**Software Testing Plans**

Maverick Applications Corporation:

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1. **Introduction**

This document lays out the testing plans to be brought out by our team when verifying that its implementation matches the requirements laid out in the specification document. The test plans will not include these requirements: R2, R3, R6, R14, R16. As we have discussed, R2 and R14 will not be implemented by our group, the others are to be absent for testing. This leaves the agreed number of 13 requirements to be tested at this stage. To test, we have laid out the testing requirements in section 2, and list the test cases in section 3. The testing report will show the results of our testing.

**2.0 Testing Requirements**

To sufficiently test our program, we have produced testing requirements that will help us cover the requirements laid out in the requirements specification document. We will list the testing requirements in terms of the requirements that they satisfy in the requirements specification document. They will be written as TR#, where TR means testing requirement, and # indicates the requirement it satisfies from the specification document.

TR1: This will require that the user can successfully register with the system by using a UI to sign up. They should be able to enter data in all fields and have this data available in the model the next time they sign in.

TR4: This will require that, during user registration, the user is shown an indication of password strength, they should be required to enter the password twice, and returned to the registration page if the passwords in the two fields did not match. The password should be obscured by dots while being typed, and after 5 failed attempts, they will be locked out for 1 minute.

TR5: This will require that the user can log into the system using a username and password that correspond to the account that they signed up with. This should mean after they sign in, they are greeted with the main page with the posts from the users they follow and their own posts. Anything they do in the system until they sign out will be under the account they signed up with.

TR7: This will require that the user can sign out of the system. This means after they sign out, they cannot interact with the system under their account until they sign back in.

TR8: This will require that the user can see a list of all users registered in the system. This means when they search for a user with an empty string, they are shown a page with a list of all users in the system.

TR9: This will require that the user can search for other users. This means they can enter either the first name, last name, full name, or username of the user they are looking for and after pressing search, are shown a page with a list of users that match their query.

TR10/11: This will require that it is impossible for the user to follow the same user twice or unfollow a stranger. This means when clicking on the follow/unfollow button, the appropriate action is taken depending on the current state of the system.

TR12: This will require that when typing a post, the user is not allowed to type more than 200 characters and is shown how many characters they can still type. This means the character count is correct and the user is completely blocked from typing over the 200 character limit.

TR13: This will require that when viewing the current user’s main page, they are shown a list of posts that they have posted, and the users they are following have posted. Default view is chronological, they can also sort by username and hashtags. When looking at the posts, the user should be able to see the username and timestamp of each post. The system should refresh the page or the user every 30 seconds.

TR15: This will require that the user can include hashtags in their posts. This means that when a user makes a post and includes text following the character ‘#’, each unique string will constitute a new hashtag in the system that is associated with that post.

TR17: This will require that the user can search for posts by the hashtags associated with them. This means when indicating search by hashtag, a list of posts that are associated with the given hashtag will be listed. The user should also be able to search for posts by the indicated username.

TR18: This will require that the user can like a post. This means, after liking a post, the system will contain a number indicating how many times the post has been liked.

**3.0 Test Cases**

**Test 1**

PURPOSE:

Test registering of a user

SETUP:

Get to login page of the site

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

Click ‘Create an account’ Create account page

Valid strings in each of the text boxes strings should show in the text boxes (except password)

Pressing ‘Create account’ Login page

REQUIREMENTS COVERED:

1.01

**Test 2**

PURPOSE:

Test a user logging in to the system

SETUP:

Get to login page of the site, the user to test must have registered.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

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Enter the user’s username and password Username should show in box, password obscured

Press the Login Button home page should be displayed

REQUIREMENTS COVERED:

5

**Test 3**

PURPOSE:

Test the password policy

SETUP:

User should be on create account page. Text should be entered in password field.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

User types in a password Password text is changed to dots. Displays the strength of the password

User types in password twice and hits submit:

Not identical: User is directed back to the registration page and display message that passwords must match

Identical: User is taken to their homepage

REQUIREMENTS COVERED:

4.1-4.3

**Test 4**

PURPOSE:

Test the lockout functionality after 5 attempts.

SETUP:

User is on login page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

User has entered 5th attempt at password and click login Displays message that user has tried too many attempts and will be locked out for 1 minute.

REQUIREMENTS COVERED:

4.4

**Test 5**

PURPOSE:

Test the logout button

SETUP:

User is login into the system.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

User clicks logout button on the header User is directed to login page and is logged out of the system.

REQUIREMENTS COVERED:

7

**Test 6**

PURPOSE:

Test the Users Page which shows a complete list of registered users in the system.

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

User clicks the User page Displays a list of all users registered in the system

REQUIREMENTS COVERED:

8

**Test 7**

PURPOSE:

Test the Hashtag page

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

-------------------------------------------

User searches for a hashtag(#Changes) Displays a list of all posts with that hashtag

User clicks follow on the hashtag page Follow changes to Unfollow

REQUIREMENTS COVERED:

17.1

**Test 8**

PURPOSE:

Test the search functionality

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

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“#” Displays a list of all hashtags

“#Programming” Show all posts containing #Programming

“Stephen Pandorf” return a list of users with similar names

“stevenjp” return a list of users with similar username

REQUIREMENTS COVERED:

9,R17,

**Test 9**

PURPOSE:

Test the follow functionality

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

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Click the follow button Follow changes to Unfollow

Click Unfollow Unfollow changes to Follow

REQUIREMENTS COVERED:

10, 11

**Test 10**

PURPOSE:

Test the posting functionality

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

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“Post 1” Post is displayed on the feed

“This post contains a #hashtag” Post is displayed on the feed with the hashtag

Post over 200 characters User cannot enter any characters after 200, Below post “0 characters remaining” is displayed.

REQUIREMENTS COVERED:

12, 13, 15,

**Test 11**

PURPOSE:

Test sorting of the post feed

SETUP:

Users registered in the system so they can view the page.

INPUTS and EXPECTED OUTPUTS:

inputs expected output

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Selects sort by Username Posts are displayed by Username alphabetically

Selects sort by Hashtag Posts are displayed by Hashtag alphabetically based on the first hashtag appearing in the post

Selects sort by Likes Posts are displayed by Like Count

Selects sort by Date Posts are displayed based on the time created

REQUIREMENTS COVERED:

13