

COMP 3133 – Lab Test – 1 (06%)

Due Date: 07th Feb 2024 06:00 PM

Create Chat Application having following features:

- 1) Create chat application name **studentID_lab_test1_chat_app** and GitHub repo
- 2) User can connect to chat server
- 3) Create Signup page to create new account (use **username** for unique identification)
- 4) Create Login page to authenticate existing user (use *localStorage* to keep session for logged In user)
- 5) After successful login allow user to **join** room from given room list (**devops, cloud computing, covid19, sports, nodeJS**, etc.)
- 6) User can **leave** the room
- 7) Users are only allowed to chat within their own room
- 8) Store all the user details and chat message to mongoDB for future retrieval.
- 9) Add “**user is typing...**” feature to the chat application
- 10) User can logout from the system
- 11) Host your application on Vercel or cyclic.sh or Heroku or GitHub pages.

Sample user schema

```
{
  "_id": "j35nn35hjdksgjkdsgs",
  "username": "pritamworld",
  "firstname": "pritesh",
  "lastname": "Patel",
  "password": "What about covid19 vaccine?",
  "createon": "01-28-2022 18:30 PM"
}
```

Sample MongoDB group message schema

```
{
  "_id": "847het8nieigouy4v",
  "from_user": "pritamworld",
  "room": "covid19",
}
```

```

    "message": "What about covid19 vaccine?"
    "date_sent": "01-28-2021 18:30 PM"
  }

```

Sample Mongodb private message schema

```

{
  "_id": "847het8nieigouy4v",
  "from_user": "pritamworld",
  "to_user": "moxdroid",
  "message": "What about covid19 vaccine?"
  "date_sent": "01-28-2021 18:30 PM"
}

```

Evaluation Criteria:

- 1) Maintaining GitHub repo with commits from your local machine. **(Code uploaded will not be accepted)** (10 points)
- 2) Working signup screen with mongodb record creation and express API (10 point)
- 3) Working screen to login/logout with mongodb record creation and express API (10 point)
- 4) Mongoose schemas with validation (10 point)
- 5) User can join and leave the room (10 point)
- 6) Two users can chat in same room with mongodb storage (40 points)
- 7) Host your application on Vercel or cyclic.sh or Heroku or GitHub pages (10 points)

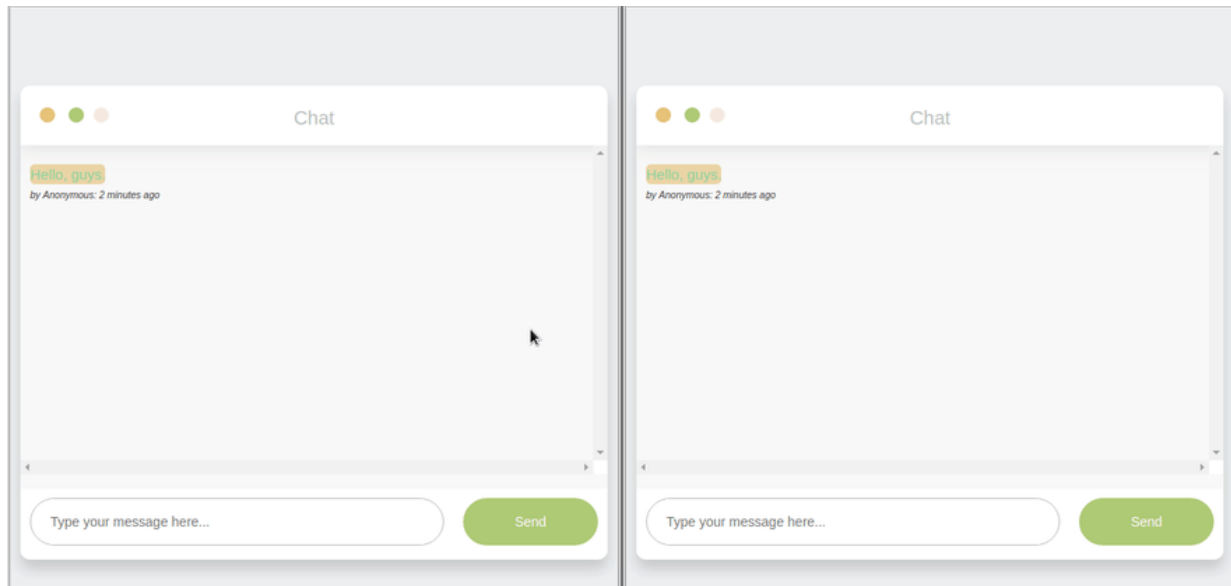
Note:

- 1) User socket.io, express and mongoose modules
- 2) Use HTML5/CSS/Bootstrap/jQuery to design application/chat screens

Submission:

- 1) Upload ZIP file of your source code to the black board on or before deadline
- 2) Provide GitHub link during submission.
- 3) Take screenshots or record short video of your application/mongodb to show your work evidence and upload to D2L
- 4) No email submissions will be accepted and emails with such requests will not be addressed or responded.
- 5) Issues with submissions should be sent BEFORE the deadline.
- 6) Any attempt to **cheat** will be handled according to the college policies and will result in grade 0 for the labtest1 and a report sent to the chair. **Cheating** includes not code exchange (submitting code written by other students or from the internet or another GitHub repo/tutorial)

Sample Chat screen are only for reference



Chat app

Username

Room

Join Chat Room

Chat app

Room name: News

Members:

- Pritamworld
- Moxdroid

Chat App Bot 2:56 Pm
Welcome to chat app :)

Chat App Bot 3:56 Pm
pritamworld has joined the chat

Chat App Bot 2:56 Pm
pritamworld has left the chat

Chat App Bot 2:57 Pm
moxdroid has joined the chat

Moxdroid 2:57 Pm
hi

Pritamworld 2:57 Pm
hello

Type your message here... Send

Chat app

Room name: News

Members:

- Pritamworld
- Moxdroid

Chat App Bot 2:57 Pm
Welcome to chat app :)

Moxdroid 2:57 Pm
hi

Pritamworld 2:57 Pm
hello

Type your message here... Send