**Create REST service for department**

**SpringLearnApplication.java**

package com.cognizant.springlearn;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class SpringLearnApplication {

public static void main(String[] args) {

SpringApplication.run(SpringLearnApplication.class, args);

}

}

**Employee.java**

package com.cognizant.springlearn.model;

public class Employee {

private int id;

private String name;

private double salary;

private boolean permanent;

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public double getSalary() {

return salary;

}

public void setSalary(double salary) {

this.salary = salary;

}

public boolean isPermanent() {

return permanent;

}

public void setPermanent(boolean permanent) {

this.permanent = permanent;

}

}

**Department.java**

package com.cognizant.springlearn.model;

public class Department {

private int id;

private String name;

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

}

**EmployeeDao.java**

package com.cognizant.springlearn.dao;

import com.cognizant.springlearn.model.Employee;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.stereotype.Repository;

import java.util.List;

@Repository

public class EmployeeDao {

public List<Employee> getAllEmployees() {

ClassPathXmlApplicationContext context = new ClassPathXmlApplicationContext("employee.xml");

return (List<Employee>) context.getBean("employeeList");

}

}

**DepartmentDao.java**

package com.cognizant.springlearn.dao;

import com.cognizant.springlearn.model.Department;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.stereotype.Repository;

import java.util.List;

@Repository

public class DepartmentDao {

public List<Department> getAllDepartments() {

ClassPathXmlApplicationContext context = new ClassPathXmlApplicationContext("department.xml");

return (List<Department>) context.getBean("departmentList");

}

}

**EmployeeService.java**

package com.cognizant.springlearn.service;

import com.cognizant.springlearn.dao.EmployeeDao;

import com.cognizant.springlearn.model.Employee;

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@Service

public class EmployeeService {

private final EmployeeDao employeeDao;

public EmployeeService(EmployeeDao employeeDao) {

this.employeeDao = employeeDao;

}

@Transactional

public List<Employee> getAllEmployees() {

return employeeDao.getAllEmployees();

}

}

**DepartmentService.java**

package com.cognizant.springlearn.service;

import com.cognizant.springlearn.dao.DepartmentDao;

import com.cognizant.springlearn.model.Department;

import org.springframework.stereotype.Service;

import java.util.List;

@Service

public class DepartmentService {

private final DepartmentDao departmentDao;

public DepartmentService(DepartmentDao departmentDao) {

this.departmentDao = departmentDao;

}

public List<Department> getAllDepartments() {

return departmentDao.getAllDepartments();

}

}

**EmployeeController.java**

package com.cognizant.springlearn.controller;

import com.cognizant.springlearn.model.Employee;

import com.cognizant.springlearn.service.EmployeeService;

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

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

import java.util.List;

@RestController

public class EmployeeController {

private final EmployeeService employeeService;

public EmployeeController(EmployeeService employeeService) {

this.employeeService = employeeService;

}

@GetMapping("/employees")

public List<Employee> getAllEmployees() {

return employeeService.getAllEmployees();

}

}

**DepartmentController.java**

package com.cognizant.springlearn.controller;

import com.cognizant.springlearn.model.Department;

import com.cognizant.springlearn.service.DepartmentService;

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

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

import java.util.List;

@RestController

public class DepartmentController {

private final DepartmentService departmentService;

public DepartmentController(DepartmentService departmentService) {

this.departmentService = departmentService;

}

@GetMapping("/departments")

public List<Department> getAllDepartments() {

return departmentService.getAllDepartments();

}

}

**Employee.xml**

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

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="

http://www.springframework.org/schema/beans

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

<bean id="employee1" class="com.cognizant.springlearn.model.Employee">

<property name="id" value="1"/>

<property name="name" value="John"/>

<property name="salary" value="50000"/>

<property name="permanent" value="true"/>

</bean>

<bean id="employee2" class="com.cognizant.springlearn.model.Employee">

<property name="id" value="2"/>

<property name="name" value="Jane"/>

<property name="salary" value="60000"/>

<property name="permanent" value="false"/>

</bean>

<bean id="employeeList" class="java.util.ArrayList">

<constructor-arg>

<list>

<ref bean="employee1"/>

<ref bean="employee2"/>

</list>

</constructor-arg>

</bean>

</beans>

**Department.xml**

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

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="

http://www.springframework.org/schema/beans

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

<bean id="department1" class="com.cognizant.springlearn.model.Department">

<property name="id" value="1"/>

<property name="name" value="HR"/>

</bean>

<bean id="department2" class="com.cognizant.springlearn.model.Department">

<property name="id" value="2"/>

<property name="name" value="IT"/>

</bean>

<bean id="departmentList" class="java.util.ArrayList">

<constructor-arg>

<list>

<ref bean="department1"/>

<ref bean="department2"/>

</list>

</constructor-arg>

</bean>

</beans>

**Application.properties**

spring.main.allow-bean-definition-overriding=true





