

# Design Report

## Project setup

|chat2/  
|--chat-app/  
| |--node\_modules/  
| |--public/  
| |--src/ → Source code for the app  
| |--pages/ → Pages of the app  
| |--feed/ → feed page  
| |--index.js  
| |--feed.css  
| |--home/ → landing/ channel page  
| |--index.js  
| |--channels.css  
| |--login/ → login page  
| |--index.js  
| |--login.css  
| |--search/ → search page  
| |--index.js  
| |--search.css  
|--App.js → Root component of the app  
|--App.css → Stylesheet for the root component  
|--index.css → Global stylesheet for the app  
|--index.js → entry point for the app  
|--package-lock.json → lock file  
|--package.json → dependency  
|--server.js → backend server code  
|--dockerfile → dockerfile for building docker image  
|--docker-compose.yml → configuration file for docker compose.

## Design

- SQL
  - **Posts Table:** the post table is used to make new posts into the feed page. (postID, Content, Author, channelID, likes, dislike). The postID is used to identify the post for comments later, channelID is used to identify which channel the post was made. The Author is used to identify the user who made the post. Likes and dislike to keep track of the likes and dislikes
  - **User Table:** The user table will register new user into the database with (userID, username, password, is\_admin, id). later this will also be used to login and to see if the user is an admin.
  - **AdminUser:** This is a hard coded into the user table. As 'admin', 'admin1234', 'Admin User', . which will mean no other users can take the name admin and the id “1” is use by the program to see if the user gets the admin privileges like delete channel and posts.
  - **Channels Table:** The channel table will register new channels into the table. As (channelID, name).
  - **Comments Table:** the comment table is used to make new comment under the posts made into the feed page. (channelID ,postID, Content, Author). Main thing is the postID which is used to identify the post that comment belongs to.
- Server

On the backend server it is using express, mysql, cores, socket.IO. First the code makes all the SQL tables. And hard code admin into the user table. Next register and login. Once the user is successfully logged in we will go the channel to add new channels using app.post. Then app.delete to delete channels only the admin can use this. App.get is use to get the channels. From there it can so the posting page/ feed page or the search page