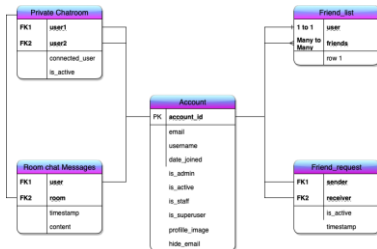


### Problem

We're provided with the code for an Artificial Intelligence that does face recognition. The product owner originally uses it to perform a constant security verification, similar to how FaceID works on Iphone. With this AI we are asked to implement an online chat application that uses that system as login verification so that they can use it as a demo of how that technology works.

### System/Database Design



### Verification

We implemented various test cases, to ensure things such as the login and register feature and chatroom were satisfied, to which we were able to accomplish. We also created a prototype for the facial recognition which is to be implemented.

| Test Case | Pass/Fail                                                                                                                                                                                                                                              |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feature   | 1                                                                                                                                                                                                                                                      |
| Purpose   | Login/Register Users                                                                                                                                                                                                                                   |
| Input     | The user can register their username and password and use it as the first measure of security when they log in to access the platform.                                                                                                                 |
| Operation | The user must be in a valid state of the user's account. This is the first measure of security that will be checked to the user. The user will need to input a username and password.                                                                  |
| Output    | The user must be in a valid state of the user's account. They will be asked to re-enter their username and password if they are not in a valid state. The user will be asked to re-enter their username and password if they are not in a valid state. |

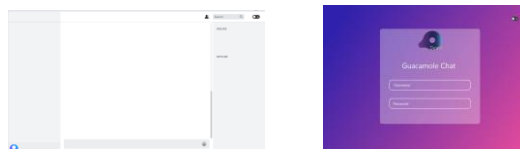
| Test Case | Pass/Fail                                                                                                                                                                                                                                              |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feature   | 1                                                                                                                                                                                                                                                      |
| Purpose   | Login/Register Users                                                                                                                                                                                                                                   |
| Input     | The user can register their username and password and use it as the first measure of security when they log in to access the platform.                                                                                                                 |
| Operation | The user must be in a valid state of the user's account. This is the first measure of security that will be checked to the user. The user will need to input a username and password.                                                                  |
| Output    | The user must be in a valid state of the user's account. They will be asked to re-enter their username and password if they are not in a valid state. The user will be asked to re-enter their username and password if they are not in a valid state. |

### Current System

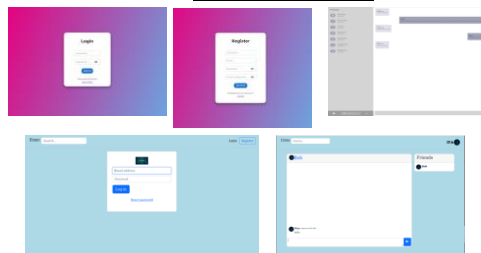
The login and registration page were implemented as well as the chat room, we have a functional model but not a fully developed application, the AI has yet to be integrated with the rest of the application as we

### Object Design

Below are the first design ideas we had for the login page and chat room that later adapted different forms



### Screenshots



### Requirements

To develop a secure real world web application that enables the users to test the AI from GuacamoleID as login authentication and lets them chat with other users. Documentation of the whole process was also required as well as

### Implementation

- When working on front-end development we used the React.js framework for web applications with which we learned a lot of how different web development can be depending on the tools you use
- For back-end Django was used since we needed it to use Python for it to be compatible with the AI code we were given
- Finally since we did a relational database, we used PostgreSQL for the implementation.

### Summary

This project helped a lot with our growth as computer science students, mostly in the area of web development, we had the chance to work with new technologies and learn a lot from them, although we did not have enough time to integrate the AI to the chat application we had a lot of fun while working on the project and hope it can be finished by our Capstone I students next semester.