ADDIS ABABA UNIVERISITY

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CENTER OF INFORMATION TECHNOLOGY AND SCIENTIFIC COMPUTING

DEPARTMENT OF SOFTWARE ENGINERRING

Management System for Gead General Trading PLC

Test Plan Document

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Definitions, Acronyms, and Abbreviations

Table 1 - Definitions

Term	Definition
Qunit	Qunit is a powerful, easy-to-use javascript unit testing framework
Codeigniter	CodeIgniter is an Application Development Framework - a toolkit - for people who build web sites using PHP. Its goal is to enable you to develop projects much faster than you could if you were writing code from scratch, by providing a rich set of libraries for commonly needed tasks, as well as a simple interface and logical structure to access these libraries

1. Introduction

1.1 Purpose

The purpose of our test plan is to uncover and report as many bugs as possible to increase our system reliability and to ensure the right product is developed.

2. Features to be tested/not be tested

2.1 Features to be tested

The followings are features to be tested:

- User login
- Add item
- Add Transaction
- Add Staff Member
- Generate Report

2.2 Features not to be tested

The followings are features not to be tested:

- view staff information
- View stock information
- View transaction information

This features were selected to not be included in the testing plan, mainly for reasons of priority. The development team considers this features to be less important compared to the features chossen to be tested. This decision does not reflect the usefulness of this features, rather the team considers this features to be less prone to bugs or other technical issues and has given them a lesser priority.

3. Pass/Fail Criteria

The success /fail criteria are the following:

- If the actual output and the expected result are the same the pass/fail criteria is “success or pass”
- If the actual output and the expected result are different the pass/fail criteria is “fail”.

4. Approach/Strategy

The approach chosen for testing is a reactive one. This approach follows on the principle that testing is not started until after design and coding are completed.

The types of testing employed will include functional and user interface testing. Alpha testing is also conducted for testing some of the features. This type of acceptance testing, helps in identifying all possible bugs. The motivation for using alpha testing was mainly to assist in the UI testing process.

Testing tools are also used to support and automate some of the testing activities we perform. The code-igniter built-in unit testing tool is used for testing some of the server-side implementations and Qunit is used for testing the client-side implementation.

5. Test cases with specifications

5.1 User login

Table 2 - Test case specification for User Login

Name: User login				
Purpose: To login to the system				
Test Data = Username (invalid username, valid username, empty) Password (invalid , valid, empty)				
Input	**Expected result**	**Data**	**Actual output**	**Pass/fail**
Invalid username and invalid password	"Invalid Username and password"	Unregistered username and unregistered password	"Invalid Username and password"	pass
Valid username and valid password	Redirect to the desired page	registered username and registered password Redirect to the desired page	Redirect to the desired page	pass
Invalid username and valid password	"Invalid Username and password"	Unregistered username and registered password	"Invalid Username and password"	pass
valid username and invalid password	"Invalid password"	registered username and unregistered password	"Invalid Username and password"	fail

Empty username and valid password	"Username field required"	No username and registered password	"Username field required"	pass
Empty username and invalid password	"Username field required"	No username and unregistered password	"Username field required"	pass
Valid username and empty password	"Password field required"	registered username and no password	"Password field required"	pass
Invalid username and empty password	"Password field required"	Unregistered username and no password	"Password field required"	pass

5.2 Add Item

Table 3 - Test case specification for Add Item

Name: Add Item				
Purpose: to add item to stock				
Test Data = Item name(valid, invalid) Quantity(valid,invalid) Unit Price(valid,invalid)				
Input	**Expected result**	**Data**	**Actual output**	**Pass/fail**
Valid Item name, valid Quantity, valid Unit Price	"item added successfully"	Any alpha-numeric item name, any numeric quantity, any numeric unit price	"item added successfully"	Pass
Valid Item name, valid Quantity, invalid Unit Price	"enter a numeric value"	Any alpha-numeric item name, any numeric quantity, any non-numeric unit price	Technical Error message	Fail
Valid Item name, invalid Quantity, valid Unit Price	"enter a numeric value"	Any alpha-numeric item name, any non-numeric quantity, any numeric unit price	Technical Error message	Fail

Valid Item name, invalid Quantity, invalid Unit Price	"enter a numeric value"	Any alpha-numeric item name, any non-numeric quantity, any non-numeric unit price	Technical Error message	Fail
invalid Item name, valid Quantity, valid Unit Price	"Item name field is required "	Null item name, any numeric quantity, any numeric unit price	"Item name field is required "	Pass
invalid Item name, valid Quantity, invalid Unit Price	"Item name field is required "	Null item name, any numeric quantity, any non-numeric unit price	Technical Error message	Fail
invalid Item name, invalid Quantity, valid Unit Price	"Item name field is required "	Null item name, any non-numeric quantity, any numeric unit price	Technical Error message	Fail
invalid Item name, invalid Quantity, invalid Unit Price	"Item name field is required "	Null item name, any non-numeric quantity, any non-numeric unit price	Technical Error message	Fail

5.3 Add Transaction

Table 4 - Test case specification for Add Transaction

Name: Add Transaction				
Purpose: to add transactions				
Test Data = Amount Given (valid,invalid) Customer Name(valid,invalid) Customer Phone(valid,invalid) Customer TIN(valid,invalid)				
Input	**Expected result**	**Data**	**Actual output**	**Pass/fail**
• valid amount given	"transaction added	• numeric amount	"transaction added	Pass

• valid customer name • valid customer phone • valid customer tin	successfully"	• non-numeric customer name • numeric customer phone • numeric customer TIN	successfully"	
• valid amount given • valid customer name • valid customer phone • invalid customer tin	"enter a numerical TIN number"	• numeric amount • non-numeric customer name • numeric customer phone • non-numeric customer TIN	Technical Error message	Fail
• valid amount given • valid customer name • invalid customer phone • valid customer tin	"enter a correct phone number"	• numeric amount • non-numeric customer name • non-numeric customer phone • numeric customer TIN	transaction added successfully"	Fail
• valid amount given • valid customer name • invalid customer phone • invalid customer tin	"enter a correct phone number"	• numeric amount • non-numeric customer name • non-numeric customer phone • non-numeric customer TIN	transaction added successfully"	Fail
• valid amount given • invalid customer name	"name cannot have numerical values"	• numeric amount • numeric customer name	"transaction added successfully"	Fail

• valid customer phone • valid customer tin		• numeric customer phone • numeric customer TIN		
• valid amount given • invalid customer name • valid customer phone • invalid customer tin	"name cannot have numerical values"	• numeric amount • non-numeric customer name • numeric customer phone • non-numeric customer TIN	transaction added successfully"	Fail
• valid amount given • invalid customer name • invalid customer phone • valid customer tin	"name cannot have numerical values"	• numeric amount • non-numeric customer name • non-numeric customer phone • numeric customer TIN	transaction added successfully"	Fail
• valid amount given • invalid customer name • invalid customer phone • invalid customer tin	"name cannot have numerical values"	• numeric amount • non-numeric customer name • non-numeric customer phone • non-numeric customer TIN	Technical Error message	Fail
• invalid amount given • valid customer name • valid customer	"numeric value required"	• non-numeric amount • non-numeric customer name • numeric	"numeric value required"	Pass

phone • valid customer tin		customer phone • numeric customer TIN		
• invalid amount given • valid customer name • valid customer phone • invalid customer tin	"numeric value required"	• non-numeric amount • non-numeric customer name • numeric customer phone • non-numeric customer TIN	"numeric value required"	Pass
• invalid amount given • valid customer name • invalid customer phone • valid customer tin	"numeric value required"	• non-numeric amount • non-numeric customer name • non-numeric customer phone • numeric customer TIN	"numeric value required"	Pass
• invalid amount given • invalid customer name • valid customer phone • valid customer tin	"numeric value required"	• non-numeric amount • numeric customer name • numeric customer phone • numeric customer TIN	"numeric value required"	Pass
• invalid amount given • invalid customer	"numeric value required"	• non-numeric amount • numeric	"numeric value required"	Pass

name • invalid customer phone • valid customer tin		customer name • non-numeric customer phone • numeric customer TIN		
• invalid amount given • invalid customer name • valid customer phone • invalid customer tin	"numeric value required"	• non-numeric amount • numeric customer name • numeric customer phone • non-numeric customer TIN	"numeric value required"	Pass
• invalid amount given • invalid customer name • valid customer phone • invalid customer tin	"numeric value required"	• non-numeric amount • numeric customer name • numeric customer phone • non-numeric customer TIN	"numeric value required"	Pass
• invalid amount given • invalid customer name • invalid customer phone • invalid customer tin	"numeric value required"	• non-numeric amount • numeric customer name • non-numeric customer phone • non-numeric customer TIN	"numeric value required"	Pass

5.4 Generate Report

Table 5 - Test case specification for Generate Report

Name: Generate Report				
Purpose: to generate report				
Test Data = From date(valid, invalid) To Date (valid,invalid)				
Input	**Expected result**	**Data**	**Actual output**	**Pass/fail**
Valid from date and valid to date	Form is generated	"Form date" < "to date" and "from date" <= "current date"	Form is generated	Pass
Valid from date and invalid to date	"insert a valid to date"	"Form date" >"to date"	Form is generated	Fail
Invalid form date and valid to date	"insert a valid from date"	"Form date" > "to date" or "from date" > "current date"	Form is generated	Fail
Invalid from date invalid to date	"insert a valid from and to date"	"Form date" > "to date" and "from date" > "current date"	Form is generated	Fail

5.5 Add Staff Member

Table 6 - Test case specification for Add Staff Member

Name: Add staff member				
Purpose: to add a staff member				
Test Data = First Name (valid, invalid) Last Name (valid,invalid) Address (valid,invalid) Salary (valid,invalid)				
Input	**Expected result**	**Data**	**Actual output**	**Pass/fail**
Valid first name, valid last	Add staff member	Any alpha-numeric first	Add staff member	Pass

name, valid address, valid salary		name, any alpha-numeric last name, any alpha-numeric address, any numeric salary		
Valid first name, valid last name, valid address, invalid salary	"enter a numeric value"	Any alpha-numeric first name, any alpha-numeric last name, any alpha-numeric address, any non-numeric salary	Technical Error message	Fail
Valid first name, valid last name, invalid address, valid salary	"address field is required"	Any alpha-numeric first name, any alpha-numeric last name, null address, any numeric salary	"address field is required"	Pass
Valid first name, valid last name, invalid address, invalid salary	"address field is required" "enter a numeric value"	Any alpha-numeric first name, any alpha-numeric last name, null address, any non-numeric salary	Technical Error message	Fail
Valid first name, invalid last name, valid address, valid salary	"last name field is required"	Any alpha-numeric first name, null last name, any alpha-numeric address, any numeric salary	"last name field is required"	Pass
Valid first name, invalid last name, invalid address, valid salary	"last name field is required" "address field is required"	Any alpha-numeric first name, null last name, null address, any numeric salary	"last name field is required" "address field is required"	Pass
Valid first name, invalid last name, invalid address, invalid salary	"last name field is required" "address field is	Any alpha-numeric first name, null last name, null address, any non-	Technical Error message	Fail

	required” “enter a numeric value”	numeric salary		
invalid first name, valid last name, valid address, valid salary	“first name field is required”	Null first name, any alpha-numeric last name, any alpha-numeric address, any numeric salary	“first name field is required”	Pass
invalid first name, invalid last name, valid address, valid salary	“first name field is required” “last name field is required”	Null first name, null last name, any alpha-numeric address, any numeric salary	“first name field is required” “last name field is required”	Pass
invalid first name, invalid last name, invalid address, valid salary	“first name field is required” “last name field is required” “address field is required”	Null first name, null last name, null address, any numeric salary	“first name field is required” “last name field is required” “address field is required”	Pass
invalid first name, invalid last name, invalid address, invalid salary	“first name field is required” “last name field is required” “address field is required” “enter a numeric value”	Null first name, null last name, null address, non-numeric salary	Technical Error message	Fail

REFERENCES

- Guru99, http://www.guru99.com/software-testing, June 25, 2018