GLite Gaming Clan Web Application

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1   Introduction

My application is an online chat especially developed for a small group of people. More specifically for a gaming clan that will share the same secret keyword('glite2018') in order to enter to the chatting rooms. It is very easy to log-in if you know the secret keyword. You don't have to create an account, you only have to pick your nickname and enter the secret keyword('glite2018'). Then every message that you will be posting it will appear next to the given nickname at the home page.
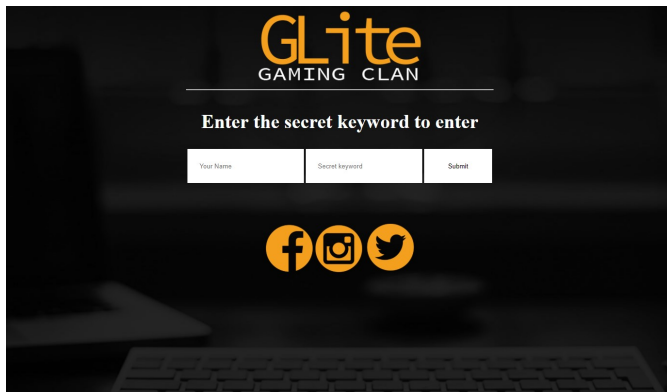

Figure 1: **Home page**

Once you log in you can choose between four different chatting rooms. The first chat room is for Battlefield V players, the second is for Hearthstone players, the third one is for Counter Strike:GO players and the fourth one for FIFA 19 players. Each chatting room is connected to a different .db file to store the nickname and messages so then can be displayed in the appropriate page. At the bottom of the screen there are links to social media pages. These links can be used also for some new user who doesn't have the secret keyword yet in order to ask for it from an already member of the clan. See Figure 2

In the website there is error message function for potential mistakes by the users of the website. Every time that you are trying to visit a page that does not exist you are going to be redirected to the html page with the error message. See Figure 3

2   Design

The website is structured to make the navigation experience easy for all users. All the routes are designed to followed with

Figure 2: **Chat Rooms**

a logical structure. And all the potential routes are displayed in every single page. For example once you log in, there is the log out button displayed under the logo of the website in every single page. The same with the chatting rooms. You do not have to look in different pages in order to change your chatting room. The social media links are always at the bottom under all the content of each page. The website keeps the consistency to make the navigation experience more satisfying. The website runs through python flask where every route displays different content by rendering HTML pages from my 'templates' folder. With Jinja2 tags I have created a basic template that is been used from other HTML files in order to make my application more efficient for the users but also for me to manipulate. The whole styling is been done with CSS and CSS Grids. I haven't used any additional libraries for the styling or bootstrap components. The navigation map at Figure 5 shows how the URL structure works.

3   Enhancements

The first thing that I would like to add in the future is the account functionality. Instead of just picking up your nickname for the current session, I would like to have a proper register / login functionality where all of your details will be stored in
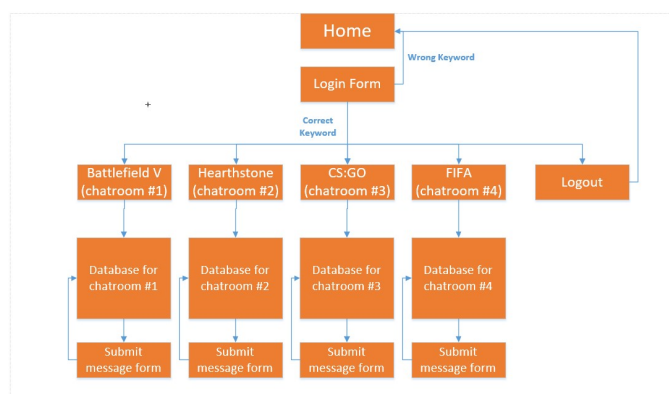
Figure 3: **Error page**

Figure 4: **Navigation Map**

a database. That means that no one will be able to use the same nickname as you. At the moment multiple users can log in with the same nickname simply because it is stored temporarily in the session and not in a database. Along with that I would like to add a seperate page that will be your account information and settings. A page that you can possibly change your password, check how many messages you have sent etc. And with an account page you can find more information about all the other users as well.

It would be also useful if any registered user could create his own chat room. With this way the developers will not have to update the chat rooms every so often. Currently there are 4 chatrooms with the most popular games played among the GLite Gaming community.

Another feature that can be added is to delete or edit previous messages. This gives a little more flexibility to the users in case they want to delete something the posted or even change it. Typo mistakes can not be prevented once they stored in the database.

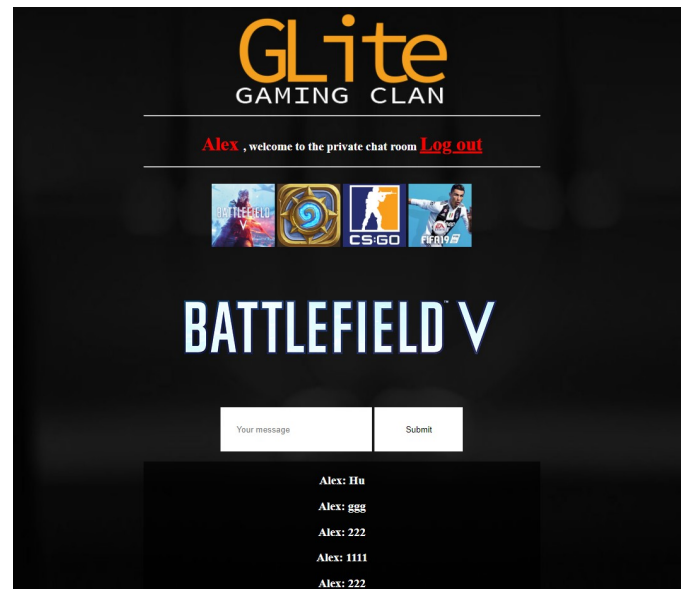Figure 5: **Chat Room**

In the future I imagine this chat rooms will have a large amount of messages. That will make the page really long as it is displaying all of the messages. That means that if you want to read the most recent message you will have to scroll down the page. This can be annoying for the user so to make the experience better I would like to display all these messages in a scrolling box, while i am displaying from the bottom the 10 most recent messages.

In addition there is no message poping out if you enter the wrong keyword on the home page. This can be confusing for new users. This is something that must be fixed soon. While on other pages there are messages appearing like: "You have successfully logged out" when pressing the log out button or "Couldn't find the page requested" when visiting a url that does not exist. Ideally the message will be popping on the same page and not redirecting you into a different one.

Apart from the chatting rooms, it would be really interesting if I could get people working on articles related to gaming. I think it would bring more users if i could provide any gaming news, tutorials etc.

4 Critical Evaluation

Even though functionality of the website it is not very complicated, it is working as expected. I do not think anyone would have problems to use this website. The navigation is straight-forward and has logical structure, the clickable elements are obvious for the user because they are highlighted with orange or red colour and they differ from the plain text in the website. The website also has a good consistency of the terms that are used and all the elements are remaining at the same place in every page. Overall I think that the website fits its purpose to serve a specific community in order to communicate through their own application simple and easy. There are some limitations that I mentioned on the "Enhancements" above but at this point the website does not have any broken pieces apart from the social media buttons

that they are actually redirecting you to the default pages and not actual pages of a group.

5 Personal Evaluation

When I first started working on this assignment I was looking for complicated tutorials with additional libraries that I could not really understand exactly how they are functioning. I spent a lot of time in the beginning to create a register and log in functionality while I did not know yet what I would like to create at the end. Then I decided to start again without using any of the unknown libraries and create a chat room website that will work with sessions. With the sessions I created protected pages that can be visited only by logged in users. This start working they way I wanted and I was more confident about the result I will get by the end of my deadlines.

On the protected pages I added a submit form that was going to be stored in a database and then displayed back to the users. I was happy with the functionality at this point so I wanted to focus on the styling. I was afraid that If i was going work on the python code to add more features I was going to risk spending too much time on the functionality side of the project and not have enough time to make it look aesthetically pleasant.

I am happy with my project, I think I performed really well and created a system where in the real world can be actually used by a small community. Overall I think the website looks good and with the design enhancements that I mentioned above it can be very decent website.

I think I did not performed very well at the first few weeks of the assignment because as I said I think I was not looking for the most appropriate resources regarding my knowledge and the assignment itself.

6 References

For the completion of this project I have followed the module's workbook and git repository. I also watched a few tutorials on Lynda.com and Youtube. These tutorials helped me to built my SQLITE3 Database, create sessions and protect the pages that I wanted to give access only to logged in users. In addition I watched tutorials and learned more about CSS styling and how to use CSS grids for styling.

-CSS Grids Tutorial: https://www.youtube.com/watch?v=jV8B24rSN5o

-HTML resources: https://www.w3schools.com/html

-CSS resources: https://www.w3schools.com/css

-Jinja resources: http://jinja.pocoo.org/docs/2.10/templates/

-Tutorial for sessions: https://www.youtube.com/watch?v=T1ZVyY1LWOg

-Create and Display SQLITE3 Database: https://www.youtube.com/watch?v=GjJbaolBPAY