

Computer Science/Software Engineering Programme  
Sino-British Collaborative Education  
CDUT

**Debate Forum**

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# 1 Introduction

## 1.1 Purpose of the project

The purpose of this report is to accomplish the preliminary design of database and the ideas for wire frames of web pages, and complete the expected realization and division of the client and server functions of the project. This project is a debate forum, which allows users post different topics and post their claims to support or against, while simultaneously replying to other claims or replies.

# 2 Database Design

## 2.1 ER Diagram

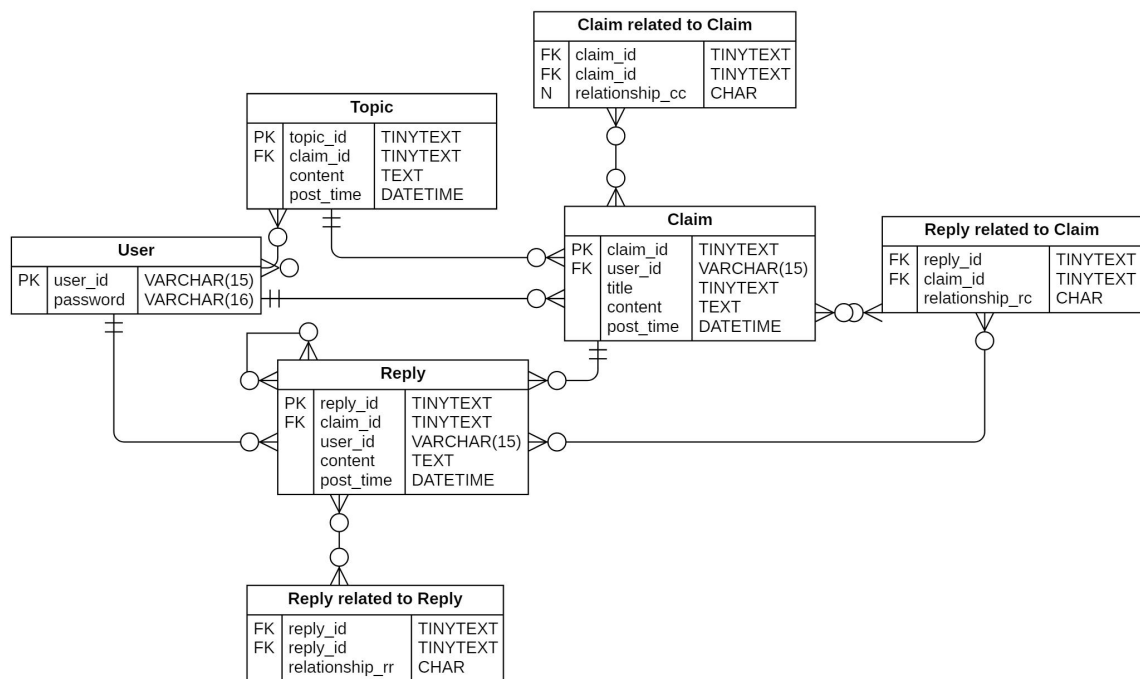


Figure 1 Database ER Diagram

### 3 Wire frame

#### 3.1 Home page

Debate Forum

Search

Log in

# Welcome to Debate Forum

List of Topic

[topic 1](#)

[topic 2](#)

[topic 3](#)

[topic 4](#)

[topic 5](#)

Figure 2 Home page

3.2 Topic details page

Debate Forum

Topic name

Search

Log in

Topic 1:  
Topic description, balabala, balabalala  
balabala

post username  
post time  
update time

+ Add a new Claim

Claim name	username	post time	update time
Claim 1	username	post time	update time
Claim 2	username	post time	update time
Claim 3	username	post time	update time
Claim 4	username	post time	update time

Figure 3 Topic page

### 3.3 Claim details page

Debate Forum

HomeTopic

Search

Log in

Claim 1:  
Claim description, balabala, balabalala  
balabala  
balabala  
.....  
  
Opposed Claim 2  
Equivalent Claim 3

post username  
post time  
update time

+ Add Reply

Reply 1 is balabala.

username  
post time

Related to: Claim  
Relationship: clarification

+ Add Reply

Reply 1's reply. Balabala...

username  
post time

+ Add Reply

Reply 1's reply. Balabala...

username  
post time

+ Add Reply

Reply 2 is balabala.

username  
post time

Related to: Reply 1...  
Relationship: Evidence  
Related to: Reply 3...  
Relationship: Rebuttle

+ Add Reply

Figure 4 Claim page

### 3.4 Write topic page

Debate Forum

Home

Search

User

Topic name

Topic description

Send

Figure 5 Write topic page

3.5 Write claim page

Debate Forum

HomeTopic

SearchUser

Claim title

Claim description

Related to :

▼

Claim 1

Claim 2

Relationship :

▼

Opposed

Equivalent

Related to: Claim 1

Relationship: Opposed

Related to: Claim 2

Relationship: Equivalent

+ Add relationship

Send

Figure 6 Write claim page



3.6 Write reply page

Debate Forum

Home

Topic

Claim

Search

User

Related to :

Claim

Reply

Relationship :

Clarification

Supporting argument

Counterargument

Related to: Reply

Relationship: Rebuttle

Related to: Claim

Relationship:

Supporting argument

+ Add relationship

Send

Figure 7 Write reply page

3.7 Choose relationship in Write reply page

Related to :

	▼
Claim	
Reply	

Figure 8 Choose claim

Relationship :

	▼
Clarification	
Supporting argument	
Counterargument	

Figure 9 Relationship between replay and claim

Related to :

	▼
Claim	
Reply	

Figure 10 Choose reply

Relationship :

	▼
Evidence	
Support	
Rebuttal	

Figure 11 Relationship between reply and reply

### 3.8 Log in pop up window

Debate Forum	Log in
--------------	--------

Username

Password

Log in

Register

Figure 12 Log in pop up window

### 3.9 Register pop up window

Debate Forum	Register
--------------	----------

Username

Password

Register

Figure 13 Register pop up window

3.10 User information page

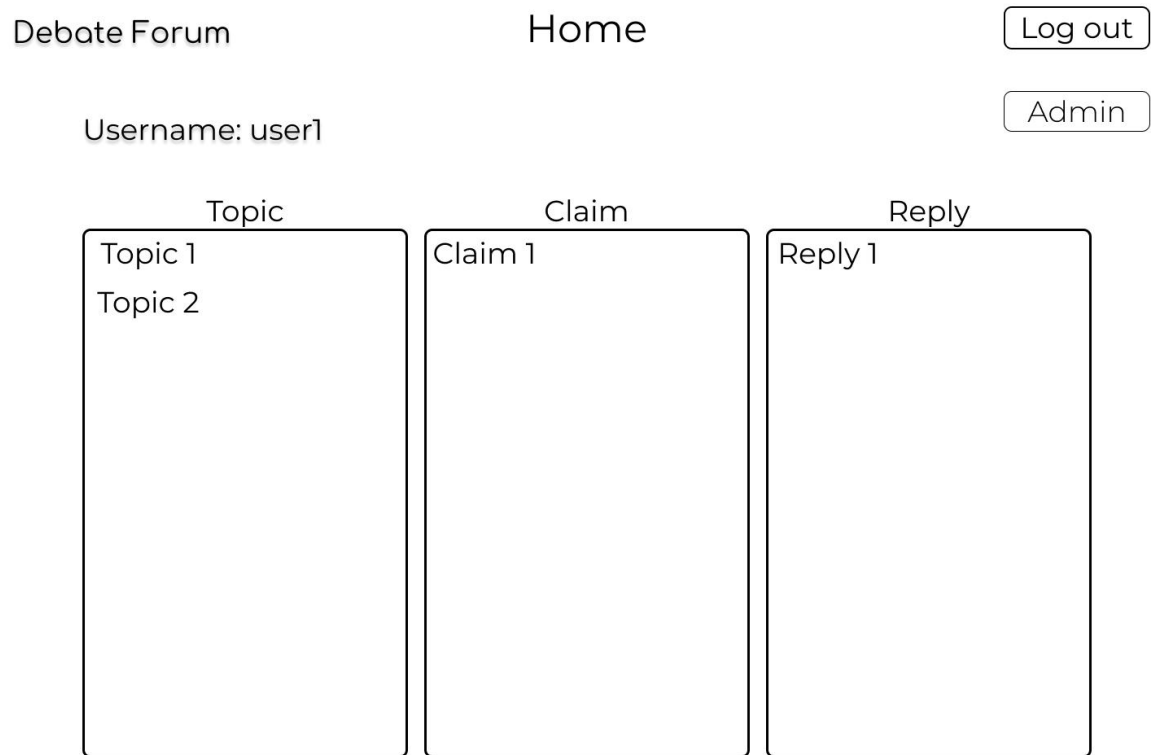


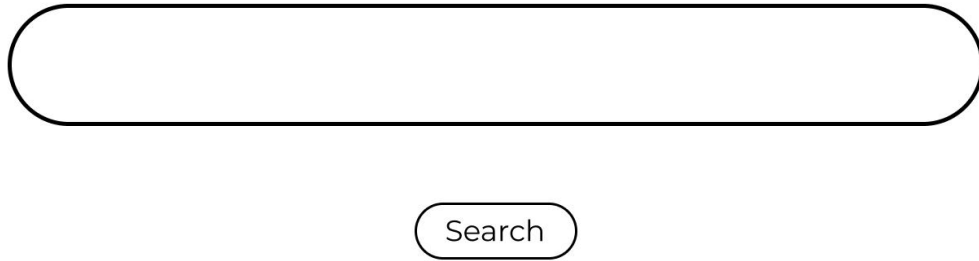
Figure 14 User information page

### 3.11 Search page (Additional functionality)

Debate Forum

Home

Log in



A large, empty, rounded rectangular search bar is centered on the page. Below it, centered, is a rounded rectangular button with the text "Search".

Figure 15 Search page

3.12 Admin page (Additional functionality)

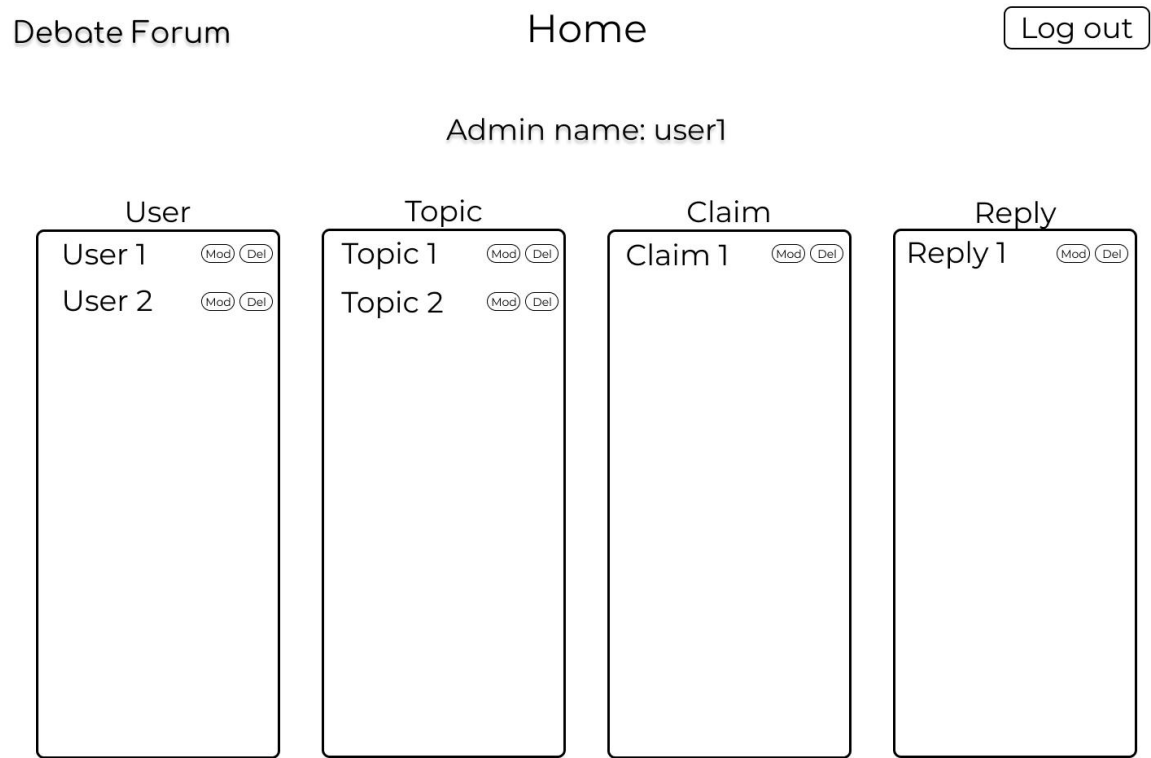


Figure 16 Admin page

3.13 Search result page (Additional functionality)

Debate Forum

Home

Log in

Topic

Search

Topic 1 is balabala

Topic 2 are two rabbit.....

Topic 3 talk about trangle.

This claim is supporting Topic 2 and rabbits...

user 2

user 4

user 5

user 4

Figure 17 Search result page

3.14 Navigation of all pages

Debate Forum				Search	Log in	
Debate Forum				Search	User	
Debate Forum	Topic name			Search	Log in	
Debate Forum	Home	Topic		Search	Log in	
Debate Forum	Home	Topic		Search	User	
Debate Forum	Home	Topic	Claim	Search	User	
Debate Forum	Home				Log in	
Debate Forum	Home				User	
Debate Forum	Home				Log out	
Debate Forum	Home			Search	User	
Debate Forum	Log in				Debate Forum	Register

Figure 18 Navigation list



## **4 Functionality and implement of client and server**

The functionality and implementation are described in the order of the wire frames. And the navigation will be discussed on the page where it is used.

### **4.1 Functionality and implement of client**

#### **4.1.1. Home page (Figure 2)**

The list of topics are below a welcome sentence. Each topic with underline can be clicked and the client will send request to server to jump to corresponding topic details page.

The navigation is on the top. The first element on the left is the logo of this forum. The first one on the right is the login button, which will pop up a login window. The second one on the right is search button, which will make a request to the server to enter the search page. Elements of the same navigation as this page will not be repeated in the future.

#### **4.1.2. Topic details page (Figure 3)**

The top box include topic name and topic description, in which the username of the publisher and post time are on the right. The update time is also on the right, which means the post time of the latest claim or reply. Below it is an add button that user can click to add new claim in this topic. When the user clicks it, the client sends a request to jump to the page which is used to post new claim. The titles of each claim are shown chronologically below. In the middle of the navigation is topic name and the others are the same as the navigation on the homepage.

#### **4.1.3. Claim details page (Figure 4)**

The top box described a claim and relationship between other claims, and displayed post user and post time. The update time is the time of newest reply. Below is an add button, which can add new reply for this claim. Click it will send a request to server and jump to write reply page. All replies of this claim are chronologically and the reply of reply is in

the corresponding reply box. And the add button in the reply box is same as the button above.

The “Home” in navigation can be clicked and send request to enter homepage, and the “Topic ” can be clicked and send request to jump to topic page of this claim.

#### 4.1.4. Write topic page (Figure 5)

The top box allows the user to enter the topic name. The middle box allows the user to enter the topic description. Only the user click bottom send button, the topic name and description will be send to server.

The middle “Home” in navigation can be clicked and send request to jump to homepage. The login button in the upper right becomes the user button because only user can post topic, claim and reply. Click it will send request and enter user page.

#### 4.1.5. Write claim page (Figure 6)

The left two boxes are the same as the topic page, and the send button is the same, too. After selecting the relationship in the upper right corner, user can add new relationships by clicking the add button in the lower left corner, and the new is displayed below.

#### 4.1.6. Reply page (Figure 7)

Click send button will send reply in left box to server. Other parts functions are same as the write claim page.

The “Topic” and “Claim” in navigation can be clicked and send request to enter topic and claim page of this reply.

#### 4.1.7. Log in and register (Figure 12&13)

These two window are overridden floating window. Click the login button in the upper right corner and the login window pops up and floats over the page. Enter the right user name and password and click the login button, then client sends these data to server to check if user can login. Or click register button to pop up the register window. Then enter

the username and password and click register button, the client sends data to server to store data.

#### 4.1.8. User page (Figure 14)

After login, click the user button in the upper right corner, the client sends request to enter the user page. The Admin button on the right is used to enter the administrator page, client will send enter request but only admin can enter that page. The topics, claims and replies posted by this user displayed below and can be clicked and jumped, and the client will send the corresponding request to the server.

The “Log out” button is used to send request and log out account.

#### 4.1.9. Search page (Figure 15)(Additional functionality)

Enter text and click search button will send request to server to search the content related to the text.

#### 4.1.10. Admin page (Figure 16)(Additional functionality)

Admin can modify or delete user, topic, claim and reply. Del button will directly send request to server and delete item. Mod button will send request and jump to corresponding write page.

### 4.2 Client functionality code implementation

HTML and CSS: pages, button, navigation, hide login window,

JavaScript: Confirmation box(after user click send, MOD, Del button). Popup login and register window. Search(additional functionality). Preventing injection attacks by JS escaping. Login and logout.

AJAX: Updated claims and replies posted without refreshing the page(additional functionality). Send data to SQL.

jQuery: Fade-in and fade-out animation for pages(additional functionality).

### 4.3 Functionality and implement of server

Responding request of client and enter to correct page will be used in every pages.

#### 4.3.1. Home page (Figure 2)

Output each topic name to client and show them. Then respond request of client and enter to correct page.

#### 4.3.2. Topic details page and claim details page (Figure 3&4)

Server will respond request of client and enter to correct page. Then arrange the topics, claims or replies of the database chronologically and present them to the client.

#### 4.3.3. Write topic page, write claim page and reply page (Figure 5&6&7)

Receives the request and stores the data entered by the user into the appropriate database.

#### 4.3.4. Login and register (Figure 12&13)

Verify that the user entered the correct username and password through AJAX, PHP, and SQL. If correct then respond to the login request, otherwise notifies the user of an input error through the client. Or receive and store the user registration information sent by the client into the database.

#### 4.3.5. User page (Figure 14)

Respond jump request or logout request and give feedback. Respond permission to allow user jump to admin page or not.

#### 4.3.6. Search page (Figure 15)(Additional functionality)

Receives client requests and searches for text entered by the user. Then return all topics or claims or replies related to the input text by search results pages.

#### 4.3.7. Admin page (Figure 16)(Additional functionality)

Delete data from the database or jump to the corresponding modification page according to the corresponding request.

#### 4.4 Server functionality code implementation

SQL: Store data. Coordinate with AJAX to display claims and replies chronologically.

Search data

PHP: Coordinate with AJAX and SQL to store or use data. Search data.

Python: Coordinate with JS to implement login and logout.