

## [Flask-SocketIO]

### General Information & Licensing

Code Repository	<a href="https://github.com/miguelgrinberg/flask-socketio">https://github.com/miguelgrinberg/flask-socketio</a>
License Type	BSD
License Description	<ul style="list-style-type: none"><li>• Enables real-time, bidirectional and event-based communication between the browser and the server</li><li>• Consists of:<ul style="list-style-type: none"><li>- a Node.js server</li><li>- a Javascript client library for the browser</li></ul></li></ul>
License Restrictions	<ul style="list-style-type: none"><li>• WebSocket client will not be able to successfully connect to a Socket.IO serve</li><li>• Socket.IO client will not be able to connect to a plain WebSocket server</li><li>• Keeps an open TCP connection to the server, which may result in a high battery drain for your users.</li></ul>
Who worked with this?	Josh Aviles

*Use as many of the sections below as needed, or create more, to explain every function, method, class, or object type you used from this library/framework.*

### On Function [socketio.on()]

#### Purpose

- This tech is used to help handle events that take place on our website. Similarly to routes, it is attached to specific events (either message, json, or a custom event) and completes a task, based on what event was clicked/used.
- It is used for both our home page and DM page.

Magic ★★°

- After the socket is created, a login page will be displayed to the client. They will login and be moved to the home page. Here they will be allowed to post an image to the feed. Since the on function handles events, when a user submits a post to the feed, the function will recognize this and with the help of the emit function, send the post to all clients on the server. For our DM page, there will be interaction between 2 specific clients. In this specific instance, there will be a form to fill out (which is the message that they want to send) and a submit button. When the button is clicked, the on function will handle this event by completing the task designated to the submit button
- N/A: Yet to be coded

## Emit Function

## Purpose

- This tech is used to send data to the clients that are attached to the socket
- It is used for both our home page and DM page.

Magic ★★°

- On the home page, users will be allowed to post an image to the feed. When the user completes the form, the emit function is used to send that post to all the clients currently attached to the server. For our DM page, this works a little differently. Here, the message that the user submits will only be sent to the client whom they are currently messaging
- N/A: Yet to be coded

# leave\_room/join\_room functions

## Purpose

- This tech is used to put users in a private room and to remove users from private rooms.
- It is used for our DM page.

## Magic ★★°

- For our DM page, messages will only be sent in between 2 clients. Since this is the case, we must put said clients into a room. We use the join\_room function for this. At the end when the users dismiss from the chat, we use the leave\_room function.
- N/A: Yet to be coded