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;

@SpringBootTest

@Transactional

public class ProductModelTests {

@Autowired

private ProductRepository productRepository;

private Product testProduct;

@BeforeEach

public void setUp() {

// Create and save a test product

testProduct = new Product();

testProduct.setName("Sample Product");

testProduct.setPrice(99.99);

productRepository.save(testProduct);

}

@Test

public void testReadProductById() {

// Retrieve the product by ID

Product retrievedProduct = productRepository.findById(testProduct.getId()).orElse(null);

// Check that the retrieved product is not null and matches the test product

Assertions.assertNotNull(retrievedProduct, "The retrieved product should not be null.");

Assertions.assertEquals(testProduct.getId(), retrievedProduct.getId(), "The product IDs should match.");

Assertions.assertEquals(testProduct.getName(), retrievedProduct.getName(), "The product names should match.");

Assertions.assertEquals(testProduct.getPrice(), retrievedProduct.getPrice(), "The product prices should match.");

}

}