```
---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 seperated 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 recieve 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, (Dependancies of Dependancies)
     CheckInput:
           Depends on:
                 N/A
     LoginUser:
           Depends on:
                 sqlite3, (Dependancies of Dependancies)
     MarkAccepted:
           Depends on:
                 sqlite3, Terminal, PostQuery, (Dependancies of Dependancies)
     Menu:
           Depends on:
                 Terminal, (Dependancies of Dependancies)
     Post:
           Depends on:
                 random, string, sqlite3, (Dependancies of Dependancies)
     PostEdit:
           Depends on:
                 sqlite3, PostQuery, (Dependancies of Dependancies)
     PostMenuScreen:
           Depends on:
                 Menu, (Dependancies of Dependancies)
     PostQuery:
           Depends on:
                 N/A
     PostScreen:
           Depends on:
                 Terminal, Post, (Dependancies of Dependancies)
     RegisterUser:
           Depends on:
                 sqlite3, CheckInput, (Dependancies of Dependancies)
     SearchForPosts:
           Depends on:
                 sqlite3, PostQuery, (Dependancies of Dependancies)
     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)
            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