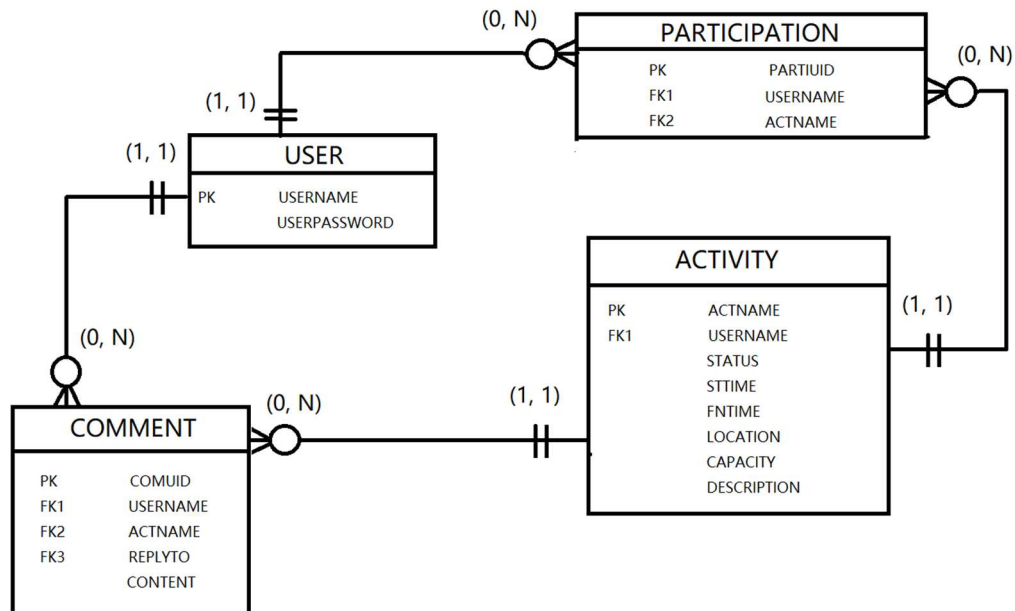# Reports on WeSalon Database Software

Patrick LUO 2018010855 IE81

1. Base logics on database

We deleted some of these columns of tables to simplify the database, meanwhile reduce the occupying amount of disk storage. Such as, two same username or activity name will cause a great confusion when you viewing the activities. So we banned that circumstance, and choose the name to be the primary key of the two tables. Queries will be more efficient and takes less RAM.

2. Functions and Screenshots

The login GUI is quite clear and simple, easy to use. You can firstly input your username and password in the edit no matter you want to register a new account or just log in. When you click login or register, the corresponding actions will be taken and a message box will be shown to indicate a failure or successful registration.
Note the length of username and password cannot exceed 20. Otherwise the registration will fail.
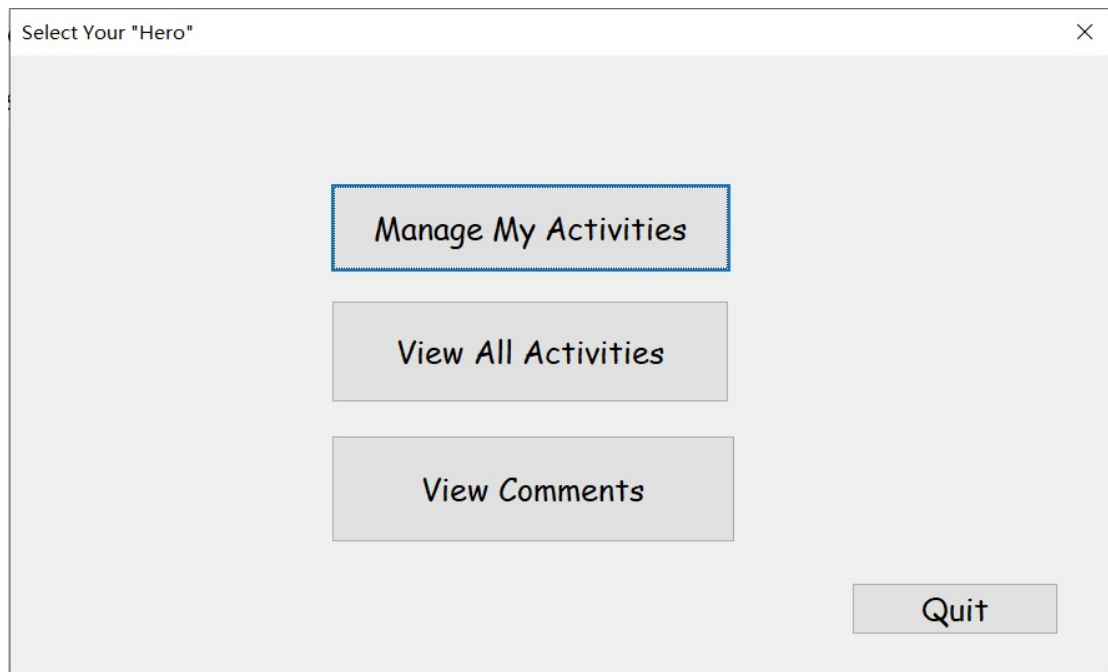
You may choose one of the following actions when logged in, including manage my activities (as a participant or holder), view all activities and view comments. A quit button is set up, or you can just close the dialog whenever you want to exit.
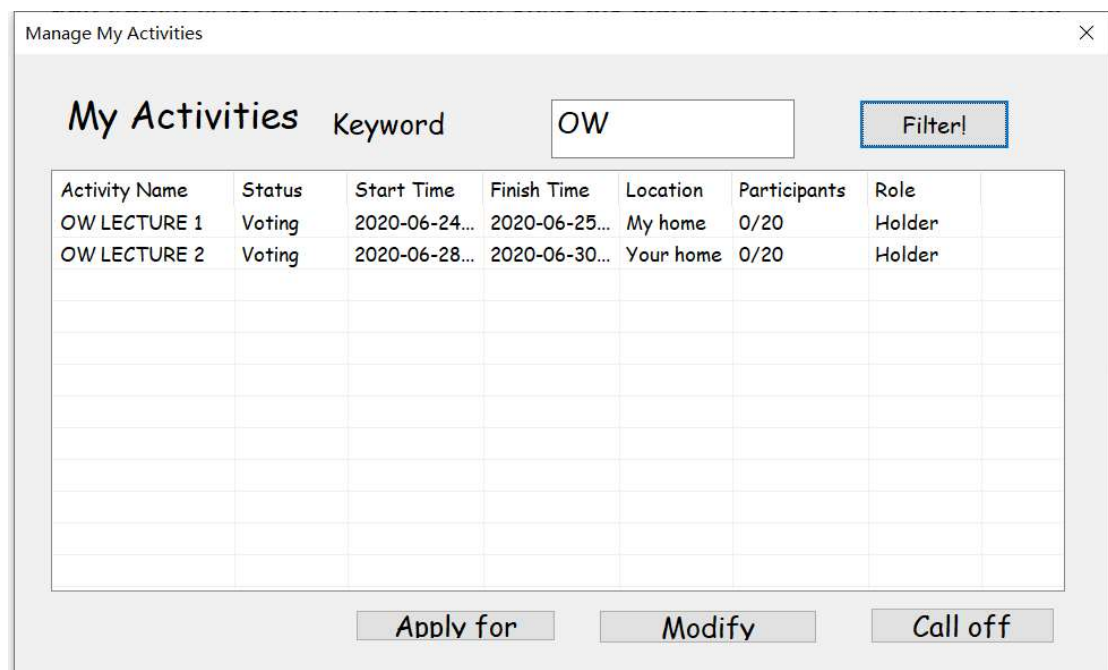
You can input your keywords in the edit box and filter your activities, or you can

click on the column title of the table to sort the activities with a certain attribute. The activities shown are either held by you or that you've participated. When you click on an activity, you can choose to modify it (if you're the holder), cancel it (also only if you're the holder) or quit it. The text on the bottom-right button will change through your selection. Or you can apply for a new activity (hold it).

You can fill out your information in the dialogue and apply it. The location name can be determined by you and be sure that the same location correspond to a same name. Apply will fail if the time input is incorrect or there's a confliction on time and location with another activity. Note the length of name, location and description cannot exceed 20, 30 and 500.

You can modify everything except the name in the modify dialogue. For example, when an activity passed voting, you can change the status to coming soon, and when

it's finished you can change to finished.

Manage My Activities   ✕

My Activities   Keyword   [OW]   [Filter!]

Activity Name	Status	Start Time	Finish Time	Location	Participants	Role
OW LECTURE 1	Voting	2020-06-24...	2020-06-25...	My home	0/20	Holder
OW LECTURE 2	Voting	2020-06-28...	2020-06-30...	Your home	0/20	Holder

[Apply for]   [Modify]   [Call off]

This is the call off or quit operations.

All Activities   ✕

Other Activities   Keyword   [   ]   [Filter!]

Activity Name	Status	Start Time	Finish Time	Location	Participants	Role
OW LECTURE 2	Voting	2020-06-28...	2020-06-30...	Your home	0/20	N/A
OW LECTURE 1	Coming S...	2020-06-24...	2020-06-25...	My home	1/20	Participant

[More About]   [Participate]

Other A...

More About ✕

OW LECTURE 2

Not funny ow lecture!

Activity Name
OW LECTURE
OW LECTURE

When you view all activities, the operations are almost same on filtering or sorting. You can click 'More About' for the detailed description, or click 'Participate' to join in it. However, you can only join in an activity when there's no time confliction of you and the activity still has room for a new participant. What's more the status of activity has to be Ongoing when you participate it.

View Comments ✕

Comments   [   ]   Search!

Reply id: #1
Establisher: lym
Activity: OW LECTURE 1
Content: It's quite funny!!! I cannot wait to hear it!

[Prev]   [Next]   [Reply]   [Reply to Act.]
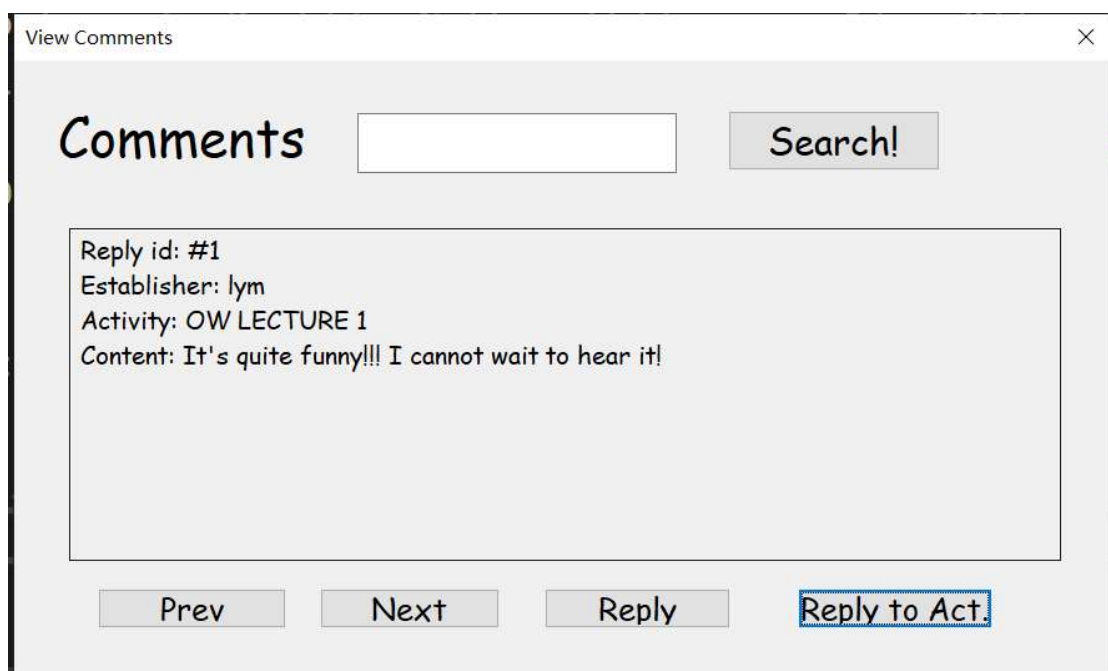
You can see replies in this dialogue, and click 'Prev' or 'Next' for a new reply to read. What's more, you can search for keywords to filter so that you can view your replies. The 'Reply' button allows you to reply to the current reply and 'Reply to Act.' allows you to reply to an activity. What's more, we added a new function which allows you to reply on activity regardless whether it's finished or not, nor you've participated it or not. You can call for others to vote for a voting activity or

let others know your coming soon activity.

Reply To Activity   ✕

Reply to Act: OW LECTURE 1

I love this lecture too much!
Can't wait to see it!

Reply!

View Comments   ✕

Comments   Search!
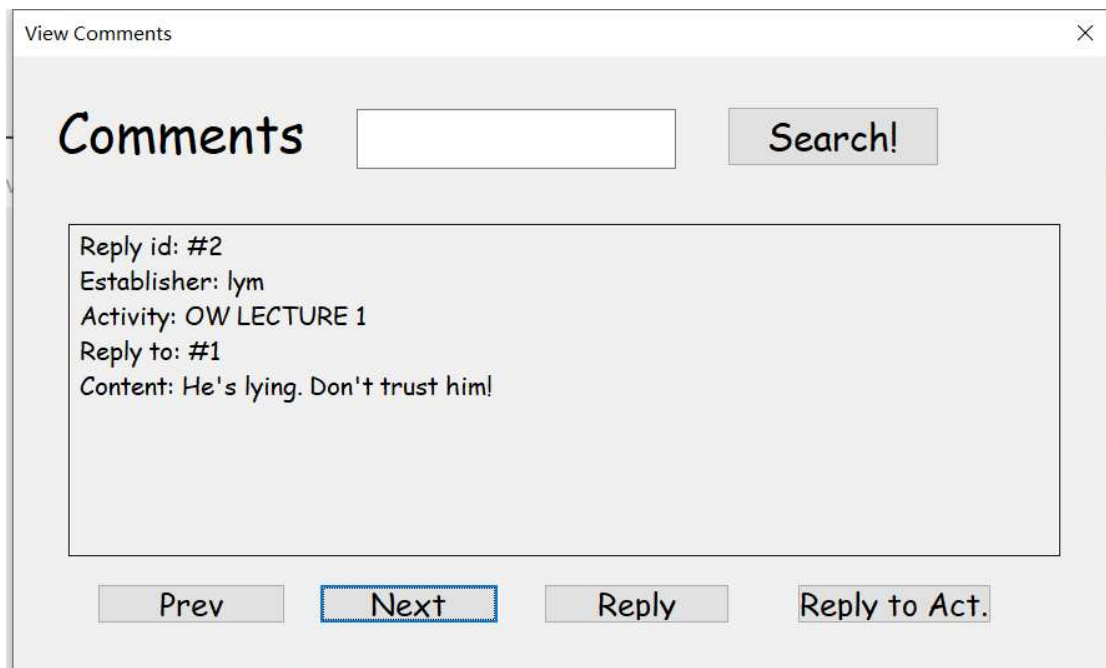
Reply id: #1
Establisher: lym
Activity: OW LEC
Content: It's quit

Reply   ✕

Reply to lym #1:

He's lying. Don't trust him!

Reply!

Prev

截图
062...

3. Something on programming

I chose to use the MFC on GUI implement.

Firstly I set the dialogs and controls like buttons, edit texts or list controls then add some callback functions.

Secondly, I choose to separate the GUI part and database part, so I created the 'dbif' interface to interact with database. So I can focus on either the GUI or the database operations at one time.

Thirdly, I wrote the CREATE TABLE statements in the MFC Application. So you don't have to run a SQL statement first to use this application. If there's no table yet on your computer, you can just run the application and it will create tables automatically for you.

Lastly, due to the properties of PostgreSQL, when you try to run on your computer, there maybe a 'wrong password' error and the application will just quit with exit status 0. But as I connect the database only once, so you can just change the password in function Initialize() in dbif.cpp once and compile again. The application won't exit unexpectedly except that circumstance. Furthermore, you can check the dberror.log for further information on database error and the causing statement.

4. Screenshots on tables (Test data only)

TABLE: USERL

TABLE: ACTIVITY

	actname [PK] character varying (20)	username character varying (20)	status character varying (20)	sttime bigint	fntime bigint	location character varying (30)	capacity integer	description character varying (500)
1	OW LECTURE 2	lym	Voting	15542458	15715258	Your home	20	Not funny ow lecture!
2	OW LECTURE 1	lym	Coming Soon	15195942	15282342	My home	20	Very funny ow lecture!

TABLE: PARTICIPATION

	partiuid [PK] integer	actname character varying (20)	username character varying (20)
1	1	OW LECTURE 1	dyc

TABLE: COMMENT

	comuid [PK] integer	username character varying (20)	actname character varying (20)	replyto integer	content character varying (1000)
1	1	lym	OW LECTURE 1	[null]	It's quite funny!!! I cannot wait t...
2	2	lym	OW LECTURE 1	1	He's lying. Don't trust him!