import io.cucumber.java.en.\*;

import static org.junit.Assert.\*;

import java.util.List;

import java.util.stream.Collectors;

public class ProductSearchSteps {

private ProductService productService; // Assume a service class for product management

private List<Product> searchResults; // List to hold the search results

@Given("the following products exist:")

public void the\_following\_products\_exist(io.cucumber.datatable.DataTable dataTable) {

// Iterate through the data table and create products

List<List<String>> productList = dataTable.asLists(String.class);

for (List<String> productData : productList) {

String name = productData.get(0);

String category = productData.get(1);

double price = Double.parseDouble(productData.get(2));

int quantity = Integer.parseInt(productData.get(3));

String description = productData.get(4);

productService.createProduct(new Product(name, category, price, quantity, description));

}

}

@When("I search for products in the category {string}")

public void i\_search\_for\_products\_in\_the\_category(String category) {

searchResults = productService.searchProductsByCategory(category); // Retrieve products by category

}

@Then("I should see the following products:")

public void i\_should\_see\_the\_following\_products(io.cucumber.datatable.DataTable expectedDataTable) {

List<List<String>> expectedProducts = expectedDataTable.asLists(String.class);

// Verify the size of the search results list

assertEquals(expectedProducts.size(), searchResults.size());

// Verify the details of each product

for (int i = 0; i < expectedProducts.size(); i++) {

List<String> expectedProduct = expectedProducts.get(i);

Product actualProduct = searchResults.get(i);

assertEquals(expectedProduct.get(0), actualProduct.getName());

assertEquals(expectedProduct.get(1), actualProduct.getCategory());

assertEquals(Double.parseDouble(expectedProduct.get(2)), actualProduct.getPrice(), 0.01);

assertEquals(Integer.parseInt(expectedProduct.get(3)), actualProduct.getQuantity());

assertEquals(expectedProduct.get(4), actualProduct.getDescription());

}

}

}