**Technical Specifications**

This project is a web based forums community using Java servlet, JSP, CSS, JavaScript and MySQL database. It will use AWS, Tomcat v8.0 as server to deploy the website. Moreover, JDBC and connector/J are used to connect the database server and the application.

**Install instruction**

1. The project is built by Eclipse -- Java EE, so Eclipse -- Java EE is highly recommanded. Link: http://www.eclipse.org/downloads/packages/eclipse-ide-java-ee-developers/marsr (latest JDK and JRE are needed to run it, Link: http://www.oracle.com/technetwork/java/javase/downloads/index.html)

2. Tomcat 8.0 or 7.0 is needed to run the code, please download and set it up. (Link: http://tomcat.apache.org/download-80.cgi)

3. MySQL server (and workbench) are neccessary, please download and set it up (Link: http://dev.mysql.com/downloads/installer/)

3. Extract the project zip file and add the project into Eclipse workspace.

4. Build path to add external library, mysql-connector-java-5.1.38-bin.jar. (It is prepared in the folder Community/WebContent/WEB-INF/lib)

5. Check the Mysql information in Community/Java Resources/src/edu.neu.ccs.community/DataAccessObject.java file. The default user name and password are "root".

6. Run the project with Tomcat server.

7. The home page is defaulted at: localhost:8080/Community/home

8. Have fun with our forums community!

\* Here is the online tutorial video we used to set up everything. If you meet any problem, I hope this is helpful. Also, you can always email us to ask any questions, We will response ASAP.

Tutorial Video: https://www.youtube.com/watch?v=LcTi546vj\_A (it only takes you few minuts to set it up, please skip the useless parts of it).

**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.

**Requirements**

1. User is able to create new objects in the database.

2. User is able to delete data from database.

3. User is able to read data from database.

4. User is able to update data in the database.

5. Completeness of operations provided to the user.

6. Additional front end functionality such as website from a 2 person.

7. Overly complicated translations from user operations to database

operations

\* Feel free to create new user account to test it

\* There is one administrator account in system, try it out. It has more functions, including delete forum, delete thread, post or ban user. (The banned user will be marked as banned but not directly be deleted.)

admin username: admin, password: admin.

\*We prepared Animal forum and its related forums, threads, posts to help you test.

\*Prepared User. Username: Zhenhuan, Password: password

Enjoy!