**Create REST service for department**

1. Department.java

package com.example.model;  
  
public class Department {  
 private int id;  
 private String name;  
  
 public Department() {}  
  
 public Department(int id, String name) {  
 this.id = id;  
 this.name = 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; }  
}

2. DepartmentDao.java

package com.example.dao;  
  
import java.util.List;  
import com.example.model.Department;  
  
public class DepartmentDao {  
 public static List<Department> DEPARTMENT\_LIST;  
  
 public List<Department> getAllDepartments() {  
 return DEPARTMENT\_LIST;  
 }  
}

3. DepartmentService.java

package com.example.service;  
  
import java.util.List;  
import org.springframework.stereotype.Service;  
import com.example.dao.DepartmentDao;  
import com.example.model.Department;  
  
@Service  
public class DepartmentService {  
  
 private final DepartmentDao departmentDao;  
  
 public DepartmentService(DepartmentDao departmentDao) {  
 this.departmentDao = departmentDao;  
 }  
  
 public List<Department> getAllDepartments() {  
 System.out.println("DepartmentService.getAllDepartments() called");  
 return departmentDao.getAllDepartments();  
 }  
}

4. DepartmentController.java

package com.example.controller;  
  
import java.util.List;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
import com.example.model.Department;  
import com.example.service.DepartmentService;  
  
@RestController  
public class DepartmentController {  
  
 private final DepartmentService departmentService;  
  
 public DepartmentController(DepartmentService departmentService) {  
 this.departmentService = departmentService;  
 }  
  
 @GetMapping("/departments")  
 public List<Department> getAllDepartments() {  
 System.out.println("DepartmentController.getAllDepartments() called");  
 return departmentService.getAllDepartments();  
 }  
}

5. DepartmentServiceApplication.java

package com.example;  
  
import com.example.dao.DepartmentDao;  
import com.example.model.Department;  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
import org.springframework.context.ApplicationContext;  
import org.springframework.context.annotation.Bean;  
import org.springframework.context.support.ClassPathXmlApplicationContext;  
import jakarta.annotation.PostConstruct;  
import java.util.List;  
  
@SpringBootApplication  
public class DepartmentServiceApplication {  
  
 public static void main(String[] args) {  
 SpringApplication.run(DepartmentServiceApplication.class, args);  
 }  
  
 @PostConstruct  
 public void loadDepartmentsFromXML() {  
 ApplicationContext context = new ClassPathXmlApplicationContext("departments.xml");  
 List<Department> departmentList = (List<Department>) context.getBean("departmentList");  
 DepartmentDao.DEPARTMENT\_LIST = departmentList;  
 System.out.println("Loaded Departments: " + departmentList.size());  
 }  
  
 @Bean  
 public DepartmentDao departmentDao() {  
 return new DepartmentDao();  
 }  
}

6. departments.xml

<?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:util="http://www.springframework.org/schema/util"  
 xsi:schemaLocation="  
 http://www.springframework.org/schema/beans   
 https://www.springframework.org/schema/beans/spring-beans.xsd  
 http://www.springframework.org/schema/util  
 https://www.springframework.org/schema/util/spring-util.xsd">  
  
 <bean id="departmentDao" class="com.example.dao.DepartmentDao" />  
  
 <util:list id="departmentList" value-type="com.example.model.Department">  
 <bean class="com.example.model.Department">  
 <property name="id" value="1"/>  
 <property name="name" value="HR"/>  
 </bean>  
 <bean class="com.example.model.Department">  
 <property name="id" value="2"/>  
 <property name="name" value="IT"/>  
 </bean>  
 <bean class="com.example.model.Department">  
 <property name="id" value="3"/>  
 <property name="name" value="Finance"/>  
 </bean>  
 </util:list>  
</beans>

Output



