CSCE 361

Software Engineering

NVENTORY

Test Plan Document

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1. Introduction

The purpose of this document is to outline the strategies for testing the Nventory website. Testing will be requirements based, meaning that the original requirements specification document will be used to obtain a list of relevant and valid testing requirements. The rest of this document is divided into three parts: Testing Requirements, Test Cases, and Testing Report. The testing requirements section is intended to give an explanation of the functionalities to be tested and how they are tested. Second, the test cases outline the purpose, procedure, and expected output that cover all the testing requirements. Third, the testing report which consists of the actual results of carrying out these tests on the application.

2. Testing Requirements

2.1. Login Page

    2.1.1.   RS 3.2.1

        2.1.1.1.   Invoke login with no arguments

        2.1.1.2.   Invoke login with valid email and invalid password

        2.1.1.3.   Invoke login with invalid email and valid password

        2.1.1.4.   Invoke login with valid email and valid password

        2.1.1.5.   Invoke Register New option

2.2. Registration Page

    2.2.1.   RS 3.2.2

        2.2.1.1.   Attempt register with no arguments

        2.2.1.2.   Attempt register with valid email and no password

        2.2.1.3.   Attempt register with no email and valid password

        2.2.1.4.   Attempt register with valid email and password

        2.2.1.5.   Attempt Back to Login option

2.3. Nventory Home Page

    2.3.1.   RS 3.2.3

        2.3.1.1.   Attempt to load home page

    2.3.2.   RS 3.2.4

        2.3.2.1.   Invoke New Checkout option

    2.3.3.   RS 3.2.5

        2.3.3.1.   Invoke Administrative Tools option

    2.3.4.   RS 3.2.6

        2.3.4.1.   Invoke Logout option

2.4. Administrative Tools Page

  2.4.1. RS 3.2.5

    2.4.1.1. Invoke Products option

    2.4.1.2. Invoke Labs option

    2.4.1.3. Invoke Checkouts option

    2.4.1.4. Invoke Go Back option

2.5. Products Page

  2.5.1. RS 3.2.5.1.3

    2.5.1.1. Invoke Go Back option

    2.5.1.2. Invoke Edit Product option

    2.5.1.3. Invoke New Product option

    2.5.1.4. Invoke Remove Product option

2.6. Edit Product Page

  2.6.1. RS 3.2.5.1.3.1

    2.6.1.1. Attempt an edit of one field on one record

    2.6.1.2. Attempt an edit of one field on more than one record

    2.6.1.3. Attempt an edit of multiple fields on one record

    2.6.1.4. Attempt an edit of multiple fields on multiple records

    2.6.1.5. Invoke Go Back option

2.7. New Product Page

  2.7.1. RS 3.2.5.1.3.1

    2.7.1.1. Attempt Submit option with no arguments

    2.7.1.2. Attempt Submit option with valid arguments

    2.7.1.3. Invoke Go Back option

2.8. Remove Product Page

  2.8.1. RS 3.2.5.1.3.1

    2.8.1.1. Invoke Remove Product option

    2.8.1.2. Invoke Go Back option

2.9. Checkouts Page

  2.9.1. RS 3.2.5.1.2

    2.9.1.1. Invoke New Checkout option

    2.9.1.2. Invoke Remove Checkout option

    2.9.1.3. Invoke Go Back option

2.10. New Checkout Page

  2.10.1. RS 3.2.5.1.2.1

    2.10.1.1. Attempt Submit with no arguments

    2.10.1.2. Attempt Submit with no Customer argument

    2.10.1.3. Attempt Submit with no Product arguments

    2.10.1.4. Attempt Submit with one Product and Customer

3. Test Cases

3.1 Login page

3.1.1 Test 1

Purpose: Invoke login with no arguments

Setup: launch application or navigate to start page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	-	False	No changes to system
Password	-	False	No changes to system

Testing Requirements covered:

2.1.1.1 Invoke login with no arguments

3.1.2 Test 2

Purpose: Invoke login with valid email and invalid password

Setup: launch application or navigate to start page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	Admin@email.com	True	-
Password	12345	False	No changes to system

Testing Requirements covered:

2.1.1.2 Invoke login with valid email and invalid password

3.1.3 Test 3

Purpose: Invoke login with invalid email and valid password
Setup: launch application or navigate to start page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	Adminwrong@email. com	False	-
Password	0000	True	No changes to system

Testing Requirements covered:
2.1.1.3 Invoke login with invalid email and valid password

3.1.4 Test 4

Purpose: Invoke login with valid email and valid password
Setup: launch application or navigate to start page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	Admin@email.com	True	-
Password	1234	True	Login successful. User is directed to home page

Testing Requirements covered:
2.1.1.4 Invoke login with valid email and valid password

3.1.5 Test 5

Purpose: Invoke Register New option

Setup: launch application or navigate to start page

Inputs and Expected Outputs

Selected Button	Expected Output
Register New User	User is directed to registration page

Testing Requirements covered:

2.1.1.5 Invoke Register New option

3.2 Registration page

3.2.1 Test 6

Purpose: Attempt register with no arguments

Setup: Navigate to registration page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	-	False	No changes to system
Password	-	False	No changes to system

Testing Requirements covered:

2.2.1.1 Attempt register with no arguments

3.2.2 Test 7

Purpose: Attempt register with valid email and no password
Setup: Navigate to registration page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	Admin@email.com	True	-
Password	-	False	No changes to system

Testing Requirements covered:
2.2.1.2 Attempt register with valid email and no password

3.2.3 Test 8

Purpose: Attempt register with no email and valid password
Setup: Navigate to registration page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	-	False	-
Password	0000	True	No changes to system

Testing Requirements covered:
2.2.1.3 Attempt register with no email and valid password

3.2.4 Test 9

Purpose: Attempt register with valid email and valid password

Setup: Navigate to registration page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Email	Admin@email.com	True	-
Password	1234	True	User is directed to home page

Testing Requirements covered:

2.2.1.4 Attempt register with valid email and valid password

3.2.5 Test 10

Purpose: Attempt Back to Login option

Setup: Navigate to registration page

Inputs and Expected Outputs

Selected Button	Expected Output
Back to Login	User is directed to login page

Testing Requirements covered:

2.2.1.5 Attempt Back to Login option

3.3   Nventory Home Page

3.3.1 Test 11

Purpose: Attempt to load home page
Setup: Login
Inputs and Expected Outputs

Input	Expected Output
Successful login	User is directed to home page

Testing Requirements covered:
2.3.1.1 Attempt to load home page

3.3.2 Test 12

Purpose: Invoke New Checkout option
Setup: Navigate to registration page
Inputs and Expected Outputs

Selected Button	Expected Output
New Checkout	User is directed to Checkout page

Testing Requirements covered:
2.3.2.1 Invoke New Checkout option

3.3.3 Test 13

Purpose: Invoke Administrative Tools option
Setup: Navigate to registration page
Inputs and Expected Outputs

Selected Button	Expected Output
Admin Tools	User is directed to Admin Tools page

Testing Requirements covered:
2.3.3.1 Invoke Administrative Tools option

3.3.4 Test 14

Purpose: Invoke Logout option
Setup: Navigate to registration page
Inputs and Expected Outputs

Selected Button	Expected Output
Logout	User is logged out and directed to login page

Testing Requirements covered:
2.3.4.1 Invoke Logout option

3.4   Administrative Tools Page

3.4.1 Test 12

Purpose: Invoke Products option
Setup: Navigate to administrative tools page
Inputs and Expected Outputs

Selected Button	Expected Output
Products	User is directed to product page

Testing Requirements covered:
2.4.1.1 Invoke Products option

3.4.2 Test 13

Purpose: Invoke Labs option
Setup: Navigate to administrative tools page
Inputs and Expected Outputs

Selected Button	Expected Output
Labs	User is directed to labs page

Testing Requirements covered:
2.4.1.2 Invoke Labs option

3.4.3 Test 14

Purpose: Invoke Checkouts option
Setup: Navigate to administrative tools page
Inputs and Expected Outputs

Selected Button	Expected Output
Checkouts	User is directed to checkouts page

Testing Requirements covered:
2.4.1.3 Invoke Checkouts option

3.4.4 Test 15

Purpose: Invoke Go Back option
Setup: Navigate to administrative tools page
Inputs and Expected Outputs

Selected Button	Expected Output
Go Back	User is returned to home page

Testing Requirements covered:
2.4.1.4 Invoke Go Back option

3.5   Products Page

3.5.1 Test 16

Purpose: Invoke Go Back option
Setup: Navigate to products page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is returned to admin tools page

Testing Requirements covered:
2.5.1.1 Invoke Go Back option

3.5.2 Test 17

Purpose: Invoke Edit Product option
Setup: Navigate to products page
Inputs and Expected Outputs

Selected Button	Expected Output
Edit Product	User is directed to edit products page

Testing Requirements covered:
2.5.1.2 Invoke Edit Product option

3.5.3 Test 18

Purpose: Invoke New Product option
Setup: Navigate to products page
Inputs and Expected Outputs

Selected Button	Expected Output
New Product	User is directed to add product page

Testing Requirements covered:
2.5.1.3 Invoke New Product option

3.5.4 Test 19

Purpose: Invoke Remove Product option
Setup: Navigate to products page
Inputs and Expected Outputs

Selected Button	Expected Output
Remove product	User is directed to Remove product page

Testing Requirements covered:
2.5.1.4 Invoke Remove Product option

3.6 Edit Product Page

3.6.1 Test 20

Purpose: Attempt an edit of one field on one record

Setup: Navigate to edit products page

Inputs and Expected Outputs

Input Field	Input Value	Action	Expected Output
Name	Any string	Apply to Any Row	Updated pushed to MongoDB
New Price/Quantity	Any integer	Apply to Any Row	Updated pushed to MongoDB

Testing Requirements covered:

2.6.1.1 Attempt an edit of one field on one record

3.6.2 Test 21

Purpose: Attempt an edit of one field on more than one record

Setup: Navigate to edit products page.

Inputs and Expected Outputs

Input Field	Input Value	Action	Expected Output
Name	Any string	Apply to any rows	Updated pushed to MongoDB
New Price/Quantity	Any integer	Apply to any rows	Updated pushed to MongoDB

Testing Requirements covered:

2.6.1.2 Attempt an edit of one field on more than one record

3.6.3 Test 22

Purpose: Attempt an edit of multiple fields on one record

Setup: Navigate to edit products page.

Inputs and Expected Outputs

Input Field	Input Value	Action	Expected Output
Name	Any string	Apply to any rows	Updated pushed to MongoDB
New Price/Quantity	Any integer	Apply to any rows	Updated pushed to MongoDB

Testing Requirements covered:

2.6.1.3 Attempt an edit of multiple fields on one record

3.6.4 Test 23

Purpose: Attempt an edit of multiple fields on multiple records

Setup: Navigate to edit products page

Inputs and Expected Outputs

Input Field	Input Value	Action	Expected Output
Name	Any string	Apply to any rows	Updated pushed to MongoDB
New Price/Quantity	Any integer	Apply to any rows	Updated pushed to MongoDB

Testing Requirements covered:

2.6.1.4 Attempt an edit of multiple fields on multiple records

3.6.5 Test 24

Purpose: Invoke Go Back option
Setup: Navigate to edit products page
Inputs and Expected Outputs

Selected Button	Expected Output
Go Back	User is directed to products page

Testing Requirements covered:
2.6.1.5 Invoke Go Back option

3.7   New Product Page

3.7.1 Test 25

Purpose: Attempt Submit option with no arguments
Setup: Navigate to new products page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	-	False	Name is required
Price	-	False	Name is required
Quantity	-	False	Name is required

Testing Requirements covered:
2.7.1.1 Attempt Submit option with no arguments

3.7.2 Test 26

Purpose: Attempt Submit option with valid arguments

Setup: Navigate to new products page.

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	kevin	True	Updated pushed to MongoDB
Price	123	True	Updated pushed to MongoDB
Quantity	321	True	Updated pushed to MongoDB

Testing Requirements covered:

2.7.1.2 Attempt Submit option with valid arguments

3.7.3 Test 27

Purpose: Invoke Go Back option

Setup: Navigate to new products page.

Inputs and Expected Outputs

Selected Button	Expected Output
Go Back	User is directed to products page

Testing Requirements covered:

2.7.1.3 Invoke Go Back option

3.8 Remove Products Page

3.8.1 Test 28
Purpose: Invoke Remove Product option
Setup: Navigate to remove products page
Inputs and Expected Outputs

Selected Button	Expected Output
X	Product is removed from MongoDB

Testing Requirements covered:
2.8.1.1 Invoke Remove Product option

3.8.2 Test 29
Purpose: Invoke Go Back option
Setup: Navigate to remove products page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is returned to home page

Testing Requirements covered:
2.8.1.2 Invoke Go Back option

3.9   Checkouts Page

3.9.1 Test 30

Purpose: Invoke New Checkout option
Setup: Navigate to checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
New Checkout	User is directed to new checkout page

Testing Requirements covered:
2.9.1.1 Invoke New Checkout option

3.9.2 Test 31

Purpose: Invoke Remove Checkout option
Setup: Navigate to checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
Remove Checkout	User is directed to remove checkout page

Testing Requirements covered:
2.9.1.2 Invoke Remove Checkout option

3.9.3 Test 32

Purpose: Invoke Go Back option
Setup: Navigate to checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is directed to admin tools page

Testing Requirements covered:
2.9.1.3 Invoke Go Back option

3.10 New Checkout Page

3.10.1 Test 33

Purpose: Attempt Submit option with no arguments
Setup: Navigate to new checkouts page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Products	-	False	Products is required
Quantity	-	False	Quantity is required
Customer	-	False	Customer is required

Testing Requirements covered:
2.10.1.1 Attempt Submit option with no arguments

3.10.2 Test 34

Purpose: Attempt Submit with no Customer argument
Setup: Navigate to new checkouts page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Products	qwe	True	-
Quantity	123	True	-
Customer	-	False	Customer is required

Testing Requirements covered:
2.10.1.2 Attempt Submit with no Customer argument

3.10.3 Test 35

Purpose: Attempt Submit with no Product arguments
Setup: Navigate to new checkouts page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Products	-	False	Products is required
Quantity	123	True	-
Customer	kevin	True	-

Testing Requirements covered:
2.10.1.3 Attempt Submit with no Product arguments

3.10.4 Test 36

Purpose: Attempt Submit with one Product and Customer
Setup: Navigate to new checkouts page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Products	Kevin	True	-
Quantity	1	True	-
Customer	kevin	True	Checkout pushed to MongoDB

Testing Requirements covered:
2.10.1.4 Attempt Submit with one Product and Customer

3.10.5 Test 37

Purpose: Attempt Submit with multiple Products and a Customer

Setup: Navigate to new checkouts page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Products	Kevin	True	-
Products	Keenan	True	-
Quantity	1	True	-
Customer	Abdul	True	Checkout pushed to MongoDB

Testing Requirements covered:

2.10.1.5 Attempt Submit with multiple Products and a Customer

3.10.6 Test 38

Purpose: Invoke Go Back option

Setup: Navigate to new checkouts page

Inputs and Expected Outputs

Selected Button	Expected Output
Go Back	User is directed to checkouts page

Testing Requirements covered:

2.10.1.6 Invoke Go Back option

3.11   Remove Products Page

3.11.1 Test 39

Purpose: Attempt Remove option on one record
Setup: Navigate to remove checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
X	Checkout is removed from MongoDB

Testing Requirements covered:
2.11.1.1 Attempt Remove option on one record

3.11.2 Test 41

Purpose: Attempt Remove option on another record
Setup: Navigate to remove checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
X	Checkout is removed from MongoDB

Testing Requirements covered:
2.11.1.2 Attempt Remove option on another record

3.11.3 Test 41

Purpose: Invoke Go Back option
Setup: Navigate to remove checkouts page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is returned to checkouts page

Testing Requirements covered:
2.11.1.3 Invoke Go Back option

3.12   Labs Page

3.12.1 Test 42
Purpose: Invoke New Lab option
Setup: Navigate to labs page
Inputs and Expected Outputs

Selected Button	Expected Output
New Lab	User is directed to new lab page

Testing Requirements covered:
2.12.1.1 Invoke New Lab option

3.12.2 Test 43
Purpose: Invoke Remove Lab option
Setup: Navigate to Lab page
Inputs and Expected Outputs

Selected Button	Expected Output
Remove Checkout	User is directed to remove Lab page

Testing Requirements covered:
2.12.1.2 Invoke Remove Lab option

3.12.3 Test 44
Purpose: Invoke Go Back option
Setup: Navigate to Lab page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is directed to admin tools page

Testing Requirements covered:
2.12.1.3 Invoke Go Back option

3.13 New Lab Page

3.13.1 Test 45

Purpose: Submit with no arguments
Setup: Navigate to new lab page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	-	False	Name is required
Cost Numbers	-	False	Cost Numbers is required

Testing Requirements covered:
2.13.1.1 Submit with no arguments

3.13.2 Test 46

Purpose: Submit with only a Lab Name argument
Setup: Navigate to new lab page
Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	kevin	True	-
Cost Numbers	-	False	Customer is required

Testing Requirements covered:
2.13.1.2 Submit with only a Lab Name argument

3.13.3 Test 47

Purpose: Submit with a Name and one CostNumber

Setup: Navigate to new lab page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	kevin	True	-
Cost Numbers	123	True	Checkout pushed to MongoDB

Testing Requirements covered:

2.13.1.3 Submit with a Name and one CostNumber

3.13.4 Test 48

Purpose: Submit with a Name and multiple CostNumbers

Setup: Navigate to new lab page

Inputs and Expected Outputs

Input Field	Input Value	Information accepted	Expected Output
Name	kevin	True	-
Cost Numbers	123	True	-
Cost Numbers	133	True	Checkout pushed to MongoDB

Testing Requirements covered:

2.13.1.4 Submit with a Name and multiple CostNumbers

3.13.4 Test 49

Purpose: Invoke Go Back option
Setup: Navigate to new lab page
Inputs and Expected Outputs

Selected Button	Expected Output
Go Back	User is directed to labs page

Testing Requirements covered:
2.13.1.5 Invoke Go Back option

3.14   Remove Lab Page

3.14.1 Test 50

Purpose: Attempt remove on one record
Setup: Navigate to remove lab page
Inputs and Expected Outputs

Selected Button	Expected Output
X	Lab is removed from MongoDB

Testing Requirements covered:
2.14.1.1 Attempt remove on one record

3.14.2 Test 51

Purpose: Attempt remove on another record
Setup: Navigate to remove lab page
Inputs and Expected Outputs

Selected Button	Expected Output
X	Lab is removed from MongoDB

Testing Requirements covered:
2.14.1.2 Attempt remove on another record

3.14.3 Test 52

Purpose: Invoke Go Back option
Setup: Navigate to remove lab page
Inputs and Expected Outputs

Selected Button	Expected Output
Go back	User is returned to Labs page

Testing Requirements covered:
2.14.1.3 Invoke Go Back option