Test plan for Anazom

ChangeLog

Version	Change Date	Ву	Description
1.0	4/12/2023	Yuexin Xu, Ayden Kilpatrick, Jessica Oramous, Paul Scarmado	Produced a working e-commerce website that contains the functionalities of sellers, buyers, and login

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1 Introduction

For this software application testing, we will be performing unit tests on the individual functionalities of our website. We will do this by utilizing CircleCI, a platform that automatically performs the unit tests for us whenever a feature has been added or changed. The test methodology that we will be adopting for the project is agile.

1.1 Scope

1.1.1 In-Scope

The features that will be tested include login/logout, actions related to buyers, and actions related to sellers. Some examples of actions related to buyers are adding an item to cart, searching for an item, and returning a product. Some examples of actions related to sellers are adding a new product, editing an existing product, and deleting a product.

1.1.2 Out-of-Scope

The requirements that will not be tested include non-functional requirements such as portability, availability, and response time, as well as any features related to the admin user type due to its functional incompleteness.

1.2 Quality Objective

The overall objective that we are trying to achieve with our testing is to ensure a properly working software that includes all of the features that are desired by the customer.

Our other objectives include:

- Identify and fix all bugs within our software before release
- Verify the logics used in our program are correct
- Guarantee an easy-to-use GUI for the customer
- Ensure the current features will work in future updates through automated testing

1.3 Roles and Responsibilities

Name	Net ID	GitHub username	Role
Paul Scarmardo	pbn26	PaulScarmardo	Configuration
			Manager

Yuexin Xu	yx155	yx155	Developer
Jessica Oramous	jlo229	jessoramous	QA Analyst
Ayden Kilpatrick	apk145	Ayden-Kilpatrick	Test Manager

2 Test Methodology

2.1 Overview

We are adopting the agile test methodology for this project for multiple reasons.

First, agile allows us to be flexible with our features. While we are given a minimum set of requirements to build our project out of in the beginning, our ideas of those features and any additional features will shift as expectations from the client changes.

Second, agile allows us to revisit previous steps in the software development process. Because expectations from the client may change, modifications of design diagrams may be needed. Agile is a test methodology that will allow us to make any modifications that we may need to our previously designed diagrams.

Third, because agile allows us to be flexible with the software development process, we are able to test our software as we are building it. Instead of following a strict pattern that requires us to finish the coding process before beginning the testing process, agile allows us to ensure the functionality of each individual feature as we create the application.

2.2 Test Levels

For this project, we will only be performing unit tests on our application due to time constraints.

2.3 Bug Triage

Bug Name	Bug Description	Date Found	Date Fixed	Resolution Description
Excess Seller Perms	Sellers are able to gain buyers' abilities by clicking the 'store' link on their navbar	4/4/2023	4/7/2023	Removed the ability for sellers to access the link on their navbar

Image Error	Unable to load store when an image is not found for a product	4/5/2023	4/8/2023	The seller is now required to upload an image for each product being registered
Payment Not Received	Sellers do not properly receive payments when a product has been bought	4/6/2023	4/9/2023	Added a column in the products database that indicates each product's seller
Edit Product Redirect	Instead of redirecting to the 'edit product' page when choosing to edit a product, it redirects to the 'add product' page	4/7/2023	4/10/2023	Removed an excess tag that caused the corresponding view to not be linked properly
Browsing Failure	Unable to browse through categories (it would log the user out when clicking a category)	4/7/2023	4/10/2023	Changed the redirect when clicking on a category from 'homepage' to 'store'

2.4 Suspension Criteria and Resumption Requirements

Unit testing for other features will be suspended if an assumption can be made that the bugs are all highly related to the flaw of one specific feature. This decision prevents further complications that could arise from altering a fully functioning feature for the sake of a flawed correlated feature.

Resumption for unit testing for all features will occur once a conclusion can be drawn that either 1) the assumption that the bug was the fault of a certain feature is wrong or 2) the flaw related to the feature is believed to be fixed.

2.5 Test Completeness

Test completeness will be achieved once the following criterias have been met:

- All features are tested
- All Manual & Automated Test cases executed
- All open bugs are fixed or will be fixed in next release

- At least 5 test cases are written and passed for each feature
- Acceptance testing for each user story is successful

3 Test Deliverables

The Test Artifacts that will be delivered during different phases of the testing lifecycle are:

- Test Plan document
- Test case documentation on GitHub repo under wiki
- Test case codes for each feature
- Test case results generated by automated testing tool
- Acceptance testing for every user story

4 Resource & Environment Needs

4.1 Testing Tools

Tools required to test the project:

- CircleCI automatic unit testing tool linked to GitHub
- GitHub home of all source codes

4.2 Test Environment

The minimum hardware requirement needed to test the application is a computer of any kind. This can be a laptop or desktop.

Following software is required in addition to client-specific software.

- Windows or MacOS operating system
- Python 3.8
- A web browsing application such as Google Chrome

5 Terms/Acronyms

TERM/ACRONYM	DEFINITION
API	Application Program Interface
AUT	Application Under Test
GUI	Graphical User Interface
CircleCI	A continuous integration tool used to perform unit testing
GitHub	An open source website used by software developers
Python	The coding language used to create this web application