

Project Report

Xin Huang

December 17, 2021

1 Project Overview

1.1 Overview

In this project, the instructor asked us to build a web-based application and I chose to build a simple web chat room where users can send messages to the public board, the web app consists a data base which stores the input information from the users (clients).

1.2 URL

You can try the web app by the following link:

<https://www.xinhuang.info/webchat>

The Github link is shown below:

<https://github.com/xinhuang09/web-chat>

2 Tools and Environment

In this project, I used **Python** for the back-end programming language and used the **Flask** framework for the web programming, and I used **HTML** for the front-end programming.

3 Application Structure

3.1 Overall Architecture

The overall architecture diagram of this application is shown below. Users exchange information through a public Message Board, and the server undertakes the main functions of reading input information, storing input information, and displaying information.

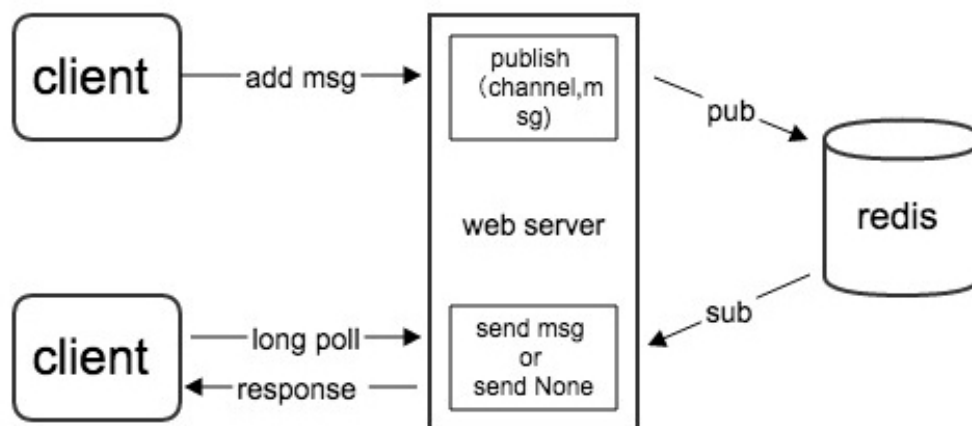


Figure 1: Architecture of the Web Chat App

3.2 Introduction of the Function

For this web chat application, users can enter the information they want to send, and the information will be stored in the server's database with three indexes: id, information content, and time. All the information stored in the database so far will be displayed in the Message Board.

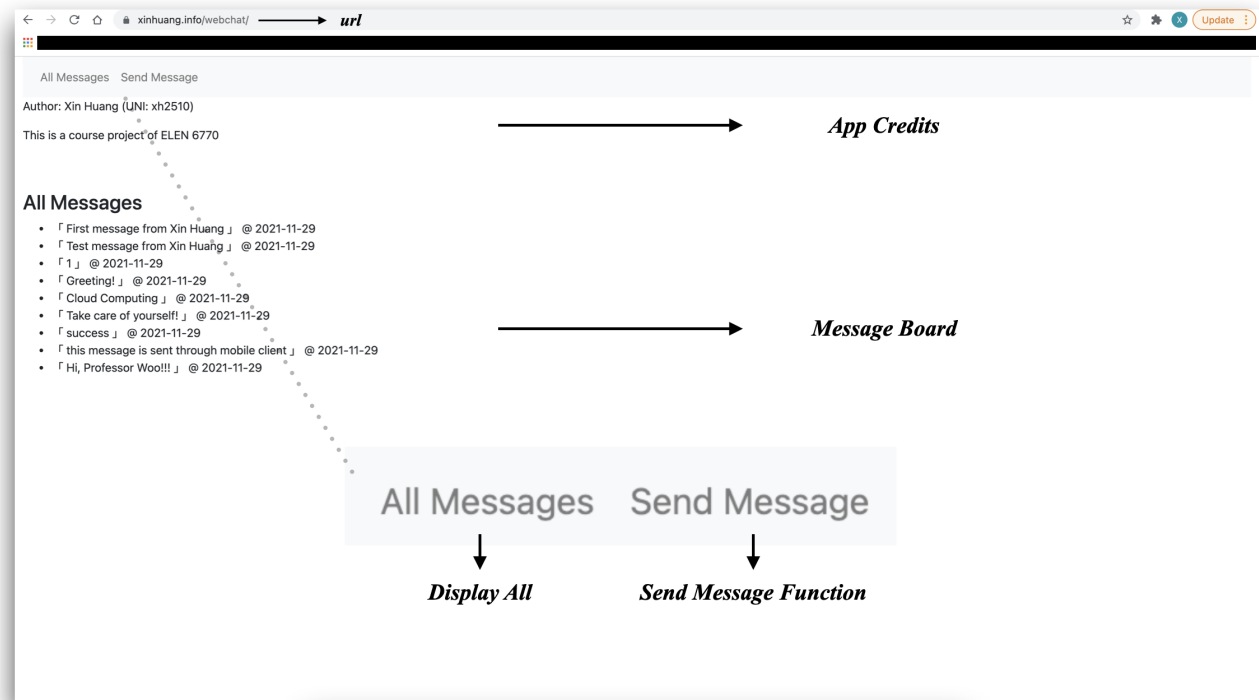


Figure 2: Main

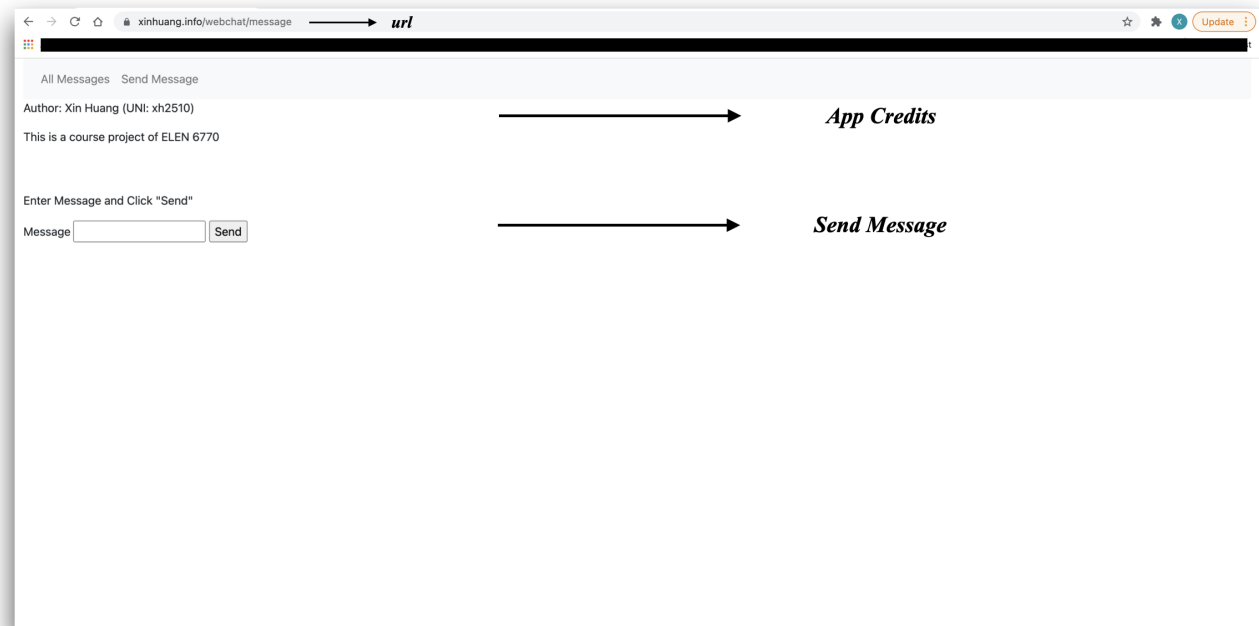


Figure 3: Send Message Function

4 Conclusion

In this project, I use Python for the development of basic functions, and use the Flask framework for the development of the application background, and use HTML to write simple front-end content, and finally realize the basic network chat room (message) function network application.

Throughout the process, I systematically learned the Flask framework and web programming knowledge, and practiced what I learned to make this web application.