**Spring Data JPA - Quick Example**

Student.java:

package com.example.studentdata;

import jakarta.persistence.\*;

@Entity

public class Student {

    @Id

    @GeneratedValue(strategy = GenerationType.IDENTITY)

    private Long id;

    private String name;

    private int age;

    // Getters and Setters

    public Long getId() { return id; }

    public void setId(Long id) { this.id = id; }

    public String getName() { return name; }

    public void setName(String name) { this.name = name; }

    public int getAge() { return age; }

    public void setAge(int age) { this.age = age; }

}

StudentRepository.java :

package com.example.studentdata;

import org.springframework.data.jpa.repository.JpaRepository;

import java.util.List;

public interface StudentRepository extends JpaRepository<Student, Long> {

    List<Student> findByName(String name);

}

StudentController.java :

package com.example.studentdata;

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

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

import java.util.List;

@RestController

public class StudentController {

    @Autowired

    private StudentRepository repo;

    @GetMapping("/")

    public String home() {

        return "✅ App is running!";

    }

    @PostMapping("/students")

    public Student saveStudent(@RequestBody Student student) {

        return repo.save(student);

    }

    @GetMapping("/students/{name}")

    public List<Student> getByName(@PathVariable String name) {

        return repo.findByName(name);

    }

}

Application.properties

spring.datasource.url=jdbc:h2:mem:testdb

spring.datasource.driverClassName=org.h2.Driver

spring.datasource.username=sa

spring.datasource.password=

spring.jpa.hibernate.ddl-auto=update

spring.h2.console.enabled=true

server.port=8081

