation() {

**return** designation;

}

**public** **void** setDesignation(String designation) {

**this**.designation = designation;

}

**public** String getSalary() {

**return** salary;

}

**public** **void** setSalary(String salary) {

**this**.salary = salary;

}

**public** String getId() {

**return** id;

}

**public** **void** setId(String id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

}

package com.spring.rest5;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.List;

import org.springframework.stereotype.Service;

@Service

public class EmployeeService {

private List<Employee> employees = new ArrayList<>(Arrays.asList(

new Employee("E1","spring", "Spring Fronework", "Spring Franenork Description", "35000"),

new Employee("E2","java", "Core Java", "Core Java Description","45000"),

new Employee("E3","javascript", "JavaScript", "JavaScript Description","50000")

));

public List<Employee> getAllEmployees() {

return employees;

}

public Employee getEmployee(String id) {

return employees.stream().filter(t -> t.getId().equals(id)).findFirst().get();

}

public void addEmployee(Employee employee) {

employees.add(employee);

}

public void updateEmployee(String id, Employee employee) {

for (int i = 0; i < employees.size(); i++) {

Employee t = employees.get(i);

if (t.getId().equals(id)) {

employees.set(i, employee);

return;

}

}

}

public void deleteEmployee(String id) {

employees.removeIf(t -> t.getId().equals(id));

}

}

package com.spring.rest5;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class Application {

public static void main(String[] args) {

SpringApplication.run(Application.class, args);

}

}

Q-6

**package** com.spring.rest6;

**import** java.util.Arrays;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.http.HttpEntity;

**import** org.springframework.http.HttpHeaders;

**import** org.springframework.http.HttpMethod;

**import** org.springframework.http.MediaType;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RequestMethod;

**import** org.springframework.web.bind.annotation.RestController;

**import** org.springframework.web.client.RestTemplate;

@RestController

**public** **class** MathController {

@Autowired

RestTemplate template;

@Autowired

MathService service;

@RequestMapping(value = "/consume/add", method=RequestMethod.***POST***)

**public** String add(@RequestBody Maths ms) {

HttpHeaders headers = **new** HttpHeaders();

headers.setAccept(Arrays.*asList*(MediaType.***APPLICATION\_JSON***));

HttpEntity<Maths> entity = **new** HttpEntity<Maths>(ms,headers);

**return** template.exchange("http://localhost:8080/add", HttpMethod.***POST***, entity, String.**class**).getBody();

}

@RequestMapping(value = "/add",method = RequestMethod.***POST***)

**public** **long** check(@RequestBody Maths ms) {

**return** service.add(ms.getN1(), ms.getN2());

}

}

**package** com.spring.rest6;

**public** **class** Maths {

**private** **long** n1;

**private** **long** n2;

**public** Maths() {

}

**public** Maths(**long** n1, **long** n2) {

**super**();

**this**.n1 = n1;

**this**.n2 = n2;

}

**public** **long** getN1() {

**return** n1;

}

**public** **void** setN1(**long** n1) {

**this**.n1 = n1;

}

**public** **long** getN2() {

**return** n2;

}

**public** **void** setN2(**long** n2) {

**this**.n2 = n2;

}

}

**package** com.spring.rest6;

**import** org.springframework.stereotype.Service;

@Service

**public** **class** MathService {

**public** **long** add(**long** n1,**long** n2) {

**return** n1+n2;

}

**public** **long** subtract(**long** n1,**long** n2) {

**return** n1-n2;

}

**public** **long** multiply(**long** n1,**long** n2) {

**return** n1\*n2;

}

**public** **double** division(**double** n1,**double** n2) {

**if**(n2!=0) {

**return** n1/n2;

}

**return** 0;

}

**public** **double** sqrt(**double** n) {

**return** Math.*sqrt*(n);

}

}

**package** com.spring.rest6;

**import** org.springframework.context.annotation.Bean;

**import** org.springframework.web.client.RestTemplate;

@SpringBootApplication

**public** **class** Application {

**public** **static** **void** main(String[] args) {

SpringApplication.run(App.**class**, args);

}

@Bean

**public** RestTemplate getRestTemp() {

**return** **new** RestTemplate();

}

}

Q-7

**package** com.spring.rest7;

**import** java.util.List;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.web.bind.annotation.PathVariable;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RequestMethod;

**public** **class** orderController {

@Autowired

**private** orderService orderService;

@RequestMapping("/orders")

**public** List<Order> getAllOrders()

{

**return** orderService.getAllOrders();

}

@RequestMapping("/orders/{id}")

**public** Order getOrder(@PathVariable String id)

{

**return** orderService.getOrder(id);

}

@RequestMapping(method=RequestMethod.***POST***,value="/orders")

**public** **void** addOrder(@RequestBody Order order)

{

orderService.addOrder(order);

}

@RequestMapping(method=RequestMethod.***PUT***,value="/orders/{id}")

**public** **void** updateOrder(@RequestBody Order order,@PathVariable String id)

{

orderService.updateOrder(id,order);

}

@RequestMapping(method=RequestMethod.***DELETE***,value="/orders/{id}")

**public** **void** deleteOrder(@RequestBody Order order,@PathVariable String id)

{

orderService.deleteOrder(id,order);

}

}

**package** com.spring.rest7;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RestController;

@RestController

**public** **class** HelloController {

@RequestMapping("/hello")

**public** String sayHi()

{

**return** "Hello";

}

}

**package** com.spring.rest7;

@Entity

@Document(collection="orders")

**public** **class** Order {

@Id

**private** String id;

**private** String title;

**private** String description;

**private** **boolean** placed;

**public** Order()

{

}

**public** Order(String title, String description, **boolean** placed) {

**super**();

**this**.title = title;

**this**.description = description;

**this**.placed = placed;

}

**public** String getid() {

**return** id;

}

**public** **void** setOrderId(String id) {

**this**.id = id;

}

**public** String getTitle() {

**return** title;

}

**public** **void** setTitle(String title) {

**this**.title = title;

}

**public** String getDescription() {

**return** description;

}

**public** **void** setDescription(String description) {

**this**.description = description;

}

**public** **boolean** isPlaced() {

**return** placed;

}

**public** **void** setPlaced(**boolean** placed) {

**this**.placed = placed;

}

}

**package** com.spring.rest7;

**import** java.util.ArrayList;

**import** java.util.List;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Service;

@Service

**public** **class** orderService {

@Autowired

orderRepository orderRepository;

**public** List<Order>getAllOrders()

{

List<Order> orders=**new** ArrayList<>();

orderRepository.findAll().forEach(orders::add);

**return** orders;

}

**public** Order getOrder(String id) {

**return** orderRepository.findOne(id);

}

**public** **void** addOrder(Order order) {

orderRepository.save(order);

}

**public** **void** updateOrder(String id, Order order) {

orderRepository.save(order);

}

**public** **void** deleteOrder(String id, Order order) {

orderRepository.delete(id);

}

}

**package** com.spring.rest7;

**import** org.springframework.stereotype.Repository;

@Repository

**public** **class** orderRepository {

// List<Order>findByTitle(String title);

//List<Order>findByPlaced(boolean placed);

}

**package** com.spring.rest7;

@SpringBootApplication

**public** **class** Application {

**public** **static** **void** main(String args[])

{

SpringApplication.run(orderAPI.**class**, args);

}

}

Q-8

**package** com.spring.rest8;

**import** java.util.List;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.web.bind.annotation.PathVariable;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RequestMethod;

**import** org.springframework.web.bind.annotation.RestController;

@RestController

**public** **class** productController {

@Autowired

**private** productService productService;

@RequestMapping("/products")

**public** List<Product> getAllProducts()

{

**return** productService.getAllProducts();

}

@RequestMapping("/products/{id}")

**public** Product getProduct(@PathVariable String id)

{

**return** productService.getProduct(id);

}

@RequestMapping(method=RequestMethod.***POST***,value="/products")

**public** **void** addProduct(@RequestBody Product product)

{

productService.addProduct(product);

}

@RequestMapping(method=RequestMethod.***PUT***,value="/products/{id}")

**public** **void** updateProduct(@RequestBody Product product,@PathVariable String id)

{

productService.updateProduct(id,product);

}

@RequestMapping(method=RequestMethod.***DELETE***,value="/products/{id}")

**public** **void** deleteOrder(@RequestBody Product product,@PathVariable String id)

{

productService.deleteProduct(id,product);

}

}

**package** com.spring.rest8;

@Entity

@Document(collection="products")

**public** **class** Product {

@Id

**private** String id;

**private** String title;

**private** String description;

**private** **boolean** placed;

**public** Product()

{

}

**public** Product(String title, String description, **boolean** placed) {

**super**();

**this**.title = title;

**this**.description = description;

**this**.placed = placed;

}

**public** String getid() {

**return** id;

}

**public** **void** setProductId(String id) {

**this**.id = id;

}

**public** String getTitle() {

**return** title;

}

**public** **void** setTitle(String title) {

**this**.title = title;

}

**public** String getDescription() {

**return** description;

}

**public** **void** setDescription(String description) {

**this**.description = description;

}

**public** **boolean** isPlaced() {

**return** placed;

}

**public** **void** setPlaced(**boolean** placed) {

**this**.placed = placed;

}

}

**package** com.spring.rest8;

**import** java.util.ArrayList;

**import** java.util.List;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Service;

@Service

**public** **class** productService {

@Autowired

productRepository productRepository;

**public** List<Product>getAllProducts()

{

List<Product> products=**new** ArrayList<>();

productRepository.findAll().forEach(products::add);

**return** products;

}

**public** Product getProduct(String id) {

**return** productRepository.findOne(id);

}

**public** **void** addProduct(Product product) {

productRepository.save(product);

}

**public** **void** updateProduct(String id, Product product) {

productRepository.save(product);

}

**public** **void** deleteProduct(String id, Product product) {

productRepository.delete(id);

}

}

**package** com.spring.rest8;

**import** org.springframework.stereotype.Repository;

@Repository

**public** **interface** productRepository **extends** MongoRepository<Product,String>

{

// List<Order>findByTitle(String title);

//List<Order>findByPlaced(boolean placed);

}

**package** com.spring.rest8;

@SpringBootApplication

**public** **class** Application {

**public** **static** **void** main(String args[])

{

SpringApplication.run(App.**class**, args);

}

}

Q-9

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd"* id=*"WebApp\_ID"* version=*"4.0"*>

<display-name>Rest-assignmentQ9</display-name>

<servlet>

<servlet-name>restQ9-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>restQ9-dispatcher</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

</web-app>

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<beans xmlns=*"http://www.springframework.org/schema/beans"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns:context=*"http://www.springframework.org/schema/context"*

xsi:schemaLocation=*"*

*http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd*

*http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context.xsd"*>

<context:component-scan base-package=*"com.manoj.restQ9"*></context:component-scan>

<context:annotation-config></context:annotation-config>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name=*"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name=*"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

package com.manoj.restQ9;

import java.util.Arrays;

import java.util.List;

import org.springframework.stereotype.Controller;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

@Controller

public class CustomerController {

private List<Customer> customers = Arrays.asList(

new Customer("c1","ram","India"),

new Customer("c2","Arjun","USA"),

new Customer("c3","Krishna","Uk")

);

@RequestMapping(value="/customers", method=RequestMethod.GET)

public List<Customer> getAllCustomers(){

return customers;

}

@RequestMapping(value="/customers/{id}",method=RequestMethod.GET)

public Customer getCustomer(@PathVariable String id) {

return customers.stream().filter(t->t.getId().equals(id)).findFirst().get();

}

@RequestMapping(value="/customers",method=RequestMethod.POST)

public void addCustomer(@RequestBody Customer customer ) {

customers.add(customer);

}

@RequestMapping(value="/customers/{id}",method=RequestMethod.PUT)

public void updateCustomer(@PathVariable String id,@RequestBody Customer customer) {

for (int i=0;i<customers.size();i++) {

Customer t = customers.get(i);

if (t.getId().equals(id)) {

customers.set(i,customer);

}

}

}

@RequestMapping(value="/customers/{id}",method=RequestMethod.DELETE)

public void deleteCustomer(@PathVariable String id) {

customers.removeIf(t->t.getId().equals(id));

}

}

**package** com.manoj.restQ9;

**public** **class** Customer {

**private** String id;

**private** String name;

**private** String country;

**public** String getId() {

**return** id;

}

**public** **void** setId(String id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getCountry() {

**return** country;

}

**public** **void** setCountry(String country) {

**this**.country = country;

}

@Override

**public** String toString() {

**return** "Customer [id=" + id + ", name=" + name + ", country=" + country + "]";

}

**public** Customer(String id, String name, String country) {

**super**();

**this**.id = id;

**this**.name = name;

**this**.country = country;

}

}