

### ---General Overview---

WelcomeScreen

--> LoginScreen

--> RegisterScreen

--> MainMenuScreen

--> PostScreen

--> SearchForPostsScreen

<----- (on logout)

<----- (on Exit)

--> SelectedPostScreen

<-- (on Exit)

--> PostScreen (If Question)

--> EditPostScreen

--> BadgeScreen

--> TagScreen

<----- (on Exit)

### ---Small User Guide---

This software opens on a welcome screen. This welcomes the user and describes the steps one should take to get further access to the app. Either through logging in if you are an existing user or registering if you are not.

Once you have either registered or logged in to the app it will take you to a main menu screen where you can select a variety of options. The user can then choose to either: (1) Post a question, (2) Search for posts (3) Logout or (4) Exit the program.

(1) On selecting this option the program prompts the user for both a title and a body for the post giving a title for the post, giving a body for the post.

After giving both the application goes to another screen which displays your potential post as it will be seen by other users to provide a preview. The user can then either confirm or decline the posting of said post. If the user confirms it will be posted. If the user declines it will not be posted.

(2) On selecting this option the program prompts the user for key words delimited by commas. The user can then provide any number of search terms separated by commas.

After submitting the keywords the program flips to another screen which displays five posts and prompts the user to select one of them or navigate the pages of returned posts by typing either n(ext) or p(revious). Upon submitting an input the program checks the input and may display (an) error message(s). The program then prompts the user to press enter to continue (so they can read potential error messages).

If the user selects a post the program will switch to a screen which displays the post and gives the user a multitude of options: (2.1) Reply to the post, (2.2) Upvote the post, (2.3) Exit

(2.1) On selecting this option the user is taken to a screen similar to (1) but the post you are replying to is displayed. This is how one can post answers to questions by giving both a title and body. Upon entering a title and body one can again either confirm or decline the posting of the answer. The user is then taken to the post menu where the post that was replied to is again displayed.

(2.2) On selecting this option the post will either receive an upvote or the user will be told that they have already voted on the post. In both cases the user is notified and asked to press enter to continue.

(2.3) On selecting this option the user is taken back to the main menu

(3) On selecting this option the user is taken back to the welcome screen

(4) On selecting this option the program exits

At most points in the program the user can type exit or back to leave the current screen.

### ---Detailed Design---

Badge:

Depends on:

sqlite3, PostQuery, (Dependencies of Dependencies)

CheckInput:

Depends on:

N/A

LoginUser:

Depends on:

sqlite3, (Dependencies of Dependencies)

MarkAccepted:

Depends on:

sqlite3, Terminal, PostQuery, (Dependencies of Dependencies)

Menu:

Depends on:

Terminal, (Dependencies of Dependencies)

Post:

Depends on:

random, string, sqlite3, (Dependencies of Dependencies)

PostEdit:

Depends on:

sqlite3, (Dependencies of Dependencies)

PostMenuScreen:

Depends on:

Menu, (Dependencies of Dependencies)

PostQuery:

Depends on:

N/A

PostScreen:

Depends on:

Terminal, Post, (Dependencies of Dependencies)

RegisterUser:

Depends on:

sqlite3, CheckInput, (Dependencies of Dependencies)

SearchForPosts:

Depends on:

sqlite3, PostQuery, (Dependencies of Dependencies)

SelectedPostScreen:

Depends on:

Menu, PostQuery, Terminal, (Dependancies of Dependancies)

Tag:

Depends on:

sqlite3, (Dependancies of Dependancies)

TagScreen:

Depends on:

Tag, CheckInput, PostQuery, Terminal, (Dependancies of Dependancies)

Terminal:

Depends on:

os, shutil, sys, (Dependancies of Dependancies)

Vote:

Depends on:

sqlite3, (Dependancies of Dependancies)

WelcomeScreen:

Depends on:

Terminal, (Dependancies of Dependancies)

WelcomeScreen

Navigates to:

LoginScreen, RegisterScreen

LoginScreen

Depends on:

LoginUser, Terminal, (Dependancies of Dependancies)

Navigates to:

MainMenuScreen

Sends data to:

LoginUser

RegisterScreen

Depends on:

RegisterUser, CheckInput, Terminal, (Dependancies of Dependancies)

Navigates to:

MainMenuScreen

Sends data to:

RegisterUser

MainMenuScreen:

Depends on:

Menu, (Dependancies of Dependancies)

Navigates to:

PostScreen, SearchForPostsScreen

PostScreen:

Navigates to:

MainMenuScreen

Sends Data to:

Post

SearchForPostsScreen:

Navigates to:

MainMenuScreen, SelectedPostScreen, PostScreen

Sends Data to:

SearchForPosts, SelectedPostScreen, PostScreen

SelectedPostScreen:

Navigates to:

TagScreen, BadgeScreen, PostEditScreen, MainMenuScreen

Sends Data to:

TagScreen, BadgeScreen, PostEditScreen, Vote, MarkAccepted

TagScreen:

Navigates to:

SelectedPostScreen

Sends Data to:

Tag

BadgeScreen:

Depends on:

CheckInput, Terminal, PostQuery, Badge, (Dependancies of Dependancies)

Navigates to:

SelectedPostScreen

Sends Data to:

Badge

PostEditScreen:

Depends on:

CheckInput, PostEdit, PostQuery, Terminal, (Dependancies of Dependancies)

Navigates to:

SelectedPostScreen

SendsDataTo:

EditPost

main

Depends on:

All other modules in some manner

---Testing Strategy---

We tested individual components heavily with a series of unit tests.

We then compiled the components into a single application and ran a smaller series of tests to ensure that the components were working well with one another.

---Group Work Breakdown---

Chase Warwick:

Modules: Badge, BadgeScreen, CheckInput, MainMenuScreen, Menu, PostMenuScreen, PostQuery, PostScreen, RegisterScreen, RegisterUser, SearchForPosts, SearchForPostsScreen, SelectedPostScreen, Tag, TagScreen, Terminal, WelcomeScreen

General Overview and readme

Cameron Matthew:

Modules: MarkAccepted, LoginScreen, LoginUser, Post, PostEdit, PostEditScreen

Vote

Cameron also compiled all of the modules into the final product.

Both:

Debugging fell on both of us to test our respective modules although Cameron noted a number of bugs in Chase's code