

**Test Plan for Senior Project: BIC Graphic North America**

**Luis A. Aguilera**  
**John Gangemi**  
**Christopher Weiss**

Students

Department of Computer Science and Engineering  
University of South Florida

Email:

laguiler@mail.usf.edu  
JohnGangemi@mail.usf.edu  
christopherw@mail.usf.edu

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## History of document

- **Version 1.00 (February 27, 2015)** – Test Plan document created
- **Version 1.10 (April 22, 2015)** – Major revisions made to the Test Plan
  - In depth instructions provided for each test done on the system
  - Section “Traceability Matrix” renamed to Appendix A (Traceability Matrices)
  - Appendix B created
  - Figures depicting expected output added to Appendix B

## Introduction

The Test Plan document details validation and verification of our design for BIC Graphic North America using appropriate test cases that generate either satisfactory or unsatisfactory results corresponding to a specific requirement and/or specification.

## Test Cases

### Validation (requirements)

Test Case ID: TC\_AC\_1

Module: Account Creation (Requirement #2)

Test Summary: Attempt to create a new user account.

Pre-condition: User must be logged in with supervisor privileges.

Test Steps: Navigate to the account creation page by clicking on the “Create Account” button. Fill out the First Name, Last Name, Department, and System Role fields in the account creation page. Click on submit.

Test Data: First Name – Luis, Last Name – Aguilera, Department – Shop Floor, System Role – User

Expected Result: User redirected to a page that will display the registration code.

Post-Condition: A new entry in the employee table.

Actual Result: The user was successfully redirected to the page displaying the registration code. (Appendix B, Figure 1.0)

Status: Pass

Test Case ID: TC\_AR\_1

Module: Account Registration (Requirement #3)

Test Summary: Attempt to register a new user account.

Pre-Condition: User account must have been created. User must obtain a unique registration code.

Test Steps: Navigate to the account registration page by clicking on the “New User?” button. Fill out the First Name, Last Name, Registration Code, Username, Password, and Confirm Password fields. Select the appropriate birth month and birth day from the menus. Select the desired security questions from the menus and fill out the Answer 1, Answer 2, and Answer 3 fields. Click on submit

Test Data: First Name – Luis, Last Name – Aguilera, Birth Month – June, Birth Day – 15, Registration Code – 4737187, Username – laguiler, Password – Password1, Security Question 1 – What is your favorite food?, Answer 1 – pizza, Security Question 2 – Maiden name of your mother?, Answer 2 – Nunya, Security Question 3 – In what city were you born?, Answer 3 - Business

Expected Result: User redirected to a page informing them that account registration was successful.

Post Condition: Employee information has been updated in the employee table. Account is now active.

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Actual Result: User was successfully redirected to the confirmation page. (Appendix B, Figure 1.1)

Status: Pass

Test Case ID: TC\_AU\_1

Module: Account Update (Requirement #4)

Test Summary: Attempt to update an employee's account information.

Pre-Condition: User must be logged in as a supervisor.

Test Steps: Navigate to the account update screen by clicking on the "Update Account" button. Fill in the Username, First Name, Last Name, New Password, and System Role fields. Click on submit.

Test Data: Username – laguiler, First Name – Luis, Last Name – Aguilera, New Password – Password2, System Role - user

Expected Result: User redirected to the supervisor main screen.

Post Condition: Employee information has been updated in the employee table by the supervisor.

Actual Result: User was redirected to the supervisor main screen.

Status: Pass

Test Case ID: TC\_SS\_1

Module: Account Self Service (Requirement #5)

Test Summary: Attempt to update an employee's account information.

Pre-Condition: Must be signed on as the employee whose account information is to be updated.

Test Steps: Fill out the New Password, Confirm Password, and Answer fields. Select the appropriate Birth Month and Birth Day from the menus. Click the submit button.

Test Data: New Password – Password 3, Confirm Password – Password 3, Birth Month – June, Birth Day – 15, Security Question – Maiden name of your mother?, Answer - Nunya

Expected Result: User redirected to the login screen.

Post Condition: Employee information has been updated in the employee table by the user himself.

Actual Result: The user was successfully redirected to the login screen.

Status: Pass

Test Case ID: TC\_PR\_1

Module: Password Reset

Test Summary: Attempt to reset a user's password.

Pre-Condition: None

Test Steps: Beginning in the Login Screen, navigate to the Lost Password screen by clicking on the "Lost Password?" button. Fill in the Username field with the name of the account whose password you would like to change, then hit the "Continue" button. Select the correct birth month and birth day from the drop down menu for the account and fill the Answer field with the appropriate answer for the security question displayed,

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then hit the “Continue” button. Enter the new password in the New Password and Confirm Password fields, then click on the “Submit” button.

Test Data: Username – laguiler, Birth Month – June, Birth Day – 15, Security Question – Maiden name of your mother?, Answer – Nunya, Password – Password4, Confirm Password – Password 4

Expected Result: User redirected to login screen.

Post Condition: The password for the desired username has been updated in the employee table.

Actual Result: The user was successfully redirected to the login screen.

Status: Pass

#### Verification (specifications)

Test Case ID: TC\_EL\_1

Module: Employee Login

Test Summary: Attempt to log into a user's account using incorrect credentials.

Pre-Condition: None

Test Steps: From the login page, type in an incorrect username and password into the Username and Password fields, then hit submit. Repeat this process with a correct username and wrong password.

Test Data: Username – John, Password – Doe; Username – laguiler, Password – Password3

Expected Result: User remains at the login screen. Error message displayed above the Username field.

Post Condition: User has failed to access the account.

Actual Result: The user was unsuccessful in logging into the account. (Appendix B, Figure 1.2)

Test Case ID: TC\_EL\_2

Module: Employee Login

Test Summary: Attempt to log into a user's account using correct credentials.

Pre-Condition: None

Test Steps: From the login page, type in a correct username and password into the Username and Password fields, then hit the submit button.

Test Data: Username – laguiler, Password – Password4

Expected Result: User is redirected to the account screen.

Post Condition: User has been granted access to his account.

Actual Result: The user was successful in logging into the account. (Appendix B, Figure 1.3)

Test Case ID: TC\_SL\_1

Module: Employee Login

Test Summary: Attempt to log into a supervisor's account using incorrect credentials.

Pre-Condition: None

Test Steps: From the login page, type in an incorrect username and password into the Username and Password fields, then hit submit. Repeat this process with a correct username and wrong password.

Test Data: Username – John, Password – Doe; Username – admin, Password – Password3

Expected Result: User remains at the login screen. Error message displayed above the Username field.

Post Condition: User has failed to access the account.

Actual Result: The user was was unsuccessful in logging into the account. (Appendix B, Figure 1.2)

Test Case ID: TC\_SL\_2

Module: Employee Login

Test Summary: Attempt to log into a supervisor's's account using correct credentials.

Pre-Condition: None

Test Steps: From the login page, type in a correct username and password into the Username and Password fields, then hit the submit button.

Test Data: Username – admin, Password – Password1

Expected Result: User is redirected to the supervisor account screen.

Post Condition: User has been granted access to his account.

Actual Result: The user was was successful in logging into the account. (Appendix B, Figure 1.4)

Test Case ID: TC\_PR\_2

Module: Password Recovery

Test Summary: Attempt to reset a user's password by providing an invalid username.

Pre-Condition: None

Test Steps: From the login screen, click on the “Lost Password?” button. In the following page, enter an incorrect username into the Username field, then hit continue.

Test Data: Username - laguilera

Expected Result: Password reset page is refreshed and an error message is displayed above the Username field.

Post Condition: Employee password remains unchanged.

Actual Result: Password reset page was refreshed and the error message displayed. (Appendix B, Figure 1.5)

Test Case ID: TC\_PR\_3

Module: Password Recovery

Test Summary: Attempt to reset a user's password by providing the wrong credentials.

Pre-Condition: None

Test Steps: From the login screen, click on the “Lost Password?” button. In the following page, enter an incorrect username into the Username field, then hit continue.

Test Data: Username – laguilera, Birth Month – January, Birth Day – 1, Security Question – Maiden name of your mother?, Answer – Nunya

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Expected Result: Verification page refreshed and an error message is displayed.

Post Condition: Employee password remains unchanged.

Actual Result: Verification page was refreshed and the error message displayed.  
(Appendix B, Figure 1.6)

Test Case ID: TC\_AR\_2

Module: Account Registration

Test Summary: Attempt to register a new account with the incorrect registration code.

Pre-Condition: User account must have been created.

Test Steps: Fill out the First Name, Last Name, Username, Password, and Confirm Password fields. Select the appropriate Birth Month, Birth Day, and security questions from the menus. Fill in the Registration Code field with an incorrect registration code. Click the submit button.

Test Data: First Name – John, Last Name – Snow, Birth Month – January, Birth Day – 2, Registration Code – 4558158, Username – knows, Password – nothing, Confirm Password – nothing, Answer 1 – Dragon, Answer 2 – snow, Answer 3 – Isengard

Expected Result: Account registration page is refreshed with an error message displayed at the top.

Post Condition: Account registration has failed. Employee data is not updated.

Actual Result: Account registration page refreshed with the error. (See Appendix B, Figure 1.6)

Test Case ID: TC\_SS\_2

Module: Account Self Service

Test Summary: Attempt to update an employee's account information with an improper password.

Pre-Condition: Must be signed on as the employee whose account information is to be updated.

Test Steps: Fill out the New Password, and Confirm Password with passwords that do not meet the three criteria. Fill in the Answer fields. Select the appropriate Birth Month and Birth Day from the menus. Click the submit button.

Test Data: New Password – pass, Confirm Password – pass, Birth Month – June, Birth Day – 15, Security Question – Maiden name of your mother?, Answer – Nunya

Expected Result: Account page is refreshed with an error message displayed at the top.

Post Condition: Employee information has not been updated in the employee table by the user himself.

Actual Result: Account page refreshed with an error message. (See Appendix B, Figure 1.7)

Test Case ID: TC\_AC\_2

Module: Account Creation

Test Summary: Attempt to create a new user account by leaving fields in blank.

Pre-condition: User must be logged in with supervisor privileges.

Test Steps: Navigate to the account creation page by clicking on the “Create Account” button. Fill out the First Name, Last Name, and System Role fields in the account creation page. Click on submit.

Test Data: First Name – Betty, Last Name – White, System Role – super

Expected Result: Account creation page refreshed with error message displayed at the top.

Post-Condition: No change to the employee table of the database.

Actual Result: Account creation page refreshed and the error message was displayed (Appendix B, Figure 1.8)

Test Case ID: TC\_AU\_2

Module: Account Update

Test Summary: Attempt to update an employee's account information, leaving a field blank.

Pre-Condition: User must be logged in as a supervisor.

Test Steps: Navigate to the account update screen by clicking on the “Update Account” button. Fill in the Username, First Name, Last Name, and System Role fields. Click on submit.

Test Data: Username – laguiler, First Name – Luis, Last Name – Aguilera, System Role - user

Expected Result: Account Update screen is refreshed with an error message.

Post Condition: Employee table is not updated with the data entered.

Actual Result: Account Update screen refreshed with the appropriate error message.

## Appendix A (Traceability Matrices)

### Validation

Test Case	Requirement items					
	1.0	2.0	3.0	4.0	5.0	6.0
1.0	X	X				
2.0	X		X			
3.0	X			X		
4.0	X				X	
5.0	X					X

Requirements:

1.0 - Log account activity into a standard logging table with single line entries for each account creation or update(s).

2.0 - Account initial creation by front line supervisor

3.0 - Account registration and activation by the employee

4.0 - Employee account update by supervisor

5.0 - Account self-service update by employee

6.0 - Account self-service password reset by employee

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Verification

		Spec Items					
Test Case	1.0	2.0	3.0	4.1.1	4.1.2	4.1.3	4.2.1
TC_EL_1	X						
TC_EL_2	X						
TC_SL_1	X						
TC_SL_2	X						
TC_PR_2	X	X					
TC_PR_3	X	X					
TC_AR_2	X		X				
TC_SS_2	X					X	X
TC_AC_2	X			X			
TC_AU_2	X				X		

## Specifications:

1.0 – Login Page

2.0 – Password Recovery Page

3.0 – Account Registration Page

4.1.1 – Account Creation Page

4.1.2 – Employee Account Update Page

4.1.3 – Account Self Service (Supervisor)

4.2.1 - Account Self Service (Employee)

**Appendix B (Figures)**

Print From Browser

Instructions

Please use the registration code below to register your account by clicking the New User? button on the login screen.

If you do not see the login screen press the refresh icon in the top left area of the main window.

Registration Code

4737187

Back

**Figure 1.0 – Account Creation Successful (Registration Code)**

Registration

You have successfully registered.

Please click on the button below to return to the login screen.

Back

**Figure 1.1 – Account Registration Confirmation**

The image shows a web-based login interface. At the top, a light gray header bar contains the word "Welcome". Below this, a message "Incorrect username and/or password" is displayed in a light gray font. The login fields consist of a "Username" label followed by a text input containing "laguiler", and a "Password" label followed by a password input showing eight dots. A prominent blue "Login" button is positioned below the password field. At the bottom of the form, there are two light gray buttons: "New User?" and "Lost Password?".

Welcome

Incorrect username and/or password

Username

Password

Login

New User?

Lost Password?

**Figure 1.2 – Failed Login Attempt**

Change Password

Please fill in all fields below

New Password

Confirm Password

Birth Month

January ▾

Birth Day

1 ▾

Security Question

Maiden name of your mother?

Answer

Submit

Cancel

**Figure 1.3 – User Account After Successful Login**

Manage Accounts

Employee

Update Account

Create Account

Supervisor

Change Password

Cancel

**Figure 1.4 – Supervisor Account After Successful Login**

Create New Password

Invalid username

Username

laguilera

Continue

Cancel

**Figure 1.5 – Password Recovery (Invalid Username)**

Registration

Incorrect name, registration code, or account already active

First Name	<input type="text" value="John"/>	Registration Code	<input type="text" value="4558158"/>
Last Name	<input type="text" value="Snow"/>	Username	<input type="text" value="knows"/>
Birth Month	<input type="text" value="January"/>	Password	<input type="password" value="....."/>
Birth Day	<input type="text" value="2"/>	Confirm Password	<input type="password" value="....."/>
Security Question 1	<input type="text" value="What is your favorite food?"/>	Answer 1	<input type="text" value="dragon"/>
Security Question 2	<input type="text" value="Maiden name of your mother?"/>	Answer 2	<input type="text" value="snow"/>
Security Question 3	<input type="text" value="In what city were you born?"/>	Answer 3	<input type="text" value="isengard"/>

Submit

Cancel

**Figure 1.6 – Failed Account Registration**

Change Password

Invalid password entry, see password rules below

New Password

....

Confirm Password

....

Birth Month

June ▼

Birth Day

15 ▼

Security Question

Maiden name of your mother?

Answer

Nunya

Submit

Cancel

**Figure 1.7 – Failed Account Self-Service (Improper Password)**

Create New Account

One or more fields are empty

First Name

Betty

Last Name

White

Department

System Role

super

Submit

Cancel

**Figure 1.8 – Failed Account Creation (Field Left Blank)**