

第 15 組

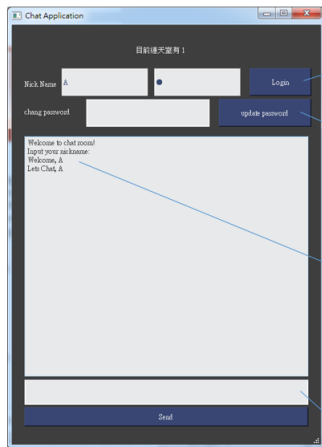
chatroom robot assistant

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動機與目的

我們想要知道平常使用的聊天軟體，是如何接收與發送訊息，也想知道 Client 和 Sever 是如何與資料庫互動。並在聊天室中模擬出一個機器人可以回答使用者簡單的問題。

Client 端介面



Nickname兩欄輸入帳號(左邊)及密碼(右邊)，輸入完成後點Login登入，如失敗須重新輸入正確帳密

在登錄成功後，可在此處輸入新的密碼，並且點擊update password 進行密碼更新。

所有聊天群組裡的信息在這個對話框中顯示。

在這個對話框中可輸入想發送的内容，輸入完成後點擊Send 發送。

Client 端功能

- 登入
- 改密碼
- 發送訊息
- 顯示其他 client 端的訊息

Server 端介面

The screenshot shows a window titled 'Chat Application' with a standard Windows-style title bar. Inside the window, there are two input fields at the top labeled 'NickName' and 'Password'. Below these fields are two buttons: 'Add' and 'Update status'. The main area of the window is a list box containing the following text: 'A online', 'B offline', 'C offline', 'D offline', and 'E offline'. At the bottom of the window are two more buttons: 'Del' and 'Kick'. Five blue arrows point from text boxes to specific elements in the window: one from the top-left text box to the 'Add' button, one from the top-right text box to the 'Update status' button, one from the middle-left text box to the list box, one from the bottom-right text box to the 'Kick' button, and one from the bottom-right text box to the 'Del' button.

在 NickName 和 Password 中輸入要添加用戶的賬號和密碼，並且點擊 Add 把新的賬號加入數據庫中

點擊 Update status，更新目前在數據庫中每個用戶的狀態

顯示當前數據庫中用戶的狀態

輸入想要剔除或刪除的帳號並點擊kick剔除，點擊Del刪除，kick會使client端的應用程式直接結束執行，Del會先從資料庫刪除該帳號並且如果該用戶是登入狀態會直接剔除

Server 端功能

- 增加帳密
- 刪除帳戶
- 顯示用戶是否在線上
- 處理 bot 天氣、匯率

MongoDB

MongoDB Compass - localhost:27017/ChatRoom.user

Connect View Collection Help

My Cluster

localhost:27017 STANDALONE

MongoDB 3.6.5 Enterprise

ChatRoom.user

DOCUMENTS 5 TOTAL SIZE 280B AVG. SIZE 56B INDEXES 1 TOTAL SIZE 16.0KB AVG. SIZE 16.0KB

Documents Schema Explain Plan Indexes Validation

FILTER { field: 'value' }

OPTIONS FIND

INSERT DOCUMENT VIEW LIST TABLE

Displaying documents 1 - 5 of 5

```
{
  "_id": ObjectId("502b1a0293a297377cd75f14"),
  "uname": "A",
  "upwd": "A",
  "online": false
}
```

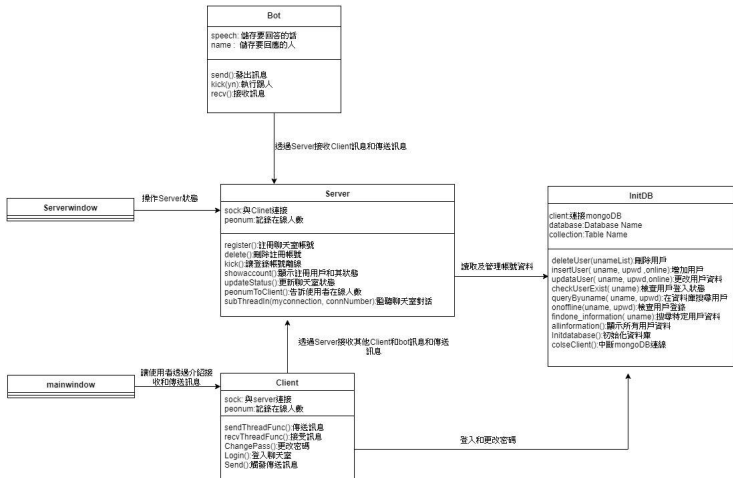
```
{
  "_id": ObjectId("502b1a0293a297377cd75f15"),
  "uname": "B",
  "upwd": "B",
  "online": false
}
```

```
{
  "_id": ObjectId("502b1a0293a297377cd75f16"),
  "uname": "C",
  "upwd": "C",
  "online": false
}
```

```
{
  "_id": ObjectId("502b1a0293a297377cd75f17"),
  "uname": "D",
  "upwd": "D",
  "online": false
}
```

```
{
  "_id": ObjectId("502b1a0293a297377cd75f18"),
  "uname": "E",
  "upwd": "E",
  "online": false
}
```

系統結構圖

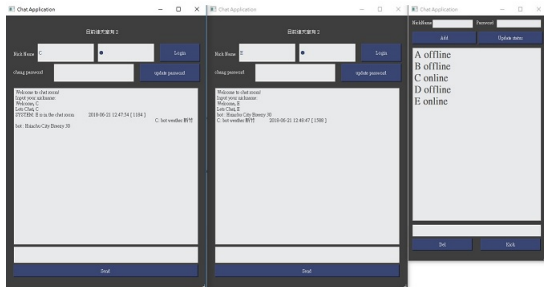


實作方法

利用 Socket 通訊，開啟 Sever 後，Client 傳送訊息，再利用 Server 廣播給其他 Client，Client 登錄時，會傳送一個特殊碼給 Server，Server 就會計算在線人數，回傳給所有的 Client。

實作方法

偵測發送的訊息，判斷是否是給 bot 的指令，
若是的話，則會利用 api 找到答案，並回傳給所
有的 Client。



實際示範

Revision History

UI window raymondracon committed May 25, 2018	severUI raymondracon committed Jun 1, 2018	Complete delete Jerying committed 4 days ago	bot testing ddbb123 committed 3 days ago
Delete same value Jerying committed May 20, 2018	add InitDB YEN-CHENG LIU committed Jun 1, 2018	Show all registers Jerying committed 4 days ago	Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Room YEN-CHENG LIU committed 3 days ago
Distinguish same nickname Jerying committed May 20, 2018	add UI raymondracon committed Jun 1, 2018	Fix some bugs Jerying committed 5 days ago	fixed some bug YEN-CHENG LIU committed 3 days ago
add client leave information YEN-CHENG LIU committed May 20, 2018	severui raymondracon committed Jun 1, 2018	Complete same user's name have same time online problem Jerying committed 5 days ago	add file raymondracon committed 3 days ago
few bug fix YEN-CHENG LIU committed May 19, 2018	update UI object YEN-CHENG LIU committed Jun 1, 2018	Revert "Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Ro... Jerying committed 5 days ago	Fix some bugs Jerying committed 3 days ago
system information for client into room Jerying committed May 19, 2018	The message right have some problem Jerying committed Jun 1, 2018	Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Room Jerying committed 5 days ago	fixed some bug and modify font size and color YEN-CHENG LIU committed 3 days ago
show the time YEN-CHENG LIU committed May 19, 2018	add UI and can normally execute YEN-CHENG LIU committed May 31, 2018	fix bugs of people number and simplify the code YEN-CHENG LIU committed 5 days ago	add kick into delete YEN-CHENG LIU committed 3 days ago
Add some information showing function YEN-CHENG LIU committed May 19, 2018		Revert "Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Ro... Jerying committed 6 days ago	complete kick function YEN-CHENG LIU committed 3 days ago
origin YEN-CHENG LIU committed May 19, 2018		Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Room Jerying committed 6 days ago	add pdf file izz773751548 committed 2 minutes ago
Initial commit YEN-CHENG LIU committed May 19, 2018		Complete online people number , but it has some bugs Jerying committed 6 days ago	some function add ddbb123 committed 6 hours ago
		finalproject file raymondracon committed 6 days ago	ppt update raymondracon committed 9 hours ago
		Delete finalproject raymondracon committed 7 days ago	Merge branch 'master' of https://github.com/c794613852/VZU-OPS-Chat_Room raymondracon committed a day ago
		Create finalproject raymondracon committed 7 days ago	ppt update raymondracon committed a day ago
		Complete register function Jerying committed 7 days ago	change UI color YEN-CHENG LIU committed 2 days ago
		login and change password according to database YEN-CHENG LIU committed 7 days ago	Fix parameter for searching weather location Jerying committed 2 days ago
		client.py can use InitDB's class method YEN-CHENG LIU committed Jun 14, 2018	try different color set YEN-CHENG LIU committed 2 days ago
		complete mongodb function Jerying committed Jun 14, 2018	bot in server and weather added ddbb123 committed 3 days ago
		Complete server ui show and not error Jerying committed Jun 13, 2018	Bot online but some problem ddbb123 committed 3 days ago
			back before Bot add