import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.Test;

import org.junit.jupiter.api.Assertions;

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

import org.springframework.boot.test.context.SpringBootTest;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@SpringBootTest

@Transactional

public class ProductModelTests {

@Autowired

private ProductRepository productRepository;

@BeforeEach

public void setUp() {

// Create and save multiple test products

Product product1 = new Product("Product 1", 10.0);

Product product2 = new Product("Product 2", 20.0);

Product product3 = new Product("Product 3", 30.0);

productRepository.save(product1);

productRepository.save(product2);

productRepository.save(product3);

}

@Test

public void testListAllProducts() {

// Retrieve all products

List<Product> products = productRepository.findAll();

// Verify the number of products retrieved

Assertions.assertEquals(3, products.size(), "The number of products should match the expected count.");

// Check that each product matches one of those created in the setup

Assertions.assertTrue(products.stream().anyMatch(p -> p.getName().equals("Product 1") && p.getPrice() == 10.0));

Assertions.assertTrue(products.stream().anyMatch(p -> p.getName().equals("Product 2") && p.getPrice() == 20.0));

Assertions.assertTrue(products.stream().anyMatch(p -> p.getName().equals("Product 3") && p.getPrice() == 30.0));

}

}