

Group 29 (AKT)

Test Report

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Table 1: **Revision History**

Version	Date	Notes
1.0	01/12/17	Created Document
1.1	04/10/17	Updated content and formatting

1 System Testing

1.1 Functional Requirement Tests Evaluation

1.1.1 User account creation (valid inputs)

Test ID: FRT1-1

Type: Functional, Dynamic, Manual

Initial State: Not authenticated, on home page

Input: Enter valid username, email and password

Output: Email sent to inputted email(user cannot log in yet).

Result: PASS

1.1.2 User account creation (invalid inputs)

Test ID: FRT1-2

Type: Functional, Dynamic, Manual

Initial State: Not authenticated, on home page

Input: Enter invalid or already registered username/email

Output: Error message shown to user. This test generates an exception.

Result: PASS

1.1.3 Verify user account

Test ID: FRT1-3

Type: Functional, Dynamic, Manual

Initial State: After successful user account creation

Input: Open verification link in email

Output: Success message(User can log in)

Result: PASS

1.1.4 Log in

Test ID: FRT1-4

Type: Functional, Dynamic, Manual

Initial State: Prompted to log in

Input: Enter user information from previously created account

Output: Successful or failed authentication

Result: PASS

1.1.5 Log in (unverified)

Test ID: FRT1-5

Type: Functional, Dynamic, Manual

Initial State: User prompted to log in

Input: The user will enter user information from previously created account.

Output: An error message should appear notifying the user to verify their account via their email.

Result: FAIL

1.1.6 Log out

Test ID: FRT1-6

Type: Functional, Dynamic, Manual

Initial State: Authenticated, viewing homepage

Input: Log out button selected

Output: Log in/Sign Up button shown on homepage

Result: PASS

1.1.7 Post creation

Test ID: FRT2-1

Type: Functional, Dynamic, Manual

Initial State: Authenticated, create post modal opened

Input: Test post parameters

Output: Check post shows in subreddit

Result: PASS

1.1.8 Content browsing

Test ID: FRT3-1

Type: Functional, Dynamic, Manual

Initial State: Application active and at home page

Input: View homepage and then select a subreddit

Output: Show posts from a variety of subreddits on homepage, show posts from specific subreddit when selected

Result: PASS

1.1.9 Delete posts**Test ID:** FRT4-1**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send delete request for test post to database**Output:** Test post deleted**Result:** PASS**1.1.10 Delete comment****Test ID:** FRT4-2**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send delete request for test comment to database**Output:** Test comment deleted**Result:** PASS**1.1.11 Create comment****Test ID:** FRT5-1**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send a request to create a test comment to database**Output:** Test comment created**Result:** PASS

1.1.12 Up-voting a post**Test ID:** FRT6-1**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send a request to upvote test post to database**Output:** Test post points increased**Result:** PASS**1.1.13 Down-voting a post****Test ID:** FRT6-2**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send a request to downvote a test post to database**Output:** Test post points decreased**Result:** PASS**1.1.14 Up-voting a comment****Test ID:** FRT6-3**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send a request to upvote test comment to database**Output:** Test comment points increased**Result:** PASS**1.1.15 Down-voting a comment****Test ID:** FRT6-4**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Send a request to downvote a test comment to database**Output:** Test comment points decreased**Result:** PASS

1.1.16 User karma points**Test ID:** FRT6-5**Type:** Structural, Dynamic, Manual**Initial State:** Authenticated**Input:** Upvote/downvote a user's post/comment, select the user's name to open user profile**Output:** User profile modal opened(karma points should have changed)**Result:** PASS**1.1.17 Sorting posts (Home page)****Test ID:** FRT7-1**Type:** Functional, Dynamic, Manual**Initial State:** Authenticated, on home page**Input:** Select all three different sorting options: Hot, New and Top**Output:** All posts sorted according to selection**Result:** PASS**1.1.18 Sorting posts (Subreddit)****Test ID:** FRT7-2**Type:** Functional, Dynamic, Manual**Initial State:** Authenticated, on test subreddit**Input:** Select all three different sorting options: Hot, New and Top**Output:** All posts sorted according to selection**Result:** PASS**1.1.19 View user profile****Test ID:** FRT8-1**Type:** Functional, Dynamic, Manual**Initial State:** Application active**Input:** Select user to open user profile**Output:** User profile modal opened**Result:** PASS

1.1.20 Edit user profile picture**Test ID:** FRT8-2**Type:** Functional, Dynamic, Manual**Initial State:** Application active**Input:** Select update photo and add link url, click "Submit"**Output:** User profile picture changed**Result:** PASS**1.1.21 View subreddit****Test ID:** FRT9-1**Type:** Functional, Dynamic, Manual**Initial State:** Application active**Input:** Select a test subreddit or use subreddit navigation**Output:** Test subreddit displayed**Result:** PASS**1.1.22 Search for existing subreddit****Test ID:** FRT10-1**Type:** Functional, Dynamic, Manual**Initial State:** Application active**Input:** Input a subreddit name**Output:** Show subreddit (if it exists)**Result:** PASS**1.1.23 Search for non-existing subreddit****Test ID:** FRT10-2**Type:** Functional, Dynamic, Manual**Initial State:** Application active**Input:** Input a subreddit name**Output:** No subreddit shown**Result:** PASS

1.1.24 Subreddit creation

Test ID: FRT11-1

Type: Functional, Dynamic, Manual

Initial State: Authenticated, create subreddit modal opened

Input: Test subreddit name and description

Output: Subreddit created

Result: PASS

1.2 Nonfunctional Requirements Tests Evaluation

1.2.1 Portability

Open app on multiple operating systems and platforms

Test ID: NFRT1-1

Type: Non-Functional, Dynamic, Manual

Initial State: Application closed, not running

Input: Navigate to website

Output: Page will load, posts will load if connected to internet

Result: PASS

1.2.2 Performance

Retrieving data within a 5 second response time

Test ID: NFRT2-1

Type: Functional, Dynamic, Manual

Initial State: Application active

Input: Select any button on the application or refreshing the page

Output: Page requested loads within 5 seconds.

Result: PASS

1.2.3 Reliability/Availability

Accessing the application with internet access Test ID: NFRT2-2

Type: Functional, Dynamic, Manual

Initial State: In a location with wifi access or data access

Input: Visit the correct URL of the project hosted

Output: Application loads on device

Result: PASS

1.2.4 Security

Moderator control**Test ID:** NFRT3-1**Type:** Non-Functional, Dynamic, Manual**Initial State:** Logged on to Firebase on AKT development team account**Input:** Navigate to authentication database/posts database**Output:** Specified user accounts/comments/posts deleted**Result:** PASS**User attempts to access another user's account****Test ID:** NFRT3-2**Type:** Non-Functional, Dynamic, Manual**Initial State:** On website, not logged in as user**Input:** Enter another user's email and some password**Output:** Application should present error in credentials message**Result:** PASS

2 Automated Testing

It has been decided that automatic testing is not feasible for this project because of the time constraint and difficulty. Since the system is already nearly fully implemented (as well as many extra features), the team has decided that system tests are enough to verify correctness and functionality. In order to implement automated testing for a project of this scale, testing should be focused on much earlier.

3 Resulting Changes

Test FRT1-5 has failed. Users being able to log in before verifying could be a potentially safety critical problem. A solution was proposed and the system has been updated to fix this problem.

4 Coverage Metrics

Coverage metrics include the number of requirements compared to the number of test cases that cover that specific requirement. The trace-ability matrix mentioned above is well suited to analyze this metric.

Additionally, the number of test cases passed and failed will be a good metric to view the coverage of the test plan.