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CMPT353

Final Project Design Report

## **Front-End (React Js Application & CSS)**

All the front end of my app were constructed by using ReactJS and CSS, other than the App.js and App.css were created by default, my app had the total of 6 main screen:

### 1) Landing

Functionality: The first screen user will encounter when launching the app, give the brief introduction and description of the app

### 2) Login

Functionality: Allows user to sign into their own account using their email and password

### 3) Register: Allows users to create their own account by signing up with their username, email, and password

### 4) Main: Main screen display channels, message of each channel, all the user message and their message vote. Main screen also allows user to post message, create channel, reply to a specific message if user desires. It also lets admin delete messages, channels, and comment.

### 5) Reply: Display the message that the user is replying to, and other replies made by other users to that specific message.

### 6) Stats: Display the user that has the most messages and most replies.

## **Back-End (MySQL)**

All my back-end data was stored in MySQL database, which has the main 4 tables:

### 1) Users: where it stores user email, password, and their username

### 2) Channels: where it stores the id and name of each channel

### 3) Messages: where it stores the message id, its content, its number of votes, and the name of the channel where it is located.

### 4) Replies: where it stores the message id, which is currently replied to, the id of each reply, its content and its total number of votes

## **Container (Docker)**

All files of the project and their structure were saved in Docker using Dockerfile.

## Final Project Test Project

### **Web App (React Js)**

- To test and debug my react js code syntax, I have used both the main terminal in Visual Basics and the browser terminal through browser inspection
- To test the app performance, I used the browser network inspection test keep track on each get and post request, to see how much time they execute each request.

### **Server**

- To test and debug server code syntax, I used the main terminal VSCode.
- To test out its performance, I used the terminal in docker file to check whether the server was successfully connected to the database. I also use to check how much memory RAM does it used up when it was running.

### **Database**

- To test out DB code syntax and avoid spending too much time. I first implement all my database table at my local host using MySQL workbench. By doing so, it helps me easier detect bug and have the visual image on what components are store in each DB table