

**Provide the final user flow of the system. List the commands used to interact with the system.**

\* Administrator id: admin, password: admin

\* All content or description input boxes are text areas, so it can be bigger if you drag the right bottom angle

\* User can always search forum or navigate between pages by clicking buttons in navigation bar

### **Commands:**

#### **In home page (<http://localhost:8080/Community/home>)**

1. Click Login in navigation bar to navigate to login page.
2. Click Sign up in navigation bar to navigate to registration page.
3. After login, click your username in navigation bar to navigate to user profile page.
4. Type anything in search bar to find related forums. (Click go or press enter)
5. Click "Create Forum" button to create new forum or new sub forum. (you will be navigated to the new forum after creating)
6. Click any Searched forum to navigate to it.
7. After login, click Logout in navigation bar to log out and navigate to login page

#### **In Forum page (example: <http://localhost:8080/Community/Forum?id=1>)**

1. You can read any threads in this forum on this forum page
2. You can read the related information about the forum on this forum page
3. Click any thread in the middle thread list to navigate to the thread page
4. Click any sub forum in the sub forum list to navigate to the sub forum
5. After login, Click Create Sub Forum to create a new sub forum of current forum (guest will be navigated to login page)
6. After login, user can post new thread (with first post) on the bottom of the page, (guest will be navigated to login page)
7. Owner/Creator is able to edit the forum by clicking edit button (others can't see it)
8. Administrator is able to delete the forum by clicking delete button (others can't see it)
9. After login, user can add/remove this forum to/from his/her favorite forums list in profile page.

#### **Thread page (example: <http://localhost:8080/Community/thread?id=1>)**

1. You can read all posts in this thread on this thread page.
2. You can read all related information about this thread on this thread page.

3. After login, click submit to post new post (guest will be navigated to login page) (trigger will update the “last post time” of user and the “last update time” of thread and forum. Also, user’s last posted threads table will be updated)
4. Writer can edit his/her own posts. The edited time will be shown after editing. (It won’t show edited time if no editing) (others can’t see the button to edit)
5. Administrator is able to delete the post by clicking delete button (others can’t see it)
6. After all posts deleted, the thread will be dropped automatically by trigger.

**Profile page (example:**

**<http://localhost:8080/Community/profile?user=Zhenhuan>)**

1. You can read all related information about this user on this profile page
2. Using user search bar to search other users’ profiles
3. Edit your own profile by clicking edit button. (others can’t see it)
4. Administrator is able to ban the user by clicking ban button (others can’t see it)
5. You will be able to see user’s past posts in the posted thread list
6. You will be able to view user’s favorite forums in favorite forum list

**Error Page (example: <http://localhost:8080/Community/thread?id=CS3200>)**

1. If user tried to change URL to navigate to non-existing page, he/she will be navigated to the 404 error page.
2. Click take home page button, user can be redirect to home page.

## **Provide a lessons learned section & Future work**

We learned so much in this project. For the back end, we learned how to create, manage and connect a database for an application. We found triggers, functions and procedures are helpful for us. Also, we learned how to make it organized, efficient and functional. On the other hand of front end, we learned how to build web application with JSP and java servlet. Those are all new things for us. Fortunately, we were able to make all functions work correctly and efficiently. However, there are some features are not finished, including message and friend between users and creating new administrator account. We think message and friend system will be so cool for this application, because users sometimes wish to directly touch with others without interrupts. Also, being able to add new administrator account in front end can make the management easier for non-technical managers. Those features are not required but really cool for our system, so we will keep working on it after this course. Also, we are thinking to add more functions such as email verification after login, user image icon and assigning forum owner (for administrator). We will keep working on them.

## ERD diagram

(The ERD diagram has some less functions than our real projects. Our real project is much better. It has more functions, such as favorite forum, user profile page and administrator's powers, etc. You will find out more. The ERD diagram only covers the basic functions of a user.)

