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 with different categories

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

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

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

productRepository.save(product1);

productRepository.save(product2);

productRepository.save(product3);

}

@Test

public void testFindByCategory() {

// Retrieve products by category

List<Product> electronicsProducts = productRepository.findByCategory("Electronics");

// Verify the number of products retrieved matches the expected count

Assertions.assertEquals(2, electronicsProducts.size(), "There should be 2 products in the 'Electronics' category.");

// Check that all retrieved products belong to the 'Electronics' category

Assertions.assertTrue(electronicsProducts.stream().allMatch(p -> p.getCategory().equals("Electronics")),

"All products should belong to the 'Electronics' category.");

}

}