**Employee.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"

xsi:schemaLocation="http://www.springframework.org/schema/beans

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

<bean id="skill1" class="com.example.employeemanagement.model.Skill">

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

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

</bean>

<bean id="skill2" class="com.example.employeemanagement.model.Skill">

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

<property name="name" value="Spring Boot" />

</bean>

<bean id="department1" class="com.example.employeemanagement.model.Department">

<property name="id" value="101" />

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

</bean>

<bean id="department2" class="com.example.employeemanagement.model.Department">

<property name="id" value="102" />

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

</bean>

<bean id="employee1" class="com.example.employeemanagement.model.Employee">

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

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

<property name="department" ref="department1" />

<property name="skills">

<list>

<ref bean="skill1"/>

<ref bean="skill2"/>

</list>

</property>

</bean>

<bean id="employee2" class="com.example.employeemanagement.model.Employee">

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

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

<property name="department" ref="department2" />

<property name="skills">

<list>

<ref bean="skill1"/>

</list>

</property>

</bean>

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

<constructor-arg>

<list>

<ref bean="employee1" />

<ref bean="employee2" />

</list>

</constructor-arg>

</bean>

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

<constructor-arg>

<list>

<ref bean="department1" />

<ref bean="department2" />

</list>

</constructor-arg>

</bean>

</beans>

**Skill.java**

package com.example.employeemanagement.model;

public class Skill {

private int id;

private String name;

// Constructors

public Skill() {}

public Skill(int id, String name) {

this.id = id;

this.name = name;

}

// Getters & 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; }

}

**Department.java**

package com.example.employeemanagement.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; }

}

**Employee.java**

package com.example.employeemanagement.model;

import java.util.List;

public class Employee {

private int id;

private String name;

private Department department;

private List<Skill> skills;

public Employee() {}

public Employee(int id, String name, Department department, List<Skill> skills) {

this.id = id;

this.name = name;

this.department = department;

this.skills = skills;

}

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 Department getDepartment() { return department; }

public void setDepartment(Department department) { this.department = department; }

public List<Skill> getSkills() { return skills; }

public void setSkills(List<Skill> skills) { this.skills = skills; }

}

**EmployeeDao.java**

package com.example.employeemanagement.dao;

import com.example.employeemanagement.model.Employee;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.stereotype.Repository;

import java.util.List;

@Repository

public class EmployeeDao {

public static List<Employee> EMPLOYEE\_LIST;

public EmployeeDao() {

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

EMPLOYEE\_LIST = (List<Employee>) context.getBean("employeeList");

}

public List<Employee> getAllEmployees() {

return EMPLOYEE\_LIST;

}

}

**DepartmentDao.java**

package com.example.employeemanagement.dao;

import com.example.employeemanagement.model.Department;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.stereotype.Repository;

import java.util.List;

@Repository

public class DepartmentDao {

public static List<Department> DEPARTMENT\_LIST;

public DepartmentDao() {

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

DEPARTMENT\_LIST = (List<Department>) context.getBean("departmentList");

}

public List<Department> getAllDepartments() {

return DEPARTMENT\_LIST;

}

}

**EmployeeService.java**

package com.example.employeemanagement.service;

import com.example.employeemanagement.dao.EmployeeDao;

import com.example.employeemanagement.model.Employee;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@Service

public class EmployeeService {

@Autowired

private EmployeeDao employeeDao;

@Transactional

public List<Employee> getAllEmployees() {

return employeeDao.getAllEmployees();

}

}

**DepartmentService.java**

package com.example.employeemanagement.service;

import com.example.employeemanagement.dao.DepartmentDao;

import com.example.employeemanagement.model.Department;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@Service

public class DepartmentService {

@Autowired

private DepartmentDao departmentDao;

@Transactional

public List<Department> getAllDepartments() {

return departmentDao.getAllDepartments();

}

}

**EmployeeController.java**

package com.example.employeemanagement.controller;

import com.example.employeemanagement.model.Employee;

import com.example.employeemanagement.service.EmployeeService;

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

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

import java.util.List;

@RestController

public class EmployeeController {

@Autowired

private EmployeeService employeeService;

@GetMapping("/employees")

public List<Employee> getAllEmployees() {

return employeeService.getAllEmployees();

}

}

**DepartmentController.java**

package com.example.employeemanagement.controller;

import com.example.employeemanagement.model.Department;

import com.example.employeemanagement.service.DepartmentService;

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

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

import java.util.List;

@RestController

public class DepartmentController {

@Autowired

private DepartmentService departmentService;

@GetMapping("/departments")

public List<Department> getAllDepartments() {

return departmentService.getAllDepartments();

}

}

**EmployeemanagementApplication.java**

package com.example.employeemanagement;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class EmployeemanagementApplication {

public static void main(String[] args) {

SpringApplication.run(EmployeemanagementApplication.class, args);

}

}