

Testing Report

RoboNews.com

"Your Source For Robotics Coverage"

Client

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Table of Contents

| | <u>Page</u> |
|-------------------------------------|-------------|
| 1. Introduction | 3 |
| 1.1 Purpose of This Document | 3 |
| 1.2 References | 3 |
| 2. Testing Process | 3 |
| 2.1 Description | 3 |
| 2.2 Testing Sessions | 4 |
| 2.3 Impressions of the Process | 4 |
| 3. Test Results | 5 |
| Appendix A - Peer Review Sign-off | 10 |
| Appendix B – Document Contributions | 12 |

1. Introduction

RoboNews.com, is similar to any website with the potential to receive large amounts of user traffic and significant amounts of data, must be thoroughly tested to ensure stability, expose flaws in the system, and ensure the best possible experience for the user.

1.1 Purpose of This Document

This document is intended for system administrators, quality assurance teams, and other users interested in reviewing the test procedure used for the development of the first iteration of this product. This report will define and analyze the testing process and describe the results.

1.2 References

Use cases from the System Requirements Specifications (SRS) document.

2. Testing Process

2.1 Description

Use cases as outlined by the System Requirements Specifications document are the basis for which each particular spiral are thoroughly tested. Team members contributed various other use cases, test methods, and outlined potential implementations issues that could potentially arise.

Testing was done in a variety of methods, from the standard individual unit testing to white box testing and eventually to black box, user driven testing. Individual units were thoroughly tested with every possible potential outcome and misuse in mind. Upon successfully completing rigorous individual unit testing, integration testing commenced to ensure that modules worked together as intended.

2.2 Testing Sessions

| Test Number | Date | Location | Time Started | Time Ended | Performed By | Use Cases |
|-------------|-----------|----------|--------------|------------|--------------|--|
| S1A | 2/27/2013 | Home | 9:30 PM | 11:00 PM | Sven Rivera | •User Login •Admin Login •Navigating Links |
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2.3 Impressions of the Process

The testing process was overall very effective in this particular spiral. The combined usage of regular “expected” use of the website combined with a more erratic, error prone approach to testing produced a very good picture of the strengths and weaknesses of the website. For having just set up the skeleton of the website with minimal functionality, the website functions quite well and effectively implements the create username, login and limited navigational button interface that the website offers at this time.

The strongest component of the website as of this spiral is the user and administrator login. User login creation is very straightforward and correctly communicates with

the database in both creating and fetching use data and checking it for correct login information. The weakest portion of the website at the moment is the navigational links. At the moment, though they are displayed, lead to errors upon clicking them , and also do not allow the user to log off. Detailed information about individual modules follow below.

3. Test Results

Testing was conducted using a series of typical use cases and small variations of them that would not be outside the boundaries of normal use. In addition, non-standard boundary conditions were also tested in order to ensure that the website properly handles invalid situations that could possibly result in improper website functionality.

3.1 Testing Suite

The table below outlines and describes each particular use case and their respective boundary conditions, valid and invalid inputs. Results normally fell within expected outcomes but issues were discovered with the password confirmation portion of the username creation module. Navigation also posed issues in sections of the website that had not yet been fully developed. The majority of the basic login and account creation features worked flawlessly.

S1A

| Use Case | <i>Create User Login</i> |
|-------------------|---|
| Valid Situation | User creates a login consisting of a username, password and retype the password for confirmation. |
| Invalid Situation | 1. User enters a blank username or password upon creation. 2. User enters their username with varying upper and lower case letters |

| | |
|---|---|
| | differing from their original username. 3. User enters a non-matching password when asked to confirm it during account creation |
| Purpose | To ensure that users can create logins under the right conditions. |
| Expected Results for Valid Situation | The username and password is created and properly stored in the sql database and properly confirms the retyped password confirmation. |
| Expected Results for Invalid Situation | 1. The website will reject the blank entry and reprompt them for a username or password. 2. Mixed case username should be accepted 3. Non-Matching passwords should be rejected and re-prompted |
| Issues/bugs Found | 1. Creating a non-mixed case username but attempting to login with mixed case (i.e. John123 but inputting jOhn123) results in an error 2. Entering a password but leaving the confirm password blank does not result in an error and allows a user to successfully create an account |

S1B

| | |
|--------------------------|---|
| Use Case | <i>Navigating the Website</i> |
| Valid Situation | 1. Clicking on a variety of different links results in appropriate page or information being displayed. 2. Clicking the back button after logging in |
| Invalid Situation | Clicking on a non-functioning portion of the website. |

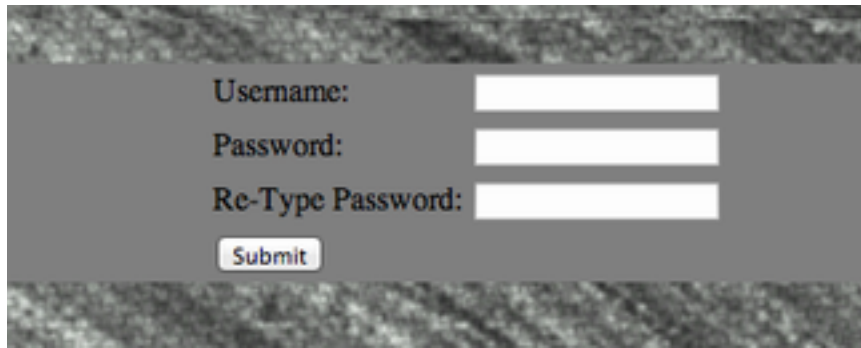
| | |
|---|--|
| Purpose | To test how the website handles navigating between links and buttons that are currently developed and functioning (such as create login) or buttons that currently do not have a purpose |
| Expected Results for Valid Situation | 1. The website takes you to the appropriate page and correctly displays the information and content. |
| Expected Results for Invalid Situation | The website will inform the user that the page they requested is not currently available. |
| Boundary Conditions | |
| Issues/bugs Found | 1. Clicking on an invalid link does not gracefully inform the user that the particular page they are attempting to navigate to is not completed, but rather gives a standard, non-descriptive error. |

3.2 Test Results

The results from testing are outlined in the images below.

S1A Use Case: Creating a user login
Performed By: Sven Rivera

1. Clicking on create user login correctly navigates and displays the login creation portion of the site.



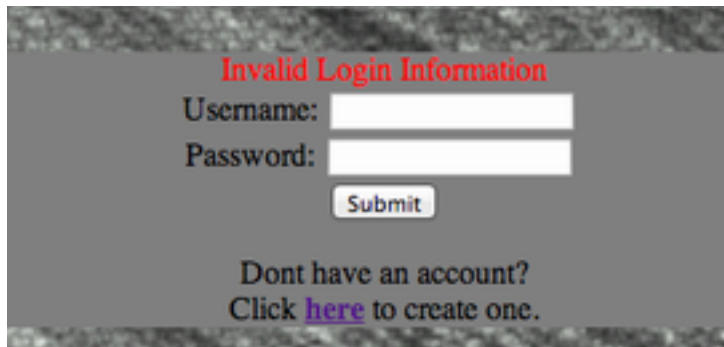
Initial login form with three input fields and a submit button.

Username:

Password:

Re-Type Password:

2. Logging in without inputting a password or entering an invalid password:



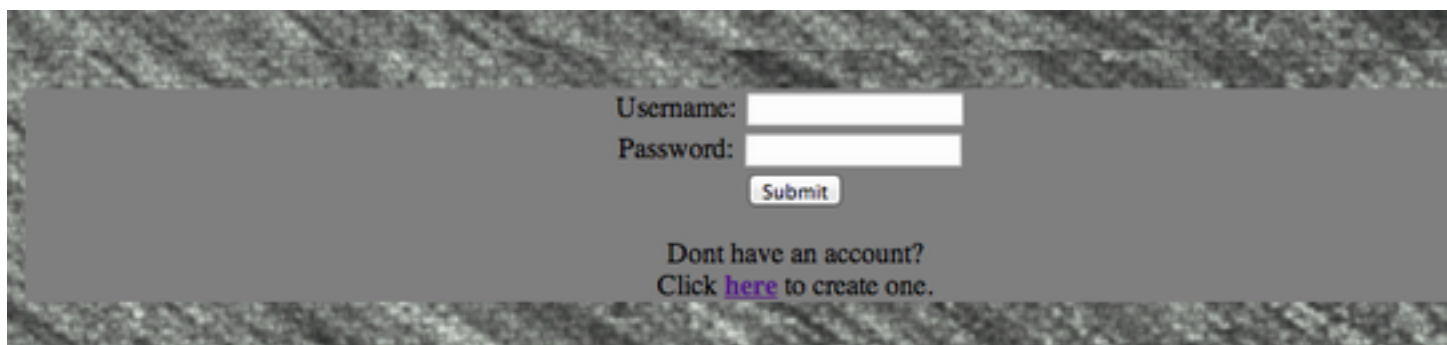
Invalid Login Information

Username:

Password:

Dont have an account?
Click [here](#) to create one.

3. •Correctly creating a username, password and matching password confirmation, navigates back to the user login screen
- Creating a username but inputting nothing in the password confirmation, navigates back to the user login screen *Bug*



Invalid Login Information

Username:

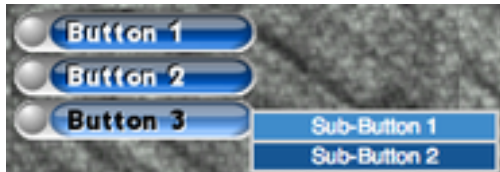
Password:

Dont have an account?
Click [here](#) to create one.

S1B Use Case: Navigating the website

Performed By: Sven Rivera

1. Clicking a link or button that has not yet been currently developed or under construction, resulting in an error *Bug*



Not Found

The requested URL /~gb4/CMSC345/Link 1 was not found on this server.

4. Appendix A – Team Review Sign-off

This document has been collaboratively written by all members the team. Additionally, all team members have reviewed this document and agree on both the content and the format. Any disagreements or concerns are addressed in team comments below.

Team

Name _____ Date _____

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5. Appendix B– Document Contributions

The overall document was created by Sven Rivera and reviewed by other group members.