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

import static org.junit.Assert.\*;

import java.util.List;

public class ProductListingSteps {

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

private List<Product> products; // List to hold the retrieved products

@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);

double price = Double.parseDouble(productData.get(1));

int quantity = Integer.parseInt(productData.get(2));

String description = productData.get(3);

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

}

}

@When("I request to list all products")

public void i\_request\_to\_list\_all\_products() {

products = productService.listAllProducts(); // Retrieve all products from the service

}

@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 products list

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

// Verify the details of each product

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

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

Product actualProduct = products.get(i);

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

assertEquals(Double.parseDouble(expectedProduct.get(1)), actualProduct.getPrice(), 0.01);

assertEquals(Integer.parseInt(expectedProduct.get(2)), actualProduct.getQuantity());

assertEquals(expectedProduct.get(3), actualProduct.getDescription());

}

}

}