**Test plan for**

**THREADIT**

***Note that you can refine your testing plan as the project development goes. Keep the change log as follow:***

*ChangeLog*

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Change Date** | **By** | **Description** |
| version number | Date of Change | Name of person who made changes | Description of the changes made |
| 1 | 09/02/2023 | Nathan Poppe | Create initial test plan |

# Introduction

## Scope

Scope defines the features, functional or non-functional requirements of the software that **will be** tested.

Functional Requirements:

1. User Profiles
2. Create and Interact with Threads
3. Organize Threads
4. Home Feed
5. Spool Suggestions (Optional)

Non-Functional Requirements:

1. Load Testing

## Roles and Responsibilities

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Net ID** | **GitHub username** | **Role** |
| Anthony Phung | phunga1 | awphung | Full-Stack |
| Cody Wallbridge | wallbric | CodyWallbridge | Backend, Testing |
| Nathan Poppe | poppen1 | nathanpoppe | Full-Stack, Testing |
| Noah Curoe | curoen | noahc3 | Full-Stack, CI/CD |

# Test Methodology

## Test Levels

**Core Feature 1: User Profiles**

Unit/Integration Test Summary:

* User with unique username and email and valid password can register
* User with registered account and correct credentials can login
* User with non-unique username or email can not register
* User with an invalid length password can not register
* Logged-in user can view user settings
* Logged-in user can customize user settings
* Non-logged-in user can not view or customize user settings

Acceptance Test Summary:

Register/Login:

1. Click Login button on sidebar
2. Click Register tab
3. Enter valid email, username, and password
4. Click Register
5. Ensure “Successfully registered”
6. Click Login button on sidebar
7. Enter the same valid credentials
8. Click Login
9. Ensure logged in successfully and on Home page
10. Click Logout
11. Ensure logged out successfully and still on Home page

Customize Profile:

1. Click Login button on sidebar
2. Enter valid login credentials
3. Click Profile button on sidebar
4. Click Interests tab
5. View interests

**Core Feature 2: Create And Interact With Threads**

Unit/Integration Test Summary:

* Logged-in user can create a thread with a valid title, content, and topic
* Logged-in user can not create a thread with an invalid title, content, or topic
* Non-logged-in user can not create a thread
* Logged-in user can edit and delete a thread they have created
* User can not edit or delete a thread they have not created
* Logged-in user can comment on a thread with a non-empty comment
* Non-logged-in user can not comment on a thread
* Logged-in user can stitch (upvote) or rip (downvote) a thread
* Non-logged-in user can not stitch or rip a thread
* User can share a link to a thread

Acceptance Test Summary:

Create/Edit A Thread:

1. Click Login button on sidebar
2. Enter valid login credentials
3. Search for a spool in the search bar
4. Click on a spool from the dropdown to enter that spool
5. Click the Create Post button at the top of the spool
6. Enter a valid title, content, and topic
7. Click Post
8. Ensure that the spool page includes the new thread
9. Click the thread to view it
10. Click the Edit button
11. Make changes to the thread content
12. Click the Save button
13. Ensure that the changes are saved
14. Click the Delete button
15. Click the confirmation Delete button
16. Ensure that you are redirected to the spool page and the thread is delted

Interact With A Thread:

1. Click Login button on sidebar
2. Enter valid login credentials
3. Click a thread on the home page
4. Stitch the thread and ensure it has a stitch
5. Stitch the thread again to remove the stitch
6. Rip the thread and ensure it has a rip
7. Stitch the thread to remove the rip and add a stitch
8. Click the Share button
9. Ensure the current url is copied to the clipboard
10. Enter a comment in the comment input box
11. Click Comment
12. Ensure that the comment is created
13. Click Reply and enter a comment in the comment input box
14. Click Comment
15. Ensure that the reply is created
16. Click Edit on the original comment and change the comment input box
17. Click Edit to confirm the change
18. Click Delete on the original comment
19. Click the confirmation Delete button
20. Ensure that the comment is deleted

**Core Feature 3: Organize Threads**

Unit/Integration Test Summary:

* Logged-in user can create a spool with a valid name
* Logged-in user can not create a spool with an invalid name
* Non-logged in user can not create a spool
* Logged-in user can spin (subscribe) to a spool
* Non-logged-in user can not spin a spool
* Spool creator can edit a spool
* Spool creator can allow other users to edit that spool

Acceptance Test Summary:

Create/Modify a Spool:

1. Click Login button on sidebar
2. Enter valid login credentials
3. Click Create Spool button on sidebar
4. Enter a valid name and some interests
5. Click Create
6. Ensure that you are redirected to the new spool page
7. Click the Manage Spool button
8. Enter some rules and click Save Rules
9. Enter a username and click Add Moderator
10. Enter a username and click Change Owner
11. Ensure that the rules, moderators and owner have changed

Subscribe to a Spool:

1. Click Login button on sidebar
2. Enter valid login credentials
3. Search for a spool in the search bar
4. Click on a spool from the dropdown to enter that spool
5. Click the Join Spool button to subscribe to the spool
6. Ensure that a new button appears in the sidebar for that spool

**Core feature 4: Home Feed**

Unit/Integration Test Summary:

* Logged-in user can get list of feeds from their spools
* Non-logged-in user can get default list of feeds
* User can sort and filter their feed

Acceptance Test Summary:

Home Feed:

1. Click Home button on sidebar
2. Click the sort by New tab
3. Ensure home feed is sorted by newest threads
4. Click the sort by Hot tab
5. Ensure home feed is sorted by hottest threads
6. Click the sort by Top tab
7. Ensure home feed is sorted by top threads
8. Click the sort by Controversial tab
9. Ensure home feed is sorted by controversial threads
10. Click the sort by Comments tab
11. Ensure home feed is sorted by threads with most comments
12. Search for a spool in the search input
13. Click on the selection to enter that spool
14. Search within that spool for a key word
15. Ensure only threads containing that key word are shown

## Test Completeness

Criterias for Test Completeness:

* 100% code coverage (all the source code should be covered by test cases)
* All manual and atomated test cases should be executed
* No bugs or failed tests should exist at the end of a sprint

# Resource & Environment Needs

## Testing Tools

The following tools are being used in this project for testing:

* Automation: GitHub Actions, Docker
* Bug Tracking: Jira
* Backend Testing: xUnit
* Frontend Testing: TBD
* Load Testing: TBD

## Test Environment

The following software is required:

1. WSL
2. Docker
3. Postgres
4. Node
5. .NET SDK

# Terms/Acronyms

Make a mention of any terms or acronyms used in the project

| TERM/ACRONYM | DEFINITION |
| --- | --- |
| API | Application Program Interface |
| AUT | Application Under Test |
| SDK | Software Development Kit |
| WSL | Windows Subsystem for Linux |