**ISM 4432 and 6145 – SOFTWARE TESTING**

**SPRING SEMESTER 2022**

# Student Testing Portfolio – Due: April 29, 2022

**About**

I will be performing 4 different functional testing techniques on the Pizza Hut website <https://www.pizzahut.com/> along with 2 different structural testing techniques and their associated Selenium automated tests.

The first 2 areas within functional testing that will be covered include exploratory testing and user testing of the Pizza Hut home page. The other 2 functional testing areas include stress testing and boundary testing on the Pizza Hut checkout page.

For structural testing, I have the Pizza Hut contact us page for performing a metrics test along with the Pizza Hut checkout page for performing a data flow test. I have also incorporated some automation testing by using Selenium, link to GitHub is provided below.

All the results of my tests will be provided below along all associated documentation, this includes any bugs or defects discovered during the testing process.

**GitHub**

<https://github.com/seanherbert105/Student-Testing-Portfolio>

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| Test Case ID | 1 |
| **Component** | Home Page |
| **Purpose of Test Case** | Can the home page have improvements to page layout on the Pizza Hut website home page |
| **Functional Test Type** | Exploratory Testing |
| **Pre-Conditions** | N/A |
| **Inputs** | N/A |
| **Expected Outputs** | N/A |
| **Post-Conditions** | N/A |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 13 April 2022 | Pizza Hut home page is ordered very well with featured or customer important items going first | Sean Herbert | | 13 April 2022 | Not every image or hyperlink has the ability to display additional information | Sean Herbert | | 13 April 2022 | Would be an improvement if Pizza Hut home page included a slide show of multiple images of certain food images | Sean Herbert | |

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| Test Case ID | 2 |
| **Component** | Home Page |
| **Purpose of Test Case** | Can end user be able to explore the home page on the Pizza Hut website and easily find certain buttons or hyperlinks |
| **Functional Test Type** | User Testing |
| **Pre-Conditions** | N/A |
| **Inputs** | N/A |
| **Expected Outputs** | N/A |
| **Post-Conditions** | N/A |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 13 April 2022 | Pizza Hut home page is ordered very well – menu and deal items, featured menu items, popular pizza, and other important website links | Sean Herbert | | 13 April 2022 | Every page on Pizza Hut website has a clear visual of who is logged in, the store ordering from, and the shopping cart total | Sean Herbert | | 13 April 2022 | Text are legible and easy to read | Sean Herbert | |

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| Test Case ID | 3 |
| **Component** | Checkout Page |
| **Purpose of Test Case** | Can the checkout page on the Pizza Hut website handle orders placed and any additional errors that will occur |
| **Functional Test Type** | Stress Testing |
| **Pre-Conditions** | Empty shopping cart |
| **Inputs** | Menu Items |
| **Expected Outputs** | Total Amount |
| **Post-Conditions** | Shopping cart with total |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 13 April 2022 | The shopping cart is able to load items into the cart and present a total amount to the user | Sean Herbert | | 13 April 2022 | The shopping cart total updates slow down after $3,000 or more along with 25 or more separate items | Sean Herbert | | 13 April 2022 | The shopping cart stops adding additional items after a total of more than $3,500 | Sean Herbert | |

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| Test Case ID | 4 |
| **Component** | Checkout Page |
| **Purpose of Test Case** | Can the checkout page on the Pizza Hut website have a certain limit on cost or amount of orders |
| **Functional Test Type** | Boundary Testing |
| **Pre-Conditions** | Empty shopping cart |
| **Inputs** | Menu Items |
| **Expected Outputs** | Total Amount |
| **Post-Conditions** | Shopping cart with total |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 13 April 2022 | The shopping cart is only able to handle a quantity of 25 items | Sean Herbert | | 13 April 2022 | The shopping cart is only able to handle a total cost of no more than $3,500 | Sean Herbert | | 13 April 2022 | The shopping cart is only able to handle a total quantity of less than 200 | Sean Herbert | |

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| **Test Case ID** | 1 |
| **Program** | Contact-us Page |
| **Purpose of Test Case** | Does each section allow for end users to enter correct information and submit an issue to Pizza Hut |
| **Structural Test Type** | Metrics Based Testing |
| **Path Being Tested** | Restaurant/ Food Experience |
| **Pre-Conditions** | Computer with internet connection and a web browser |
| **Inputs** | About Drop Down  Order Drop Down  Device Drop Down  Date Drop Down  Time Drop Down  Store Location Drop Down  Amount Spent Drop Down  Feedback Drop Down  Feedback Text Box  Email, Phone, no reply needed Radio Buttons  First Name  Last Name  Email  Confirm Email  Phone  Address (street address and apartment/ building/ suite number)  City  State  Zip Code |
| **Expected Outputs** | Returns a successful message to end user after hitting submit button along with a confirmation email to the end user |
| **All statements in path covered as expected?** | Yes |
| **Post-Conditions** | The drop-down options and inputs are removed from the website  The website has returned a response of “Thank you for reaching out to Pizza Hut Your feedback is on its way!” |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 13 April 2022 | The website returned a response, no confirmation email – no response needed option | Sean Herbert | | 13 April 2022 | The website returned a response (see post-conditions), no confirmation email – response needed option | Sean Herbert | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

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| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 13 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 1 |
| **Test Case Description:** | Contact-us page on the Pizza Hut website <https://www.pizzahut.com/index.php?contactus=#/contactus> | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Does each section allow for end users to enter correct information and submit an issue to Pizza Hut | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Navigate to Pizza Hut website <https://www.pizzahut.com/> | | |
| **Stop Procedures:** | If user is able or unable to enter correct information  Also, if user is able or unable to submit issue to Pizza Hut | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connection | | |
| **Software:** | Operating system with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Contact-us Page | | |
| **Input Specifications:** | About Drop-Down  Order Drop-Down  Device Drop-Down  Date Drop-Down  Time Drop-Down  Store Location Drop-Down  Amount Spent Drop-Down  Feedback Drop-Down  Feedback Text Box  Email, Phone, No Reply Needed Radio Buttons  First Name  Last Name  Email  Confirm Email  Phone  Address (street address and apartment/ building/ suite number)  City  State  Zip Code | | |
| **Procedural Steps:** | Enter a value for all required inputs | | |
| **Expected Results of Case:** | Submits feedback to Pizza Hut | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | The test failed at first drop-down option – What would you like to tell us about? | | |

**Check out Page – Structural Code**

if(typeof(Storage) !== "undefined") {

localStorage.user\_state = "{

\"occasion\":\"C\",\"StoreNumber\":\"038692\",\"storeLatitude\":\"27.914157\",\"storeLongitude\":\"-82.349748\",\"action\":\"\",\"deliveryAddress\":\"\",\"currentSavedLocationIndex\":null,\"zipcode\":\"33569\",\"status\":\"recognized unregistered\",\"loyalty\":\"Y\",\"menu\":[\"pizza\",\"wings\",\"sides\",\"pasta\",\"desserts\",\"drinks\"],\"wingstreetleadmkt\":0,\"user\_state\_abbrev\":\"RU\"

}";

}

function isEmpty(val) {

return (val === undefined || val == null || val.length <= 0) ? true : false;

}

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| **Test Case ID** | 2 |
| **Program** | Check out Page |
| **Purpose of Test Case** | Will a user be able to checkout an item without a store location for pickup or an address for delivery |
| **Structural Test Type** | Data Flow Testing |
| **Path Being Tested** | If/ function code block |
| **Pre-Conditions** | Empty shopping cart  Empty store location |
| **Inputs** | Carryout  First Name  Last Name  Email  Phone  Name on Credit Card  Credit Card Number  Expiration Month  Expiration Year  CVV  Billing Zip Code  Delivery  Address (street address and apartment/ building/ suite number)  City  State  Zip Code |
| **Expected Outputs** | Error or requires a carryout or delivery location |
| **All statements in path covered as expected?** | Yes |
| **Post-Conditions** | Before begging an order, Pizza Hut requires the user to enter a delivery or carryout option |
| **Execution History** | |  |  |  | | --- | --- | --- | | **Date** | **Result** | **Tester** | | 15 April 2022 | Unable to enter an order without being asked for delivery or carryout | Sean Herbert | | 15 April 2022 | Unable to checkout without a food item in the shopping cart | Sean Herbert | | 15 April 2022 | Unable to go to payment options without First Name, Last Name, Email, and Phone Number | Sean Herbert | | 15 April 2022 | Unable to place order without Name on Credit Card, Credit Card Number, Expiration Month, Expiration Year, CVV, Billing Zip Code | Sean Herbert | |  |  |  | |  |  |  | |

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| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 15 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 1 |
| **Test Case Description:** | Adding items to shopping cart on the Pizza Hut website to check out <https://www.pizzahut.com/> | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Can a user enter an order, proceed to check out, and place the order | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Navigate to Pizza Hut website <https://www.pizzahut.com/> | | |
| **Stop Procedures:** | If user is able or unable to place order  If user is able or unable to enter details concerning the order  If user is able or unable to submit order | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connection | | |
| **Software:** | Operating system with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Cart | | |
| **Input Specifications:** | Carryout  First Name  Last Name  Email  Phone  Name on Credit Card  Credit Card Number  Expiration Month  Expiration Year  CVV  Billing Zip Code  Delivery  Address (street address and apartment/ building/ suite number)  City  State  Zip Code | | |
| **Procedural Steps:** | Enter a value for all required inputs | | |
| **Expected Results of Case:** | Submits order to Pizza Hut | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | The test failed at while trying to make the order | | |

**Defect Reporting**

**DEFECT ID: 1**

**TITLE: Deals not matching COMPONENT: Deals**

**REPORTED BY: Sean Herbert SUBCOMPONENT: N/A**

**REPORTED ON: 13 April 2022 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P3**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S3**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**The deals menu on the Pizza Hut mobile application and the Pizza Hut website don’t match (not sure if this is intentional)**

**STEPS TO REPRODUCE:**

**Pizza Hut mobile application on Android Operating System and Pizza Hut website while using a computer with internet connect and a web browser**

COMMENTS:

**N/A**

ATTACHMENTS:

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Defect Reporting**

**DEFECT ID: 2**

**TITLE: Shopping cart updates COMPONENT: Shopping cart**

**REPORTED BY: Sean Herbert SUBCOMPONENT: N/A**

**REPORTED ON: 13 April 2022 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P1**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S1**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**The shopping cart on the Pizza Hut website is not able to update shopping cart total or items once a total of more than $3,500 is reached**

**STEPS TO REPRODUCE:**

**Pizza Hut website while using a computer with internet connection and a web browser**

COMMENTS:

**N/A**

ATTACHMENTS:

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Defect Reporting**

**DEFECT ID: 3**

**TITLE: User Interface improvements COMPONENT: Home page**

**REPORTED BY: Sean Herbert SUBCOMPONENT:**

**REPORTED ON: 15 April 2022 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P4**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S4**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**Would be an improvement to the home page if additional images of Pizza Hut food items were on a slide show**

**STEPS TO REPRODUCE:**

**Pizza Hut website while using a computer with internet connection and a web browser**

COMMENTS:

**N/A**

ATTACHMENTS:

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Defect Reporting**

**DEFECT ID: 4**

**TITLE: Trusted URL’s COMPONENT: Structural Component**

**REPORTED BY: Sean Herbert SUBCOMPONENT: Array of Allowed Domains**

**REPORTED ON: 15 April 2022 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P2**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S2**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**On Pizza Hut website, there is some code written that has an array of allowed domains, one or more of those domains are no longer available**

**STEPS TO REPRODUCE:**

**Pizza Hut website while using a computer with internet connection and a web browser**

COMMENTS:

**N/A**

ATTACHMENTS:

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_