**Create static employee list data using spring xml configuration**

**SpringLearn1Application.java**

package com.cognizant.spring\_learn1;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class SpringLearn1Application {

    public static void main(String[] args) {

        SpringApplication.run(SpringLearn1Application.class, args);

    }

}

**Employee.java**

package com.cognizant.spring\_learn1.model;

import java.util.List;

public class Employee {

    private int id;

    private String name;

    private double salary;

    private boolean permanent;

    private Department department;

    private List<Skill> skills;

    // 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; }

    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; }

    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; }

    @Override

    public String toString() {

        return "Employee [id=" + id + ", name=" + name + ", salary=" + salary +

               ", permanent=" + permanent + ", department=" + department +

               ", skills=" + skills + "]";

    }

}

**Department.java**

package com.cognizant.spring\_learn1.model;

public class Department {

    private int id;

    private String 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; }

    @Override

    public String toString() {

        return "Department [id=" + id + ", name=" + name + "]";

    }

}

**Skill.java**

package com.cognizant.spring\_learn1.model;

public class Skill {

    private int id;

    private String 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; }

    @Override

    public String toString() {

        return "Skill [id=" + id + ", name=" + name + "]";

    }

}

**EmployeeController.java**

package com.cognizant.spring\_learn1.controller;

import com.cognizant.spring\_learn1.dao.EmployeeDao;

import com.cognizant.spring\_learn1.model.Employee;

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

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

import java.util.List;

@RestController

@RequestMapping("/api/employees")

public class EmployeeController {

    @Autowired

    private EmployeeDao employeeDao;

    @GetMapping

    public List<Employee> getAllEmployees() {

        return employeeDao.getAllEmployees();

    }

    @GetMapping("/{id}")

    public Employee getEmployeeById(@PathVariable("id") int id) {

        return employeeDao.getEmployee(id);

    }

}

**EmployeeConfig.java**

package com.cognizant.spring\_learn1.config;

import com.cognizant.spring\_learn1.model.Employee;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.context.annotation.Bean;

import org.springframework.context.annotation.Configuration;

import java.util.List;

@Configuration

public class EmployeeConfig {

    @Bean

    public List<Employee> employeeList() {

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

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

    }

}

**EmployeeDao.java**

package com.cognizant.spring\_learn1.dao;

import com.cognizant.spring\_learn1.model.Employee;

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

import org.springframework.stereotype.Repository;

import java.util.List;

@Repository

public class EmployeeDao {

    public static List<Employee> EMPLOYEE\_LIST;

    public EmployeeDao(@Qualifier("employeeList") List<Employee> employeeList) {

        EMPLOYEE\_LIST = employeeList;

    }

    public List<Employee> getAllEmployees() {

        return EMPLOYEE\_LIST;

    }

    public Employee getEmployee(int id) {

        for (Employee employee : EMPLOYEE\_LIST) {

            if (employee.getId() == id) {

                return employee;

            }

        }

        return null;

    }

}

**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">

    <!-- Skills -->

    <bean id="skill1" class="com.cognizant.spring\_learn1.model.Skill">

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

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

    </bean>

    <bean id="skill2" class="com.cognizant.spring\_learn1.model.Skill">

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

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

    </bean>

    <!-- Departments -->

    <bean id="dept1" class="com.cognizant.spring\_learn1.model.Department">

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

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

    </bean>

    <bean id="dept2" class="com.cognizant.spring\_learn1.model.Department">

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

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

    </bean>

    <!-- Employee list -->

    <bean id="employee1" class="com.cognizant.spring\_learn1.model.Employee">

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

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

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

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

        <property name="department" ref="dept1"/>

        <property name="skills">

            <list>

                <ref bean="skill1"/>

            </list>

        </property>

    </bean>

    <bean id="employee2" class="com.cognizant.spring\_learn1.model.Employee">

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

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

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

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

        <property name="department" ref="dept2"/>

        <property name="skills">

            <list>

                <ref bean="skill2"/>

                <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="employeeDao" class="com.cognizant.spring\_learn1.dao.EmployeeDao">

    <constructor-arg ref="employeeList"/>

</bean>

<bean id="employeeService" class="com.cognizant.spring\_learn1.service.EmployeeService">

    <property name="employeeDao" ref="employeeDao"/>

</bean>

</beans>

**pom.xml**

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

<project xmlns="http://maven.apache.org/POM/4.0.0"

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

         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

    <modelVersion>4.0.0</modelVersion>

    <parent>

        <groupId>org.springframework.boot</groupId>

        <artifactId>spring-boot-starter-parent</artifactId>

        <version>3.1.12</version>

        <relativePath/>

    </parent>

    <groupId>com.cognizant</groupId>

    <artifactId>spring-learn1</artifactId>

    <version>0.0.1-SNAPSHOT</version>

    <name>spring-learn1</name>

    <description>Demo project for Spring Boot</description>

    <properties>

        <java.version>17</java.version>

    </properties>

    <dependencies>

        <!-- Spring Web -->

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-starter-web</artifactId>

        </dependency>

        <!-- Spring Context for XML support -->

        <dependency>

            <groupId>org.springframework</groupId>

            <artifactId>spring-context</artifactId>

        </dependency>

        <!-- Testing -->

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-starter-test</artifactId>

            <scope>test</scope>

        </dependency>

    </dependencies>

    <build>

        <plugins>

            <!-- Spring Boot Maven Plugin -->

            <plugin>

                <groupId>org.springframework.boot</groupId>

                <artifactId>spring-boot-maven-plugin</artifactId>

            </plugin>

        </plugins>

    </build>

</project>

**Output:**





