Testing plan for a web shopping application

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# 1.Testing strategy

## 1. Overview

This document will explain the testing strategy I will user on my web shop for selling PC parts. There will be 4 types of tests: Unite tests, Integration tests, System tests and Acceptance tests.

## 2. Testing focus

The parts of the application the unit tests will focus on will be the CRUD functionality (e.g., Being able to create new items to sell in the shop, update / delete them). Another part of the application that needs to be tested is the ability for the customers to make orders, tests are quite important here because a customer shouldn’t be able to make an order if the amount of item, they want to buy is less than the amount available.

## 3. Testing

### 1. Unit Tests

The unit tests will be the biggest part of our testing strategy. Most of the classes will be covered by unit tests. The tests will be executed every time a new version is pushed to git to make sure that the changes did not break any part of the application.

### 2. Integration Tests

Integration tests will be integrated into the CI process in git of the project. The tests will build the application, run the unit tests, evaluate the code with Sonar cube and finally use Docker. This will make it easy to discover errors without having to manually build our application and run the unit tests ourselves.

### 3. User Acceptance Tests

User acceptance tests requires the most effort and time compared to the rest of the tests so there will only be a few. The application along with instructions will be given to classmates. Any feedback will be recorded, evaluated and if necessary incorporated.

### 3.1 Test instructions

|  |  |  |  |
| --- | --- | --- | --- |
| Scenario | Instructions | Successful criteria | Failure criteria |
| User can create an account | 1. User clicks on the login button. 2. User filles in username: test   password: test  and presses the register button.   1. Successful account creation message is displayed 2. User is redirected to login page | Account is successfully created | * User fills in a username that is already taken * User doesn’t fill in anything at all |
| User can login | 1. User clicks on the login button. 2. User filles in username: test   password: test  and presses the login button.   1. User is redirected to the home page | User is successfully logged in | * User doesn’t fill in anything at all |
| User can view details of an item | 1. User clicks on the top left button to open the side bar 2. User clicks on the “Products” button 3. User clicks on the “View details” button of the top product displayed 4. User is redirected to product details page | Page with product details is displayed | * None |
| User can add product to cart | 1. User clicks on the top left button to open the side bar 2. User clicks on the “Products” button 3. User clicks on the “Add to cart” button 4. Notification saying that the item has been added to cart is displayed | Product is successfully added to cart | * None |
| User can make an order | 1. User clicks on the top left button to open the side bar 2. User clicks on the “Products” button 3. User clicks on the “Add to cart” button 4. User clicks on the “Cart” button at the top 5. User clicks on the “Complete order” button 6. “Successfully placed order” notification is displayed | Order with selected items is successfully created | * User selected higher amount of an item than is available |
| Admin can view all edit an item | 1. Admin clicks on the top left button to open the sidebar menu 2. Admin clicks on the “Inventory” button 3. Table with all products in the system are displayed 4. Admin clicks on the “Edit” button next to the item that he wants to edit 5. Form with all the details of the item is displayed 6. Admin changes the price of the item and clicks “Save” 7. Notification saying “Item details updated” is displayed | Selected item price is changed | * Admin doesn’t change any details * Admin changes one of the details to an empty text field |
| Admin can delete an item | 1. Admin clicks on the top left button to open the sidebar menu 2. Admin clicks on the “Inventory” button 3. Table with all products in the system are displayed 4. Admin clicks on the “Delete” button next to the item that he wants to delete 5. Admin is redirected to the Inventory page 6. Notification saying “Item deleted” is displayed | Item is successfully deleted | * Item is not deleted |
| Admin can create new items | 1. Admin clicks on the top left button to open the sidebar menu 2. Admin clicks on the “Inventory” button 3. Table with all products in the system are displayed 4. Admin clicks on the “Add new item” button at the bottom right 5. Admin is redirected to the Item creation page 6. Admin fills in the details of the item 7. Admin clicks the “Create” button 8. Admin is redirected to the product details page of selected page | Item is successfully created | * Admin doesn’t fill in any product details * Admin doesn’t fill in some of the product details |