**Hands On 3: Create REST service for department**

**Employee.java**

package com.example.employeeapp.model;  
  
public class Employee {  
 private int id;  
 private String name;  
 private String department;  
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 String getDepartment() { return department; }  
 public void setDepartment(String department) { this.department = department; }  
}

**EmployeeDao.java**

package com.example.employeeapp.dao;  
  
import com.example.employeeapp.model.Employee;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Repository;  
  
import java.util.List;  
  
@Repository  
public class EmployeeDao {  
 private static List<Employee> *EMPLOYEE\_LIST*;  
  
 @Autowired  
 public EmployeeDao(List<Employee> employeeList) {  
 *EMPLOYEE\_LIST* = employeeList;  
 System.*out*.println("Loaded employees: " + employeeList.size());  
  
 }  
  
 public List<Employee> getAllEmployees() {  
 return *EMPLOYEE\_LIST*;  
 }  
}

**EmployeeController.java**

package com.example.employeeapp.controller;  
  
import java.util.List;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
  
import com.example.employeeapp.model.Employee;  
import com.example.employeeapp.service.EmployeeService;  
  
@RestController  
public class EmployeeController {  
  
 @Autowired  
 private EmployeeService employeeService;  
  
 @GetMapping("/employees")  
 public List<Employee> getAllEmployees() {  
 return employeeService.getAllEmployees();  
 }  
}

**EmployeeService.java**

package com.example.employeeapp.service;  
  
import java.util.List;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
import org.springframework.transaction.annotation.Transactional;  
  
import com.example.employeeapp.dao.EmployeeDao;  
import com.example.employeeapp.model.Employee;  
  
@Service  
public class EmployeeService {  
  
 @Autowired  
 private EmployeeDao employeeDao;  
  
 @Transactional  
 public List<Employee> getAllEmployees() {  
 return employeeDao.getAllEmployees();  
 }  
}

**Department.java**

package com.example.employeeapp.model;  
  
public class Department {  
 private int id;  
 private String name;  
  
 *// Getters and Setters* 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;  
 }  
}

**DepartmentDao.java**

package com.example.employeeapp.dao;  
  
import java.util.List;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.beans.factory.annotation.Qualifier;  
import org.springframework.stereotype.Repository;  
  
import com.example.employeeapp.model.Department;  
  
@Repository  
public class DepartmentDao {  
  
 private static List<Department> *DEPARTMENT\_LIST*;  
  
 @Autowired  
 public DepartmentDao(@Qualifier("departmentList") List<Department> departmentList) {  
 *DEPARTMENT\_LIST* = departmentList;  
 }  
  
 public List<Department> getAllDepartments() {  
 return *DEPARTMENT\_LIST*;  
 }  
}

**DepartmentController.java**

package com.example.employeeapp.controller;  
  
import java.util.List;  
  
import org.slf4j.Logger;  
import org.slf4j.LoggerFactory;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
  
import com.example.employeeapp.model.Department;  
import com.example.employeeapp.service.DepartmentService;  
  
@RestController  
public class DepartmentController {  
  
 private static final Logger *LOGGER* = LoggerFactory.*getLogger*(DepartmentController.class);  
  
 @Autowired  
 private DepartmentService departmentService;  
  
 @GetMapping("/departments")  
 public List<Department> getAllDepartments() {  
 *LOGGER*.info("Fetching all departments");  
 return departmentService.getAllDepartments();  
 }  
}

**DepartmentService.java**

package com.example.employeeapp.service;  
  
import java.util.List;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
import org.springframework.transaction.annotation.Transactional;  
  
import com.example.employeeapp.dao.DepartmentDao;  
import com.example.employeeapp.model.Department;  
  
@Service  
public class DepartmentService {  
  
 @Autowired  
 private DepartmentDao departmentDao;  
  
 @Transactional  
 public List<Department> getAllDepartments() {  
 return departmentDao.getAllDepartments();  
 }  
}

**EmployeeApplication.java**

package com.example.employeeapp;  
  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
import org.springframework.context.annotation.ImportResource;  
  
@SpringBootApplication  
@ImportResource("classpath:employee.xml")  
  
public class EmployeeappApplication {  
 public static void main(String[] args) {  
 SpringApplication.*run*(EmployeeappApplication.class, args);  
 }  
}

**Output**

