

SW Engineering CSC648 - 848 Summer 2021

Milestone 3

[UniTea](#)

Team 04

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History Table

Milestone / Version	Date
M3V2	7/29/2021
M3V1	7/22/2021
M2V2	07/20/2021
M2V1	07/06/2021
M1V2	06/26/2021
M1V1	06/14/2021

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Section 1: Data Definitions

1. **General User:** A user who can browse UniTea to find current study listings. Their only privilege is **browsing** study group listings. A general user shall **register** to gain more privileges given to registered users.
 - 1.1. **Registration:** A general user shall be able to create an account.
 - 1.2. **Browse:** Read study listings posted by Registered Users on UniTea.
2. **Registered User:** A user who has more privilege than a General User. This user will have a registered account with UniTea, and in addition to browsing, they can **create study groups** and join other **study groups**. If a section does not exist, they can **request a section creation** which will then be approved or denied by an Administrative User. To use these privileges they will need to **log in**. They will be able to **delete** accounts they created.
 - 2.1. **Login to UniTea:** Needs to provide their account information.
 - 2.1.1. **Email:** Needs to provide their email to log in.
 - 2.1.2. **Password:** Needs to provide their password to log in.
 - 2.2. **Request A Section Creation:** If a particular subject or field of study does not already exist within the UniTea forums, any Registered User can use the contact form to request an Administrative User to create it.
 - 2.3. **Create Study Group:** Create a group on UniTea in the corresponding academic section. Each study group will have a unique name with a maximum length of 100 characters and a description with a maximum length of 5000 characters
 - 2.4. **Join Study Group:** Join a study group that another Registered User created.
 - 2.5. **Study Group:** The Study groups are searchable through the search bar or the study group listing. General study groups have a limit of 20 users.
 - 2.5.1. **Delete Study Group:** Only the creator of the group or an Admin may delete the study group.
 - 2.6. **Delete Account:** Registered User needs to be logged in to delete their account.
3. **Educator User:** A user who is an educator or an educator's assistance. They will have the same privileges as a registered user. They can create a study group known as the **Educators Study Group** and which are large capacity study groups. To use these privileges they will need to log in.
 - 3.1. **Educators Study Group:** Educator study groups have a limit of 50 users, but can be raised with admin approval.

- 3.1.1. **Delete Study Group:** Only the creator of the group or an Admin may delete the study group.
- 4. **Administrative User:** A superuser who has the most privileges. They can **delete study listings** that violate the **TOS**. They can also **ban users** who violate the TOS. To use these privileges they will need to log in.
 - 4.1. **Delete Study Listings:** Remove study listings from public view. When listings are deleted, they will no longer be accessible by General or Registered Users.
 - 4.2. **TOS (Terms of Service):** A list of rules every Registered User must read and agree with to create an account.
 - 4.3. **Ban Users:** Remove a registered user access from UniTea if they have been found to be violating the TOS agreement.
- 5. **Account:** Every registered user will have an account. Unregistered users can create accounts and will become Registered Users. Each Registered User has their own **profile** page. Both general users and registered users are able to view profiles. Accounts are required in order to create study listings and communicate with other Registered Users.
 - 5.1. **Account Contains:**
 - 5.1.1. **Username:** Needs a unique username to create an account. Username must be alphanumeric characters and be unique. Usernames have a maximum length of 40 characters
 - 5.1.2. **Email:** Needs a unique email address to create an account, there cannot be more than one account for each email. Emails must be unique.
 - 5.1.3. **Password:** Needs a personalized password to create an account. Passwords must contain at least one lowercase, one uppercase, numeric characters, and special characters. Passwords have a minimum length of 8 characters and a maximum length of 100 characters.
 - 5.1.4. **Profile:** Short biography with a maximum of 1000 characters. Registered users can edit this anytime after creating an account.
 - 5.1.5. **Avatar:** Registered users can add their profile images and change them anytime after creating an account.
 - 5.1.6. **Accept Terms of Use:** Must agree and accept the terms of use to create an account.
- 6. **Forum:** A forum allows registered users to communicate with each other. The forum is divided into many sections and each section can contain **posts**. Only registered users can

write a post, while both unregistered and registered users can read the contents. Registered users can also make **comments** on posts.

- 6.1. **Forum Section:** The forum is split up into many sections, each section corresponds to a course of study. If a registered user cannot find a section that pertains to a course of study, they can request that an Administrative User create a section for that course of study.
- 6.2. **Post Types:** There are two subsections in the forums for the two types of text posts, one for study group listings, and general listings. Each post has a character limit of 5000 characters.
 - 6.2.1. **Study Group Listing:** A forum post that contains updated information about a Study Group that a Registered User has created. These are created as a part of creating a Study Group.
 - 6.2.2. **General Listing:** A forum post that is relevant to the section of the forum. It can be about anything the Registered User wants to write about as long as it was created with good judgment, and it does not Violate the TOS. Content that other Registered Users share within a post can be removed by an Administrative User if posted with poor judgment or violates the TOS.
- 6.3. **Comment:** A written response or note that a registered user may wish to leave for others to see, whether it be a response to a study group posting or a forum posting. Each comment has a character limit of 5000 characters.

Section 2: Functional Requirements

Priority 1:

General Users:

General:

1. General users shall be able to access the Registration page.
2. General users shall be able to access the Login page.
3. General users shall be able to create an account and become a Registered User.
4. General users shall be able to access the About Us page.
5. General users shall be able to access the Contact page.
6. General users shall be able to access the Home page.
7. General users shall be able to search for public study groups.
8. General users shall be able to browse through study group listings.

Registered Users:

General:

9. Registered users shall inherit all privileges of the General User.
10. Registered users shall be able to upload profile pictures.
11. Registered users shall be able to view other users' profiles.
12. Registered users shall be able to join public study groups.
13. Registered users shall be able to create public study groups.
14. Registered users shall be able to edit information on their Profile Page.
15. Registered users shall be able to change their password.
16. Registered users shall be able to log in.
17. Registered users shall be able to log out.
18. Registered users shall be able to delete their account.

Forum:

19. Registered users shall be able to create posts.
20. Registered users shall be able to add a title to the post.
21. Registered users shall be able to add a description to the post.
22. Registered users shall be able to comment on posts.
23. Registered users shall be able to delete their posts.
24. Registered users shall be able to edit their posts.
25. Registered users shall be able to edit their comments.

Host:

- 26. Registered users that create a group shall have the status of host.
- 27. Hosts shall be able to rename the group.
- 28. Hosts shall be able to delete study groups that they have created.

Group Members:

- 29. Registered users that join a group shall have the status of a group member.

Study Groups:

- 30. Registered users shall be able to create study groups, which can hold up to 20 students.
- 31. Registered users shall be able to join study groups.
- 32. Registered users shall be able to leave study groups.

Administrative User:

General:

- 33. Administrative users shall inherit all privileges from other users.
- 34. Administrative users shall be able to reset passwords.
- 35. Administrative users shall be able to change users' usernames.
- 36. Administrative users shall be able to delete any study groups.
- 37. Administrative users shall be able to delete any comments.

General:

Forum:

- 38. Forum shall display the titles of the posts and short descriptions.
- 39. Forum shall display posts.
- 40. Forum posts shall display comments.
- 41. Forum shall display usernames of users that post/comment.
- 42. Forum posts shall display the content of the discussion.

Study Group:

- 43. Study group shall be listed in a bulletin displaying the group name.
- 44. Study group shall display the host's role.
- 45. Study group shall display the subject (and major, if applicable).
- 46. Study group shall display the host username.
- 47. Study group shall display the usernames of group members to other group members.
- 48. Study group shall display the number of users in the group.
- 49. Study group shall display a group forum.

Website:

- 50. Website shall have a Registration page.
- 51. Website shall have a Login page.
- 52. Website shall have an About Us page.
- 53. Website shall have a Contact page.
- 54. Website shall have a Users Guidelines page.
- 55. Website shall prompt users to accept the terms and conditions.
- 56. Website shall have the UniTea logo on each page.
- 57. Website shall display the study groups a user has joined.

Priority 2:

Educator User:

General:

- 58. Educator users shall inherit the same privileges as registered users.

Study Groups:

- 59. Educators shall be able to create an 'Educators Study Group', which holds up to 50 students.

Registered Users:

General:

- 60. Registered users shall be able to block users.
- 61. Registered users shall be able to create private study groups.
- 62. Registered users shall be able to join private study groups.
- 63. Registered users shall be able to search private study groups.
- 64. Registered users shall be able to access the Resource Page.
- 65. Registered users shall be able to view friends in study groups.
- 66. Registered users shall be able to report other users for misconduct.

Friends:

- 67. Registered users shall be able to add friends.
- 68. Registered users shall be able to remove friends.
- 69. Registered users shall be able to directly message a friend.
- 70. Registered users shall be able to see a list of added friends.
- 71. Registered users shall be able to see friends' study groups.

Forum:

- 72. Registered users shall be able to flag an inappropriate post.

73. Registered users shall be able to bookmark posts.

Hosts:

74. Hosts shall be able to change the group to private or public.

75. Hosts shall be able to set a password for the group.

76. Hosts shall be able to add a calendar.

77. Hosts shall be able to add events to the calendar.

78. Hosts shall be able to enable members to invite users.

79. Hosts shall be able to request a merge with a target group.

80. Hosts shall be able to accept merge requests.

81. Hosts shall be able to reject merge requests.

Group Members:

82. Group members shall be able to join public groups.

83. Group members shall be able to join private groups.

84. Group members shall be able to view the group calendar.

85. Group members shall be able to invite registered and general users to join groups.

Administrative User:

General:

86. Administrative users shall be able to add new posts to the Resource page.

87. Administrative users shall be able to block any users.

88. Administrative users shall be able to permanently delete any users.

89. Administrative users shall be able to ban any users.

90. Administrative users shall be able to leave messages for reasons of the ban.

91. Administrative users shall be able to unban any users.

92. Administrative users shall be able to join any study group.

93. Administrative users shall be able to increase any study group's capacity.

General:

Forum:

94. Forum posts shall display the up/downvotes.

Study Group:

95. Study group shall display the status (Public or Private).

96. Study group shall display a group events tab.

Website:

97. Website shall prompt the users to join a study group.

98. Website shall display a page explaining how to contact the developers.

Priority 3:

Messaging:

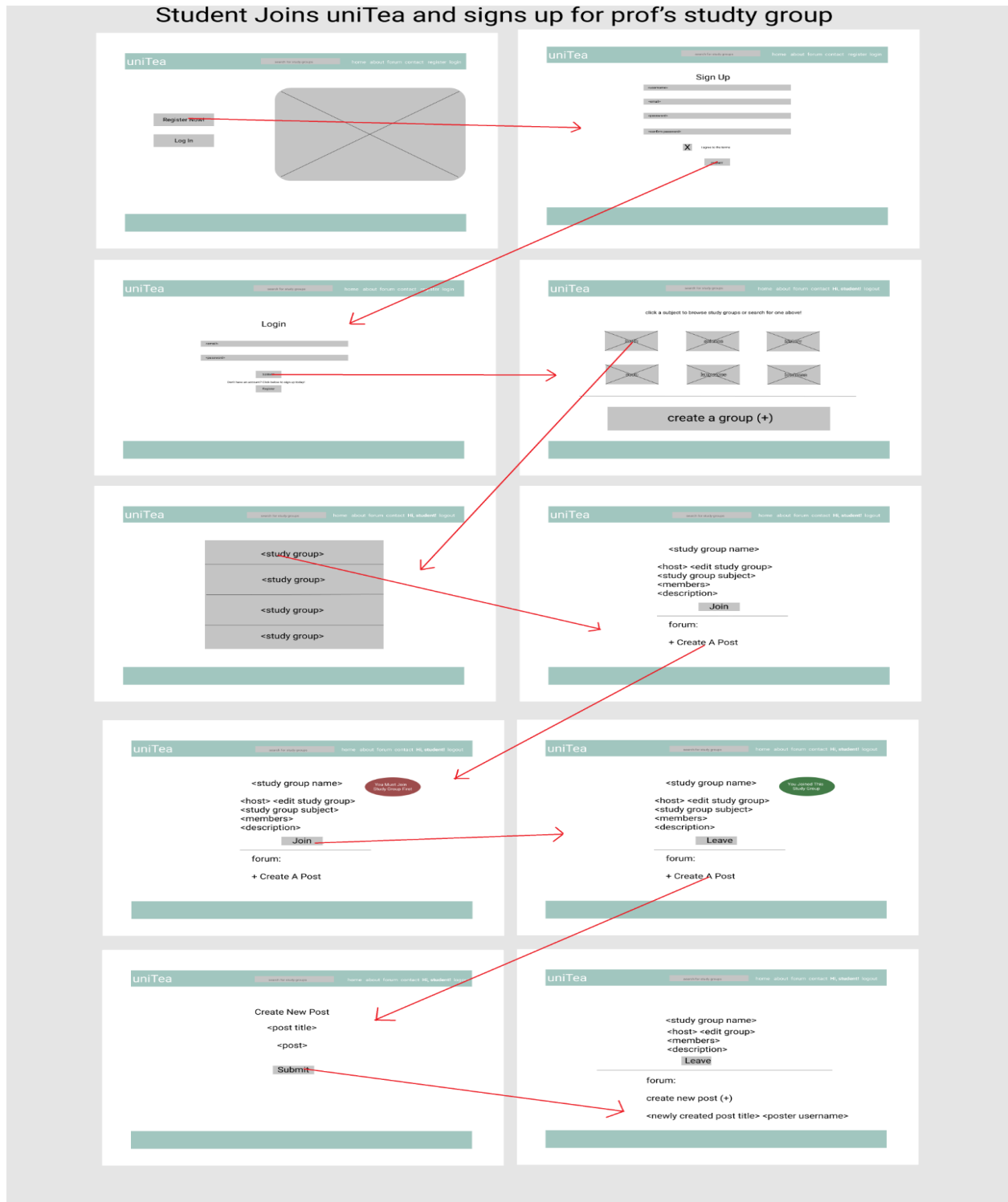
99. Registered users shall be able to send stickers.

Website:

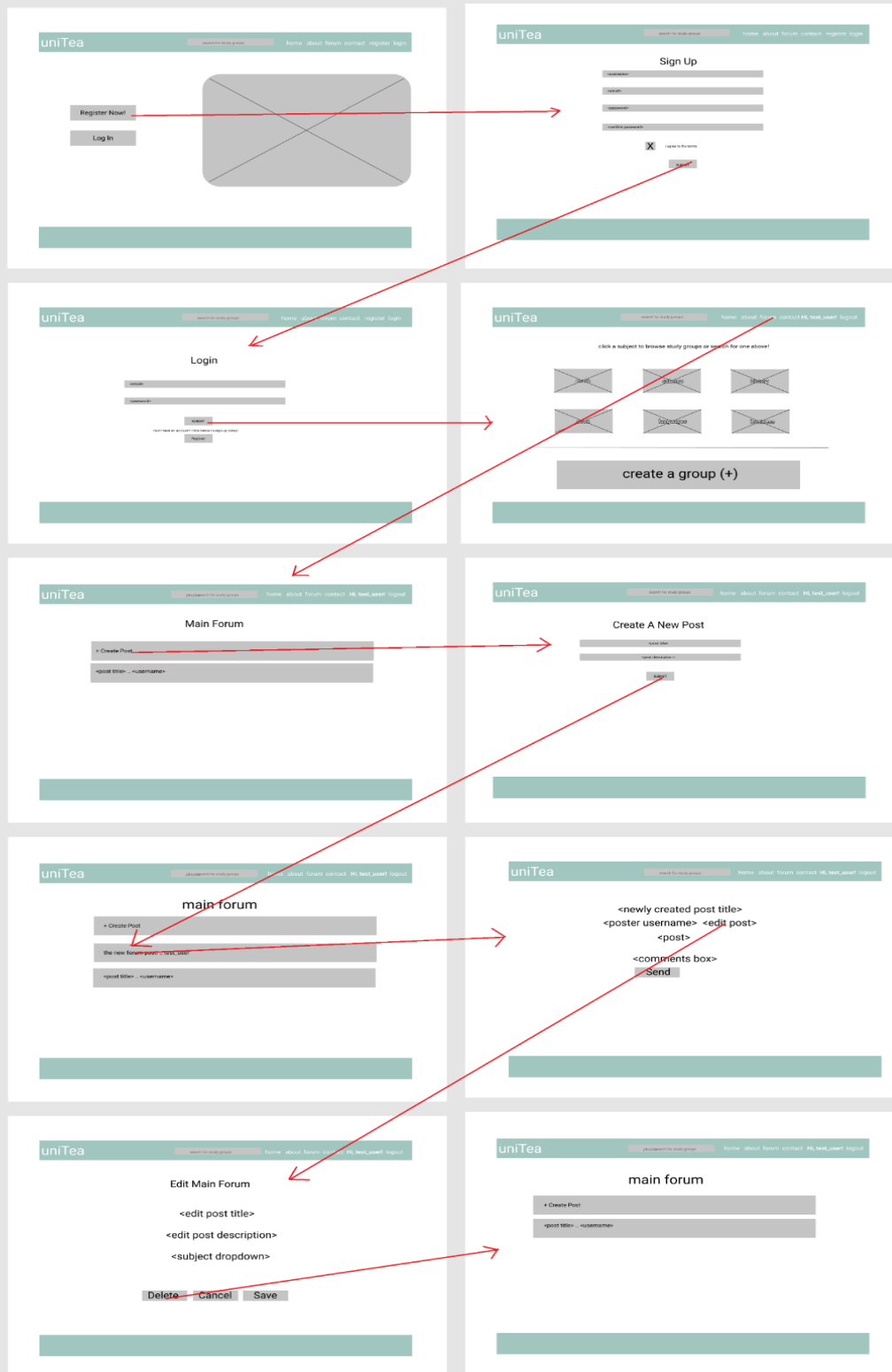
- 100. Website shall recommend users study groups that they will be interested in.
- 101. Website shall analyze the activity of each study group and provide admin users the information.
- 102. Website shall suggest what the host users should do to grow their study groups.
- 103. Website shall allow users to donate to UniTea.
- 104. Website shall have a Resource page.

Section 3: Wireframes

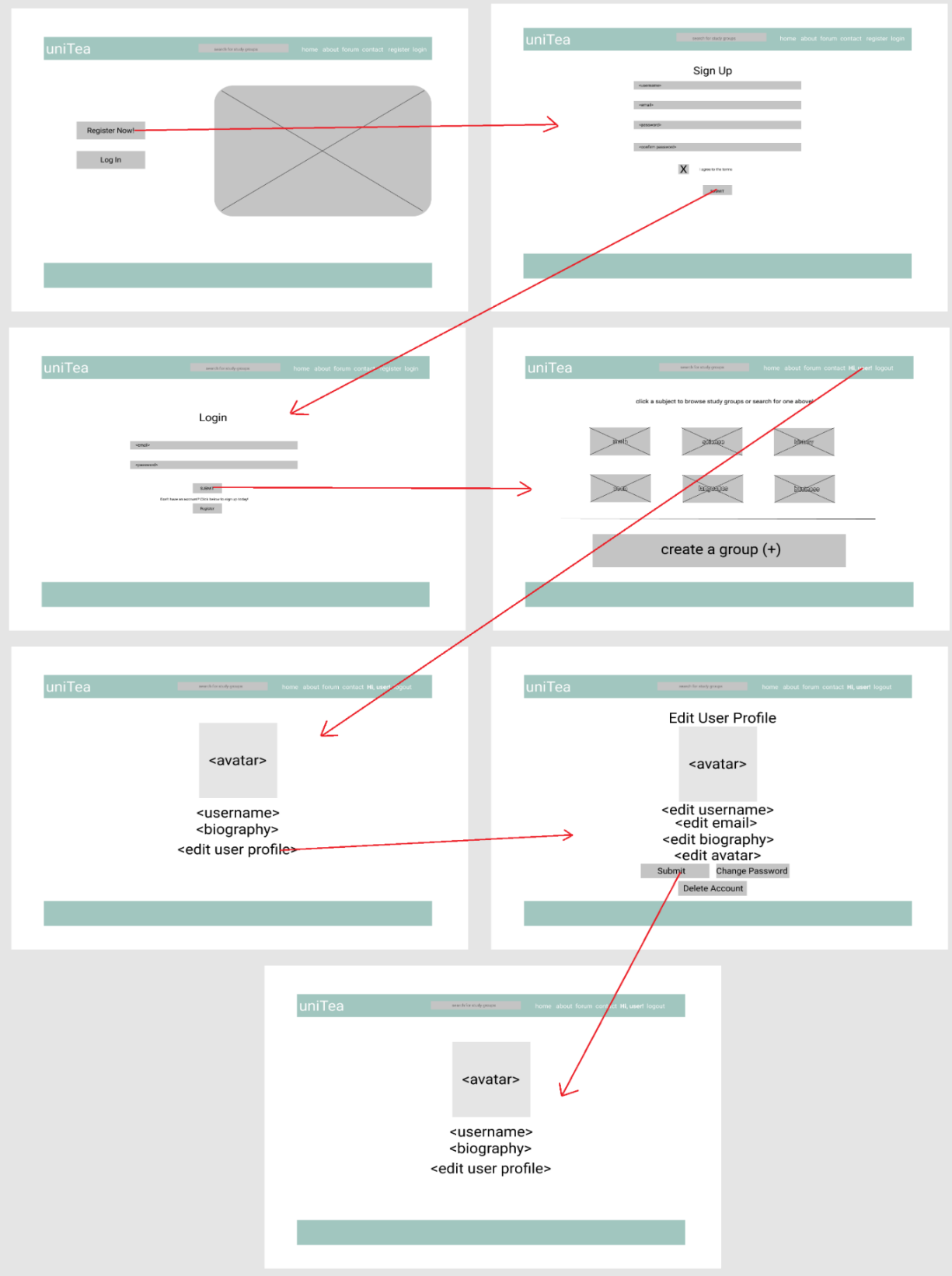
Student Joins uniTea and signs up for prof's study group



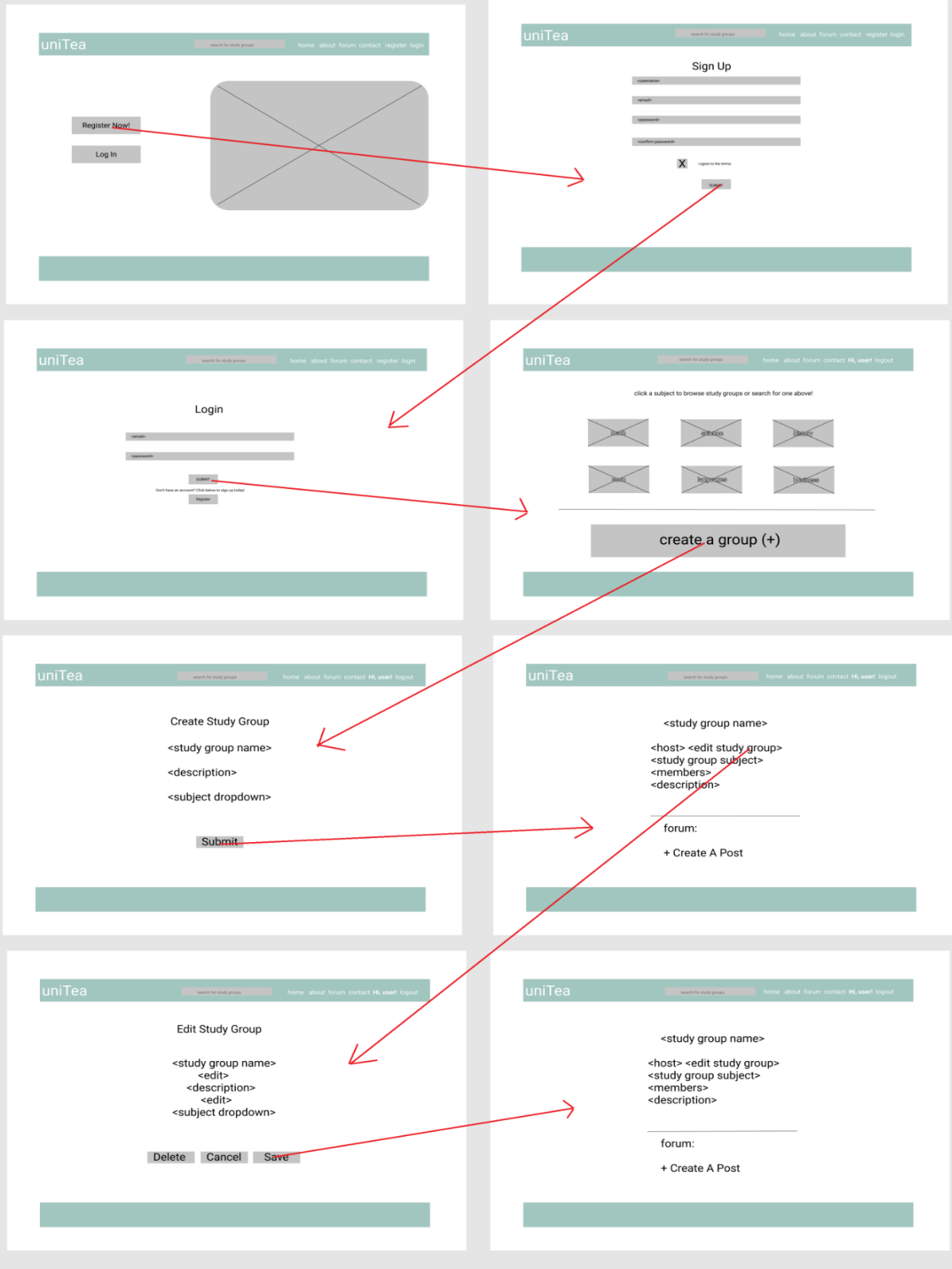
User Makes & Deletes General Forum Post



User Edits Profile



User Edits Study Group

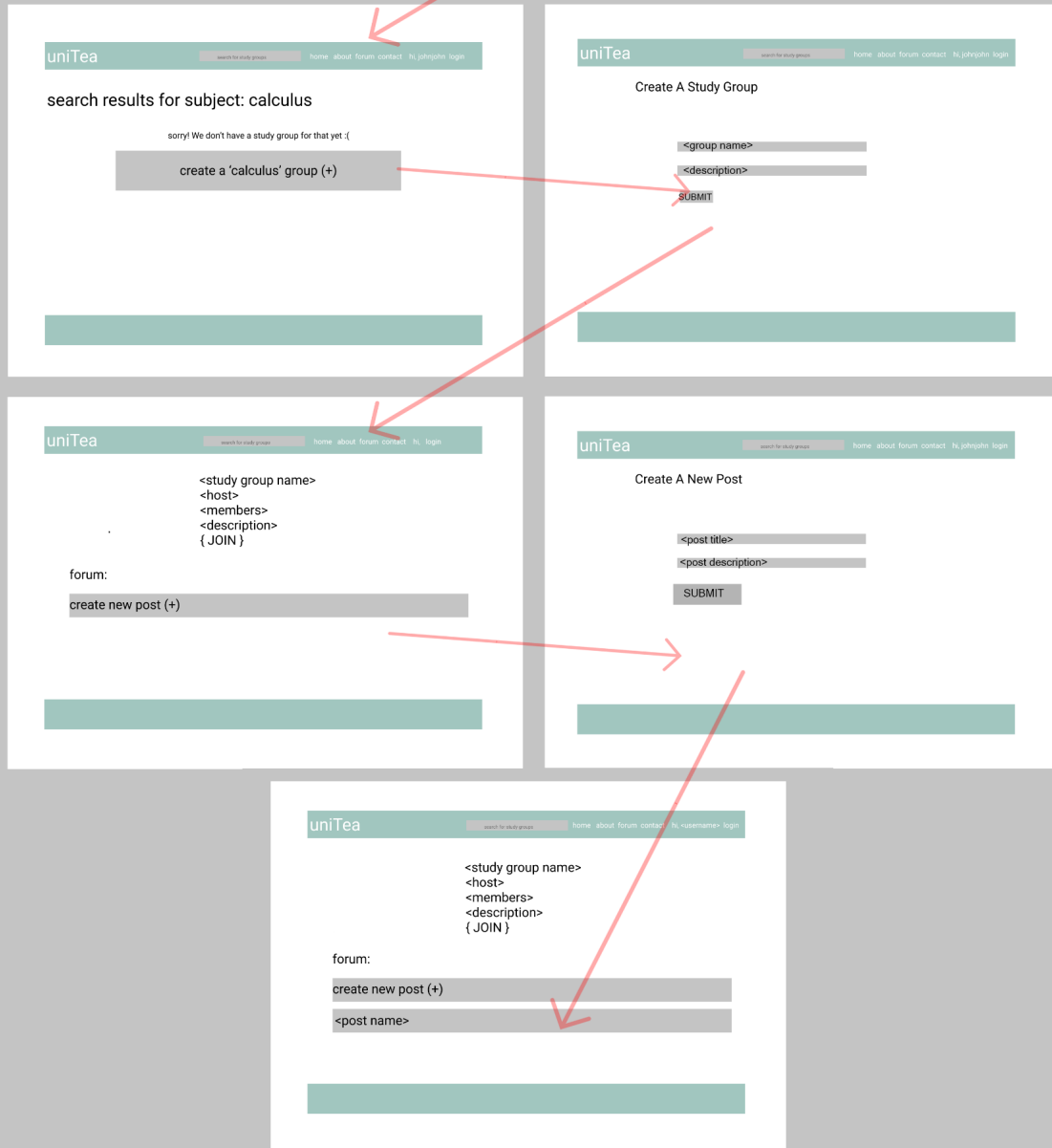


unregistered user signs up and creates a group and group post

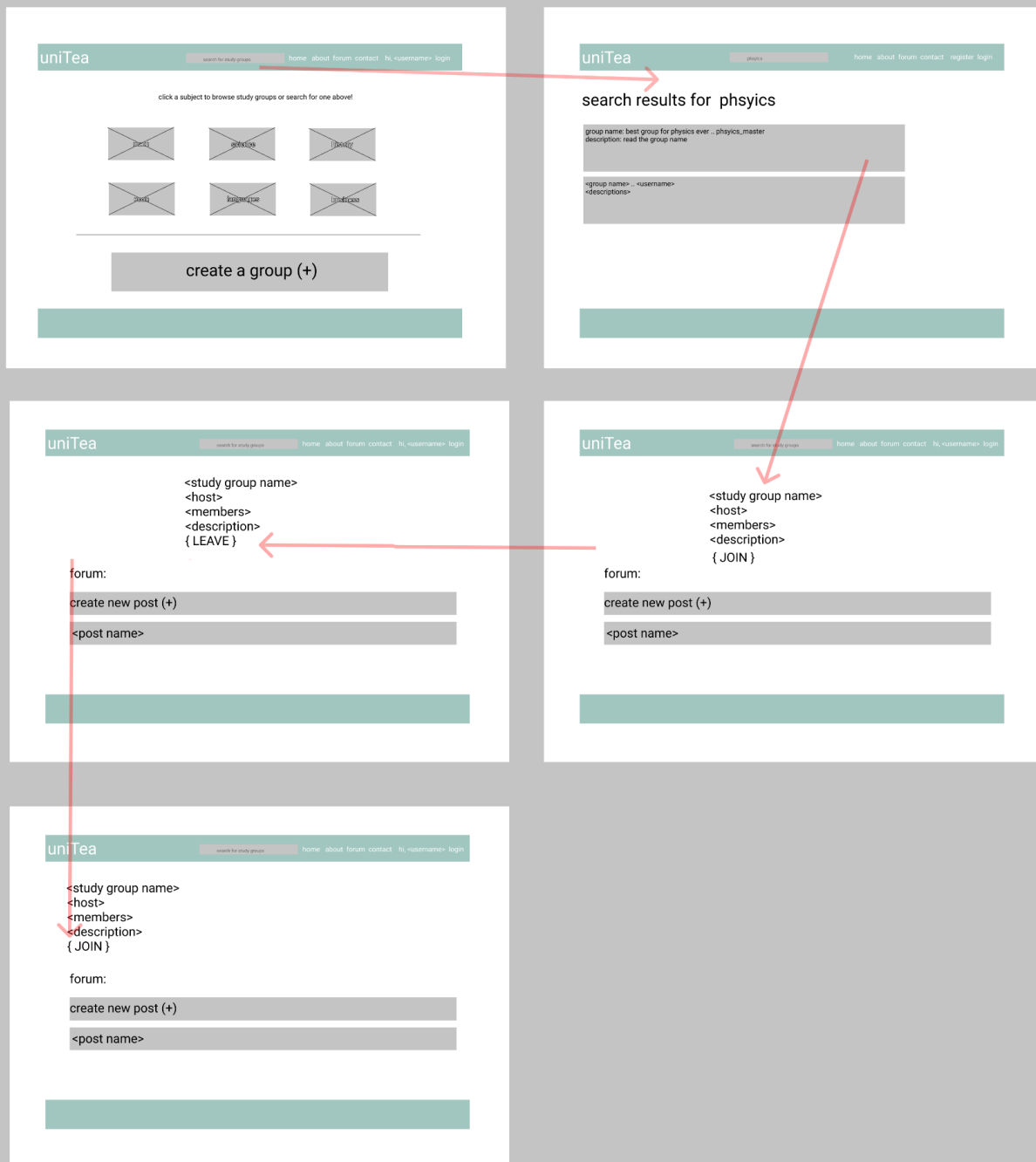


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unregistered user signs up and creates a group and group post (cont.)



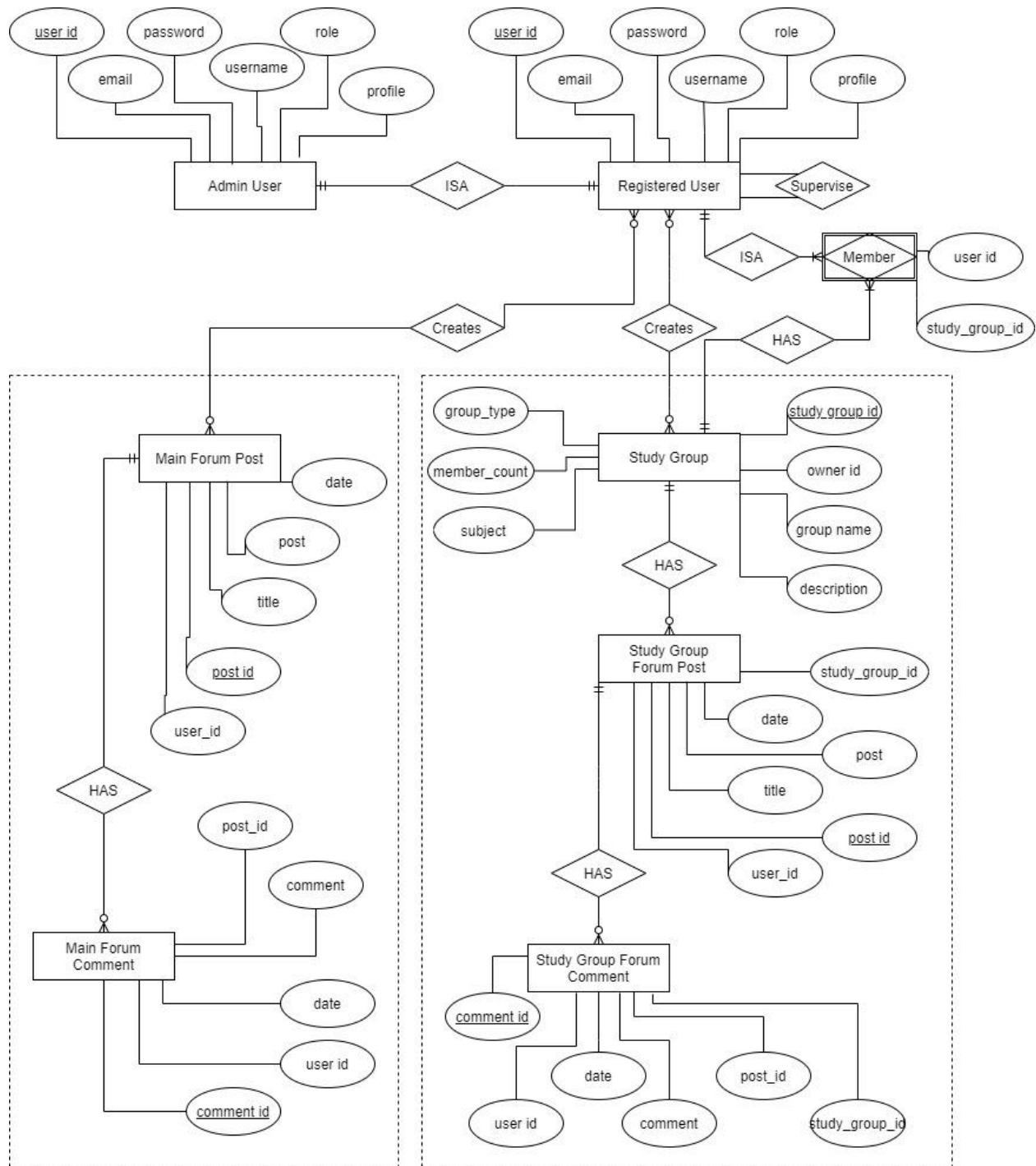
registered user accidentally joins group but leaves



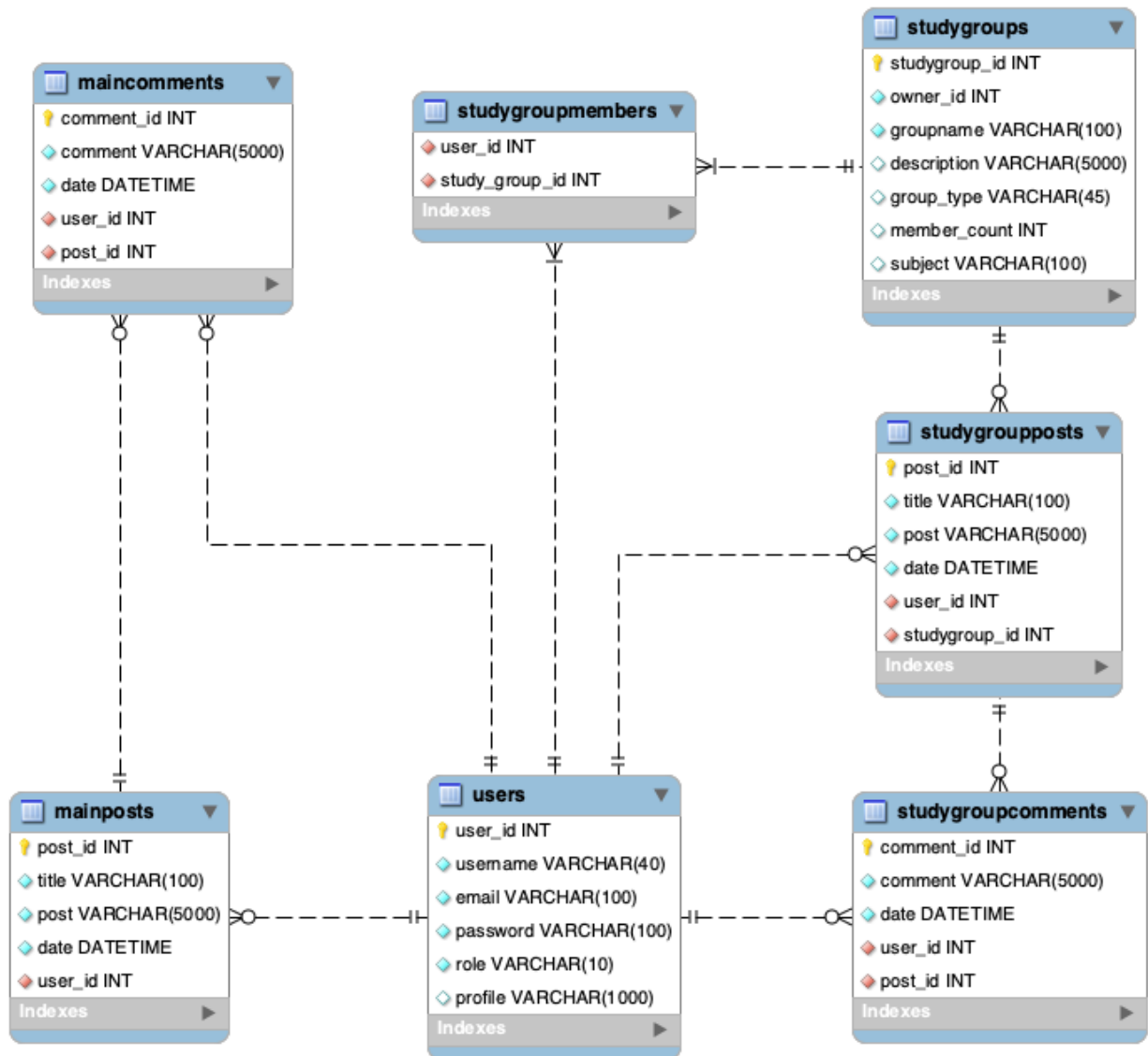
unregistered user wants to join a study group



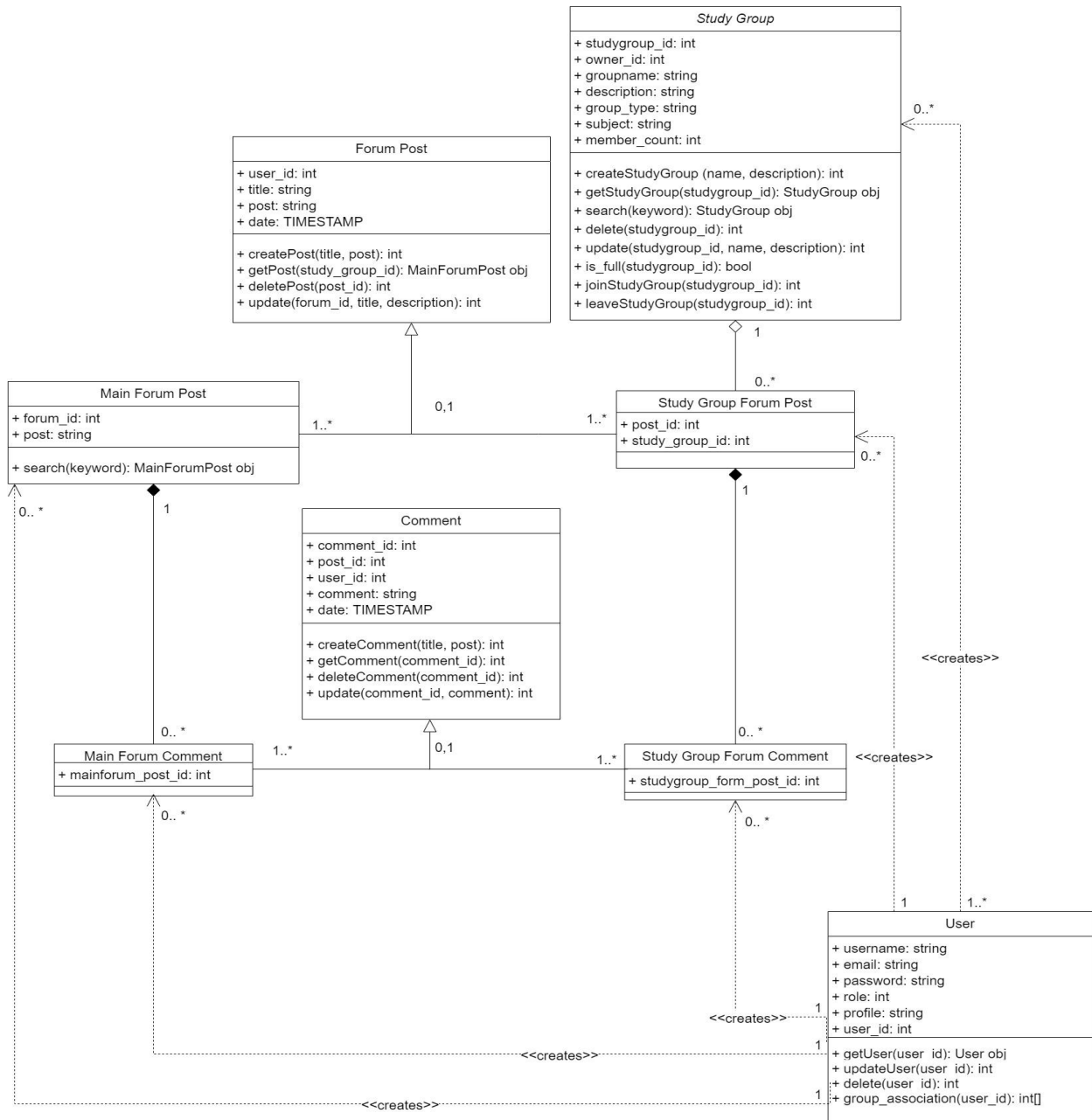
Section 4: High Level Database Architecture and Organization



For a better quality image, visit this [link](#).

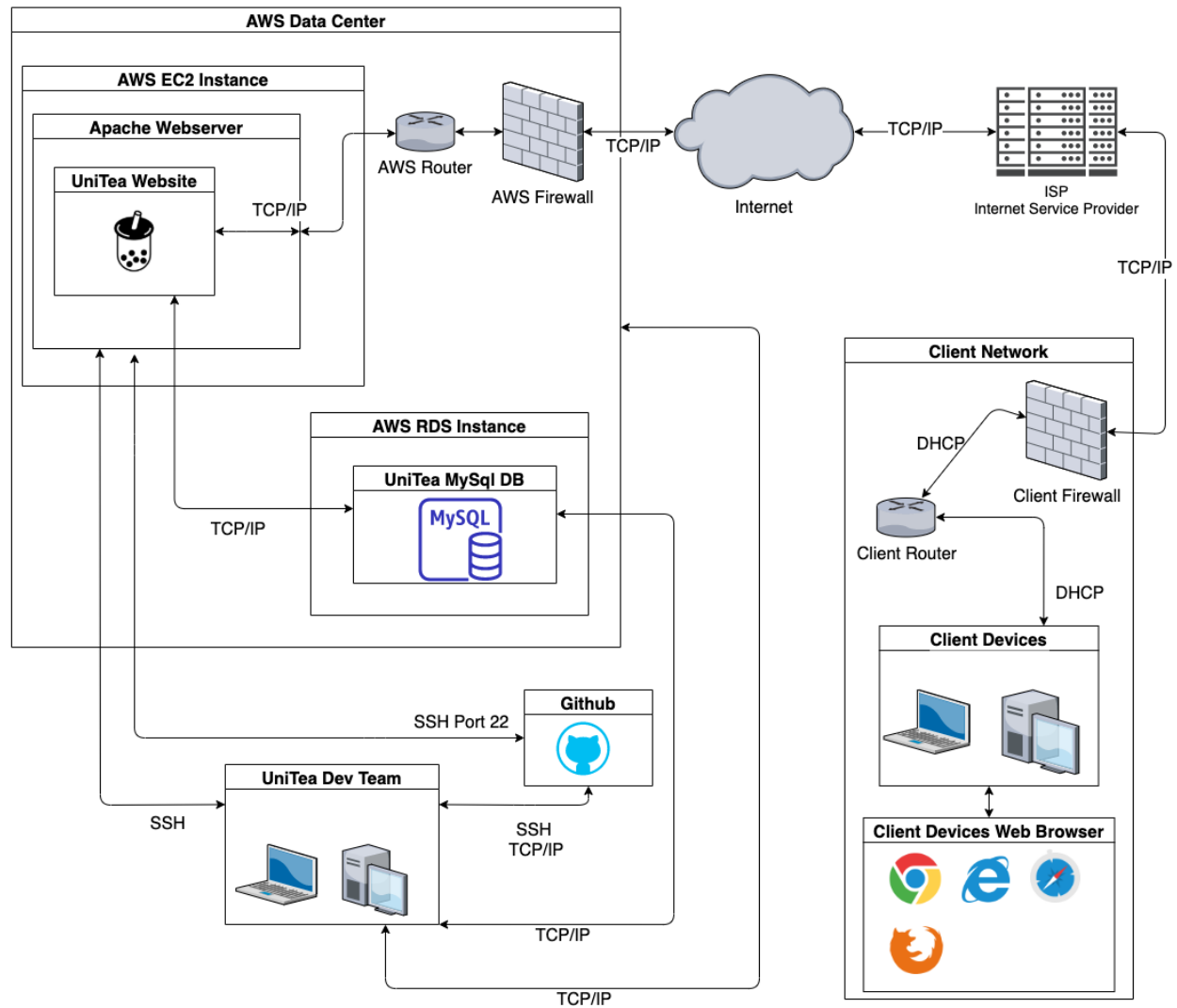


Section 5: High Level Diagrams

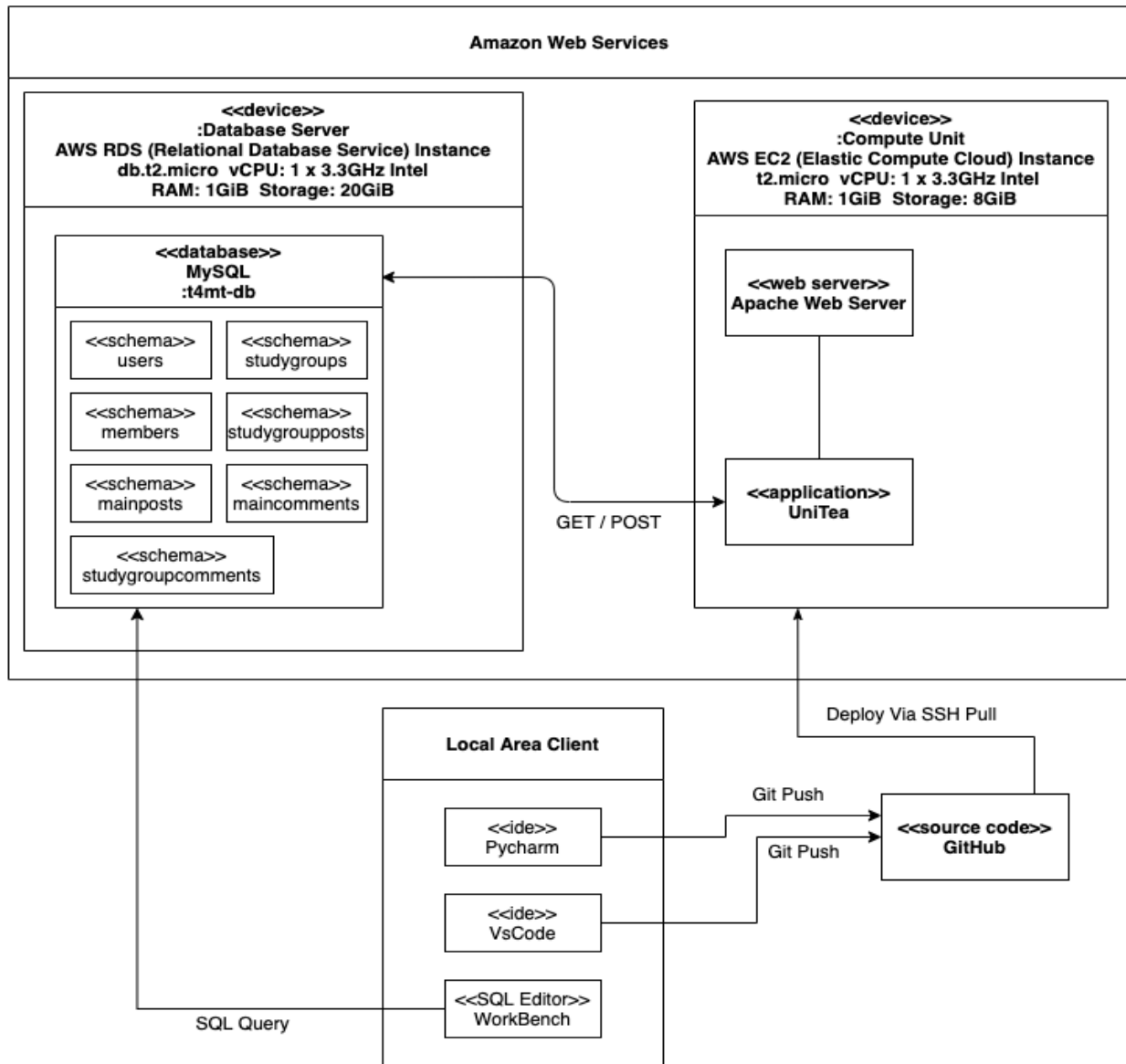


For a better quality image, visit this [link](#).

UniTea Application Networks Diagram



UniTea Deployment Diagram



Section 6: Contributions

Kiara Gil:

- converted HTML pages to use Django
- worked on frontend code for all forms on website
- styled edit- pages and home screen
- general styling on website pages
- created initial skeleton for landing page
- created wireframes for M3
- maintenance on production server

Josh Stone:

- lead frontend efforts
- redesigned home page and navigation bar
- explored mobile options for site
- created wireframes for M3
- created and styled user profile and edit user profile page
- organizing the team about page with vernon

Ostyn Sy:

- lead the backend efforts
- connected contact page to DB
- maintained neatness and cohesion in files
- added change password functionality
- provided fixes to edit user info, forum commenting capability, and join/leave button
- rerouting non registered users from certain pages
- updated UML diagram, ERD and EER, prioritization of functional requirements for M2/M3

Vernon Xie:

- worked on the landing page HTML/CSS
- updated data definitions for M2/M3
- updated router for new test pages for front end development and testing
- general styling on many website pages, including create- pages
- maintenance on production server

Melinda Yee:

- worked on the landing page HTML/CSS
- contributed ideas for some color schemes of the website
- helped implement and style the search bar in the nav
- contributed to wireframe

Cong Le:

- worked on the landing page HTML/CSS
- organized, compiled, created, and linked ToS page
- tested website, reported any concerns and fixed errors found
- provided fixes to edit user info, forum commenting capability, and join/leave button
- updated UML diagram, ERD and EER, prioritization of functional requirements for M2/M3
- worked on back-end debugging and code for login and forum posts
- added error/action display messages

Miho Shimizu:

- implemented all the backend code for P1 functional requirements, including creating tables in the DB and routing.
- updated data definitions for M2/M3
- created login functionality from actual input to making sure a user stays authenticated
- provided fixes to edit user info, forum commenting capability, and join/leave button
- created HTML files with forum post, study group listings, forms.
- general styling on many website pages
- picked the final color scheme