**Create REST service for department**

**SpringLearnApplication.java :-**

package com.cognizant.spring\_learn;  
  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
import org.springframework.context.annotation.ImportResource;  
  
@SpringBootApplication  
@ImportResource("classpath:department.xml")  
public class SpringLearnApplication {  
 public static void main(String[] args) {  
 SpringApplication.*run*(SpringLearnApplication.class, args);  
 }  
}

**DepartmentController.java :-**

package com.cognizant.spring\_learn.controller;  
  
import com.cognizant.spring\_learn.model.Department;  
import com.cognizant.spring\_learn.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() {  
 System.*out*.println("Inside DepartmentController: getAllDepartments() called");  
 return departmentService.getAllDepartments();  
 }  
}

**DepartmentDao.java :-**

package com.cognizant.spring\_learn.dao;  
  
import com.cognizant.spring\_learn.model.Department;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.beans.factory.annotation.Qualifier;  
import org.springframework.stereotype.Repository;  
  
import java.util.List;  
@Repository  
public class DepartmentDao {  
  
 @Autowired  
 @Qualifier("departmentList")  
 private List<Department> departmentList;  
  
 public List<Department> getAllDepartments() {  
 return departmentList;  
 }  
}

**Department.java :-**

package com.cognizant.spring\_learn.model;  
  
public class Department {  
 private int id;  
 private String name;  
  
 public Department() {}  
  
 public Department(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;  
 }  
}

**DepartmentService.java :-**

package com.cognizant.spring\_learn.service;  
  
import com.cognizant.spring\_learn.dao.DepartmentDao;  
import com.cognizant.spring\_learn.model.Department;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
  
import java.util.List;  
  
@Service  
public class DepartmentService {  
  
 @Autowired  
 private DepartmentDao departmentDao;  
  
 public List<Department> getAllDepartments() {  
 System.*out*.println("Inside DepartmentService: getAllDepartments() called");  
 return departmentDao.getAllDepartments();  
 }  
}

**Department.xml :-**

<?xml version="1.0" encoding="UTF-8"?>  
<beans xmlns="http://www.springframework.org/schema/beans"  
 xmlns:context="http://www.springframework.org/schema/context"  
 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  
 http://www.springframework.org/schema/context  
 http://www.springframework.org/schema/context/spring-context.xsd">  
  
 <context:component-scan base-package="com.cognizant.spring\_learn"/>  
  
 <!-- Only define the department list -->  
 <bean id="departmentList" class="java.util.ArrayList">  
 <constructor-arg>  
 <list>  
 <bean class="com.cognizant.spring\_learn.model.Department">  
 <property name="id" value="1"/>  
 <property name="name" value="HR"/>  
 </bean>  
 <bean class="com.cognizant.spring\_learn.model.Department">  
 <property name="id" value="2"/>  
 <property name="name" value="Finance"/>  
 </bean>  
 <bean class="com.cognizant.spring\_learn.model.Department">  
 <property name="id" value="3"/>  
 <property name="name" value="IT"/>  
 </bean>  
 </list>  
 </constructor-arg>  
 </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>3.5.3</version>  
 <relativePath/> <!-- lookup parent from repository -->  
 </parent>  
 <groupId>com.cognizant</groupId>  
 <artifactId>spring\_learn</artifactId>  
 <version>0.0.1-SNAPSHOT</version>  
 <name>spring\_learn</name>  
 <description>Demo project for Spring Boot</description>  
 <url/>  
 <licenses>  
 <license/>  
 </licenses>  
 <developers>  
 <developer/>  
 </developers>  
 <scm>  
 <connection/>  
 <developerConnection/>  
 <tag/>  
 <url/>  
 </scm>  
 <properties>  
 <java.version>21</java.version>  
 </properties>  
 <dependencies>  
 <dependency>  
 <groupId>org.springframework</groupId>  
 <artifactId>spring-tx</artifactId>  
 </dependency>  
  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-web</artifactId>  
 </dependency>  
  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-test</artifactId>  
 <scope>test</scope>  
 </dependency>  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-web</artifactId>  
 </dependency>  
  
 <!-- Spring Context for XML Configuration -->  
 <dependency>  
 <groupId>org.springframework</groupId>  
 <artifactId>spring-context</artifactId>  
 </dependency>  
  
 <!-- For Hot Reload (Optional) -->  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-devtools</artifactId>  
 <scope>runtime</scope>  
 <optional>true</optional>  
 </dependency>  
  
 <!-- Test Support -->  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-test</artifactId>  
 <scope>test</scope>  
 </dependency>  
 </dependencies>  
  
 <build>  
 <plugins>  
 <plugin>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-maven-plugin</artifactId>  
 </plugin>  
 </plugins>  
 </build>  
  
</project>

**Output :-**



