

## Chat System

### **Brief Explanation:**

#### **Project Structure:**

- **db\_migration => have premigration script to run at the beginning of db start.**
- **Handlers => having the REST APIs for user/message.**
- **Middlewares => having auth middleware to validate token before go to API.**
- **Models => having models of cassandra db (user/message)**
- **Nginx => having nginx config file.**
- **Repositories => having the repos interface and implementation for user/message repos.**
- **Services => having redis cache for now.**
- **Tests => having all test cases.**
- **Utils => having all the utility functions of the project.**

### **Assumptions :**

- **Get Message History to get all messages whether send or recipient match the email.**
- **I'm invalidating the cache for messages to del the key if new message is added instead of fetching data and add the new message at the end then save it to cache this approach is much easier.**
- **Validating Email in Auth Token with the Sender Email in Send Endpoint.**
- **Used JWT Bearer Token for authentication of users with email of user on it.**