

Program Description

Our program is a messaging application where users will be able to chat with one another along with one another, featuring real-time messaging, group chats, friends, and more. Users will be able to upload their own profile pictures and emojis that they can use in their desired chats. They will be able to connect with their friends by sending friend requests to them along with being suggested new friends based on mutual friends.

Program Components

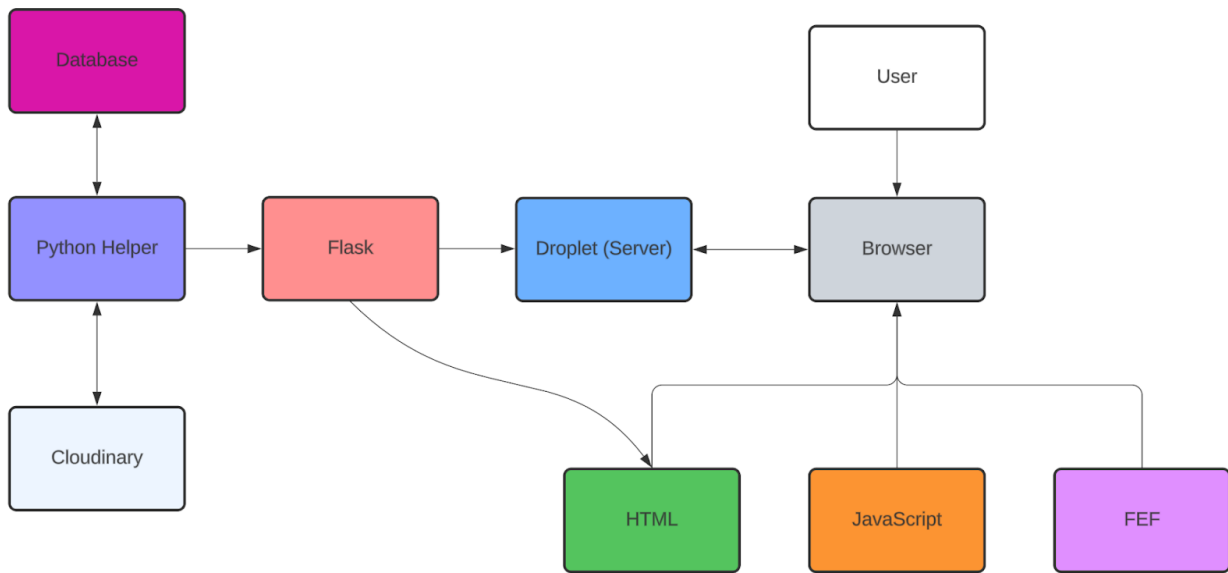
- `__init__.py`
 - Routes
 - `@app.route('/')`
 - `@app.route('/registration')`
 - `@app.route('/home')`
 - `@app.route('/profile')`
 - `@app.route('/friends')`
 - `@app.route('/settings')`
 - Event Handlers
 - `@socketio.on('connect')`
 - `@socketio.on('disconnect')`
 - `@socketio.on('new_message')`
 - `@socketio.on('join_room')`
 - `@socketio.on('upload_image')`
 - `@socketio.on('upload_emoji')`
 - `@socketio.on('change_profile_picture')`
- `static/`
 - `css/`
 - `login.css`
 - `registration.css`
 - `home.css`
 - `profile.css`
 - `friends.css`
 - `settings.css`

- js/
 - home.js
 - profile.js
 - friends.js
 - settings.js
- templates/
 - login.html - page with form where users may login into their accounts
 - registration.html - page with form where users may sign up for an account
 - home.html - home page with a friends bar on the left and the chat on the right (similar to discord)
 - profile.html - profile page of a user (displays profile picture, mutual friends, and about me/bio)
 - friends.html - displays list of recommended friends based on mutual friends and be able to search for friends
 - settings.html - settings page where you can change profile pic and add about me
- database.py
 - Setups database tables
 - Contains functions to help access tables
- keys/
 - Key for Cloudinary API

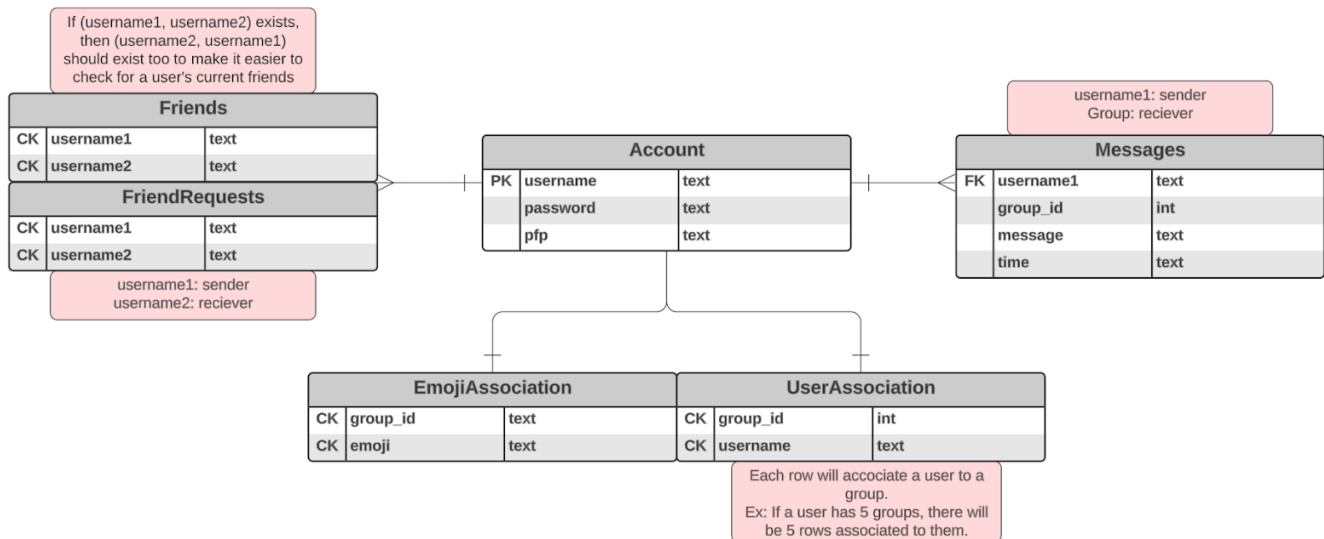
API

Cloudinary will be used to store images for user uploaded profile pictures and emojis that they would like to use.

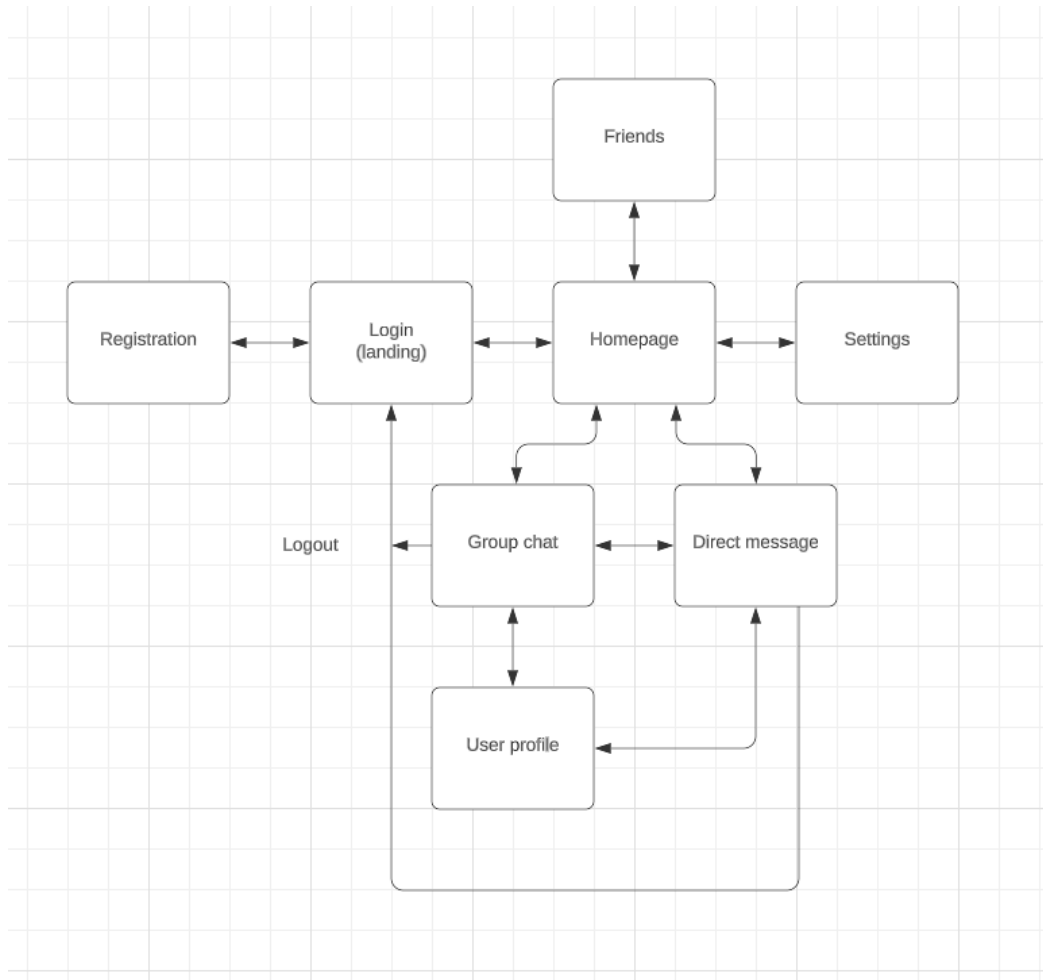
Program Component Interactions/Component Map



Database Organization



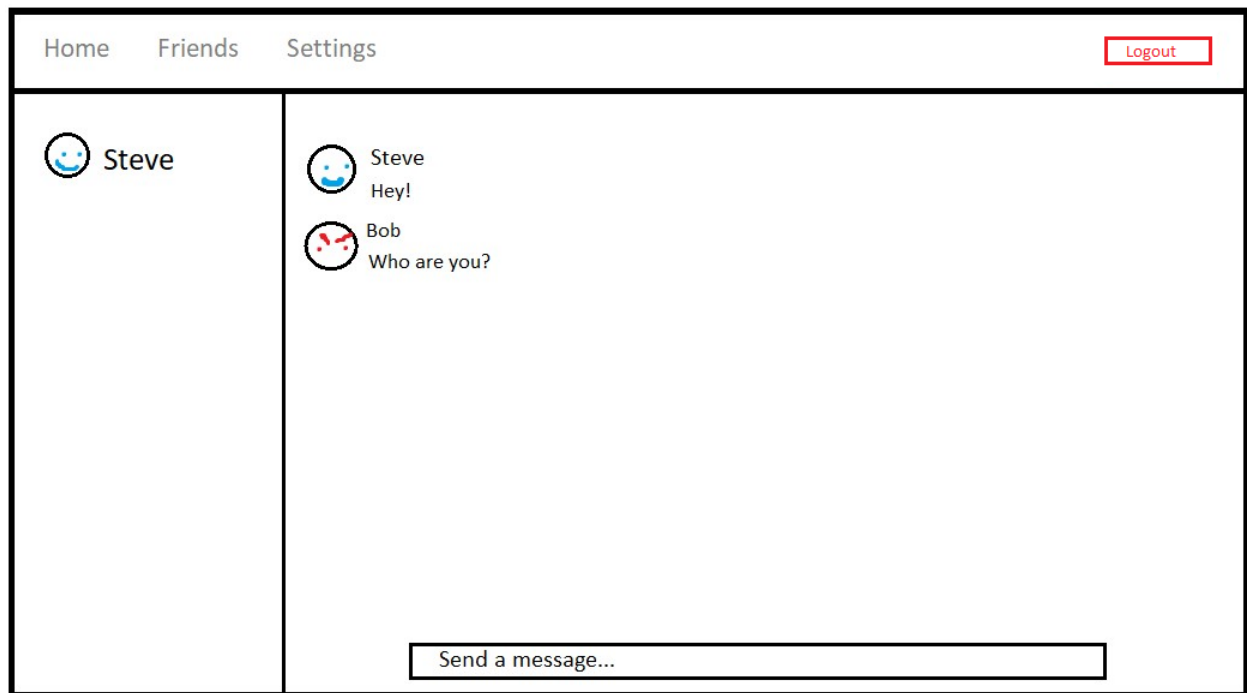
Site Map



Front-end Framework

Bootstrap will be used as our Front-end framework

Home page



Roles

Ivan Yeung - PM

- ❖ Flask
- ❖ Websockets

Jun Hong Wang - DEVO

- ❖ AJAX
- ❖ JS

James Yu - DEVO

- ❖ FEF (Bootstrap)
- ❖ Droplet

Joshua Liu - DEVO

- ❖ Database
- ❖ Cloudinary
- ❖ Websockets