

COP 5615: Distributed Operating Systems Principles

Project 4 Part 2

Twitter Clone implementation based on Erlang Programming Language and Websocket interface

Team members

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Introduction

In Project 4, part 1, we implemented a twitter simulation with features to register an account, login/logout, tweet, retweet, follow an account, view all tweets, mentions and hashtags. Now, as continuation of the project, we are adding a websockets interface to our twitter clone. We also have a User Interface now because of the websocket interface. We now have an API which is based on JSON to view all messages, responses and also, error messages. We also edited our erlang code to include cowboy for providing the websockets interface.

Youtube Video Link : https://www.youtube.com/watch?v=f8pF3Wlu_gQ

Instructions to execute the project

Install the latest version of erlang and cowboy on a mac machine.
Download the **project4part2.zip** and unzip it to any desired path.

Step 1:

Go to the location of twitterclone.html path in the project and open a new terminal there

Step 2:

First open a terminal where the project files are located and run command

- `erl sname centralserver`

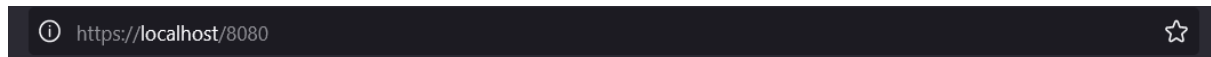
Step 3:

Then run the command to compile all the erlang files in the command terminal:-

1. c(main).
2. c(registerfunc).
3. c(sendreceive).

Step 4:

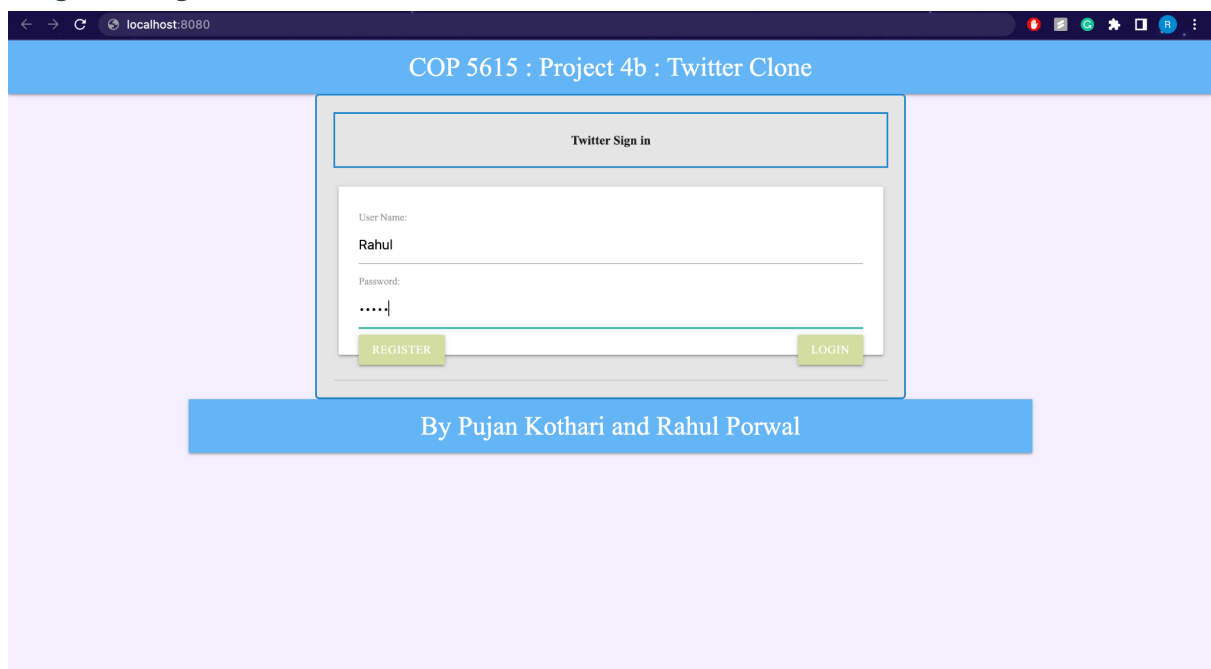
Then go to your browser and type localhost:8080 and open twitterclone.html in another tab

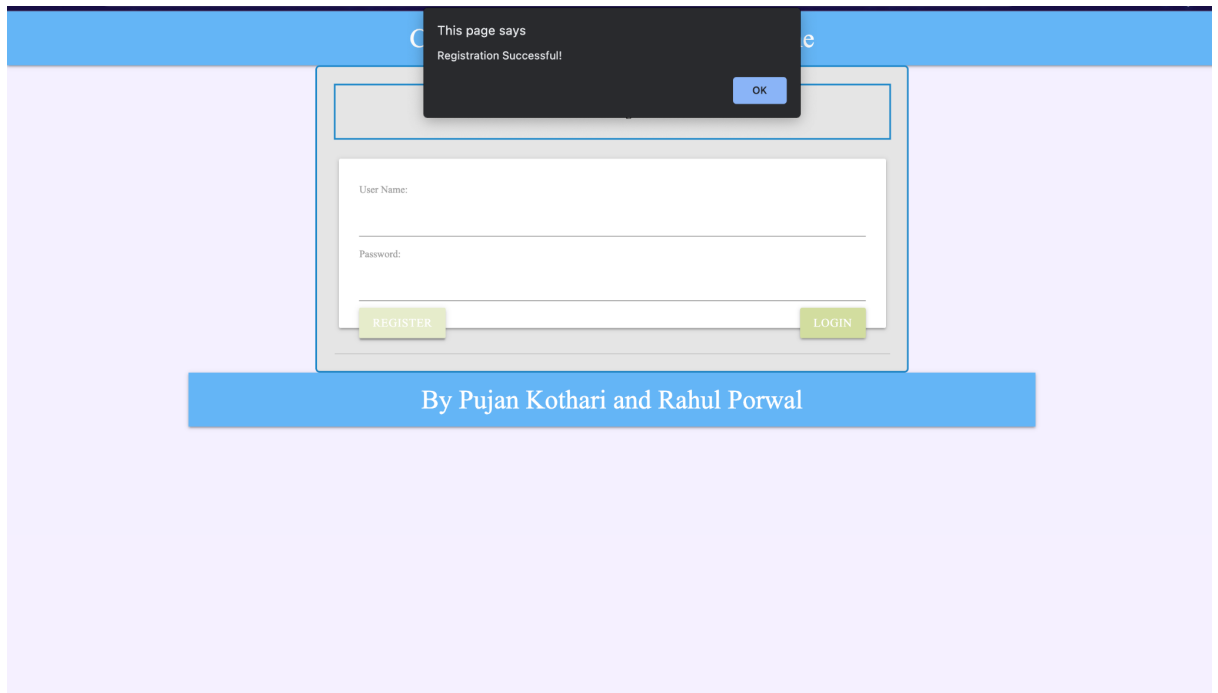


Functionality Implemented-

- **Account Registration**

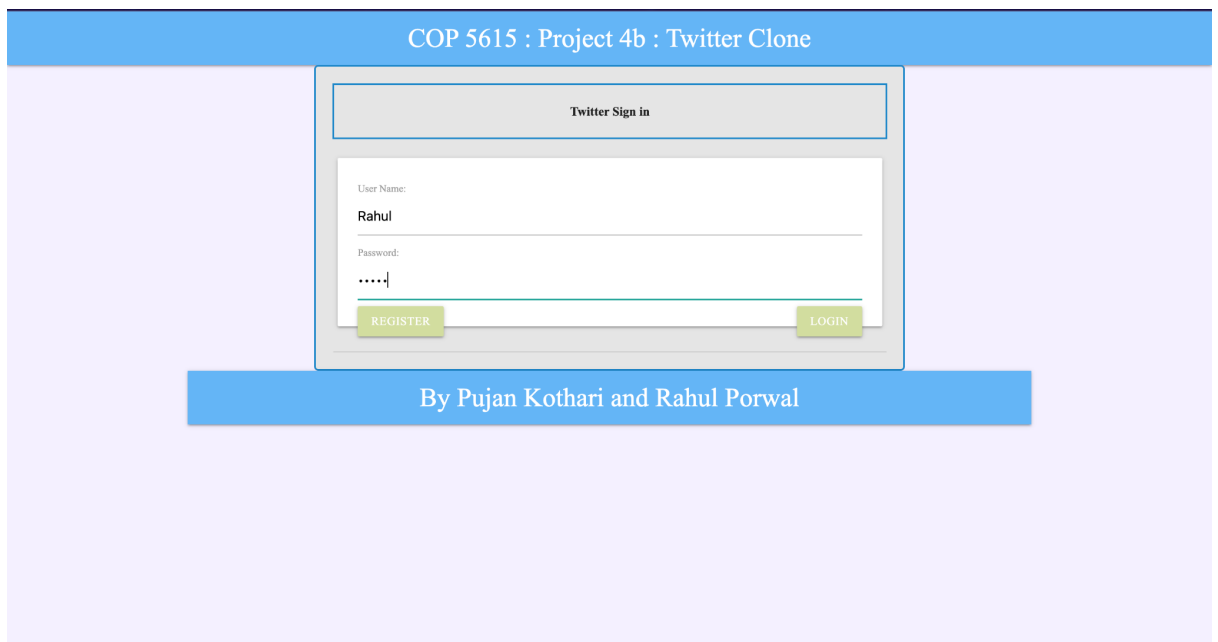
Registering account with name Rahul.

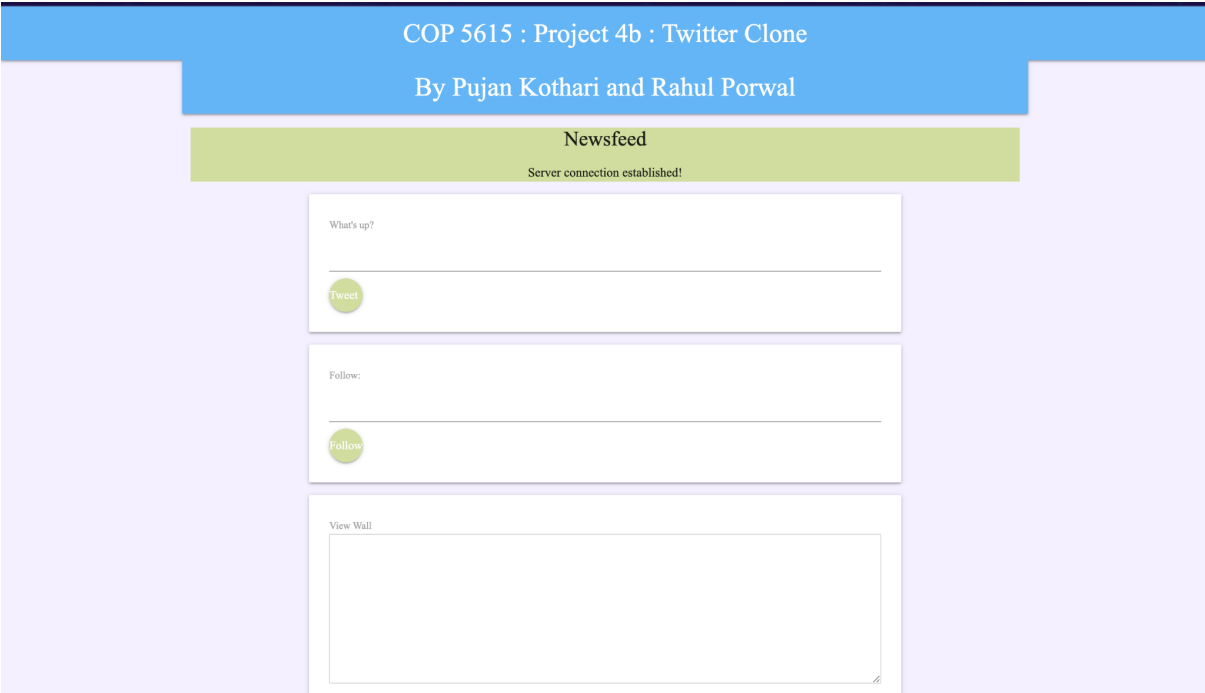




- **Login into Account**

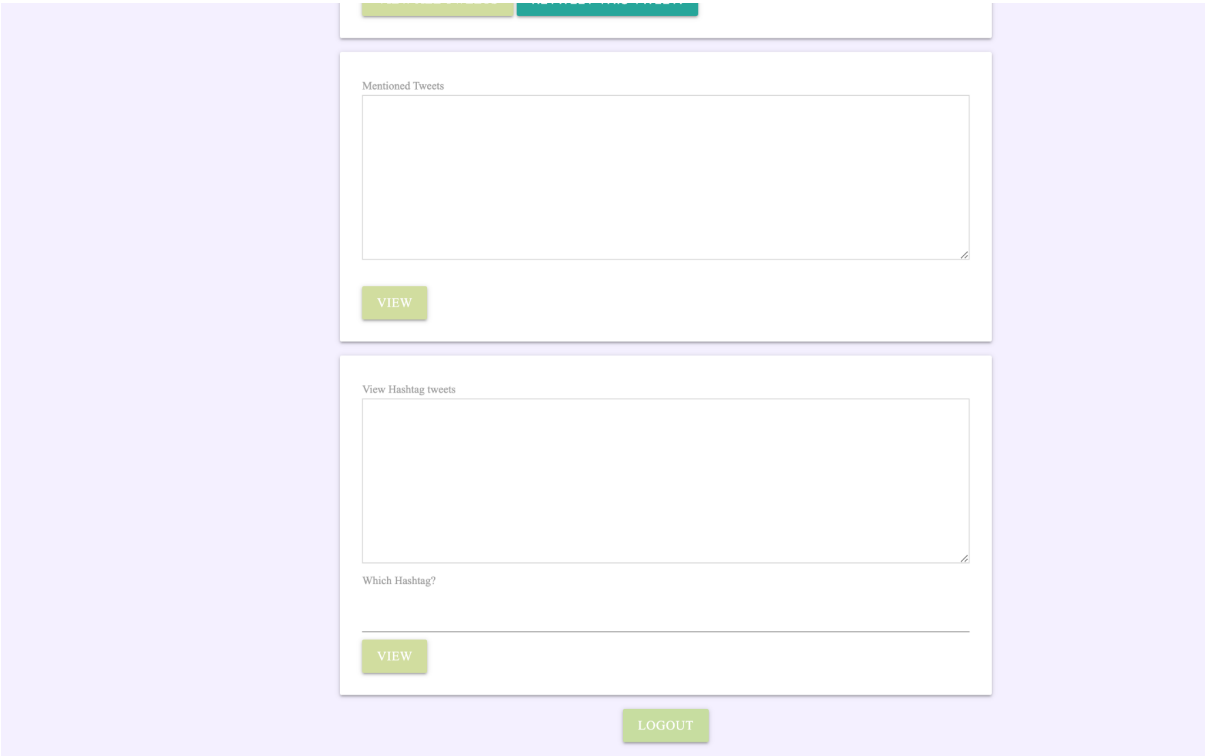
Logged in Rahul's account





- Logout

Before clicking Logout:-



After logging out:- Logged out of Rahul's account

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Twitter Sign in

User Name:

Password:

REGISTER

LOGIN

By Pujan Kothari and Rahul Porwal

- **Follow an account**

Followed Rahul's account from Pujan's account

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Newsfeed

Server connection established!

What's up?

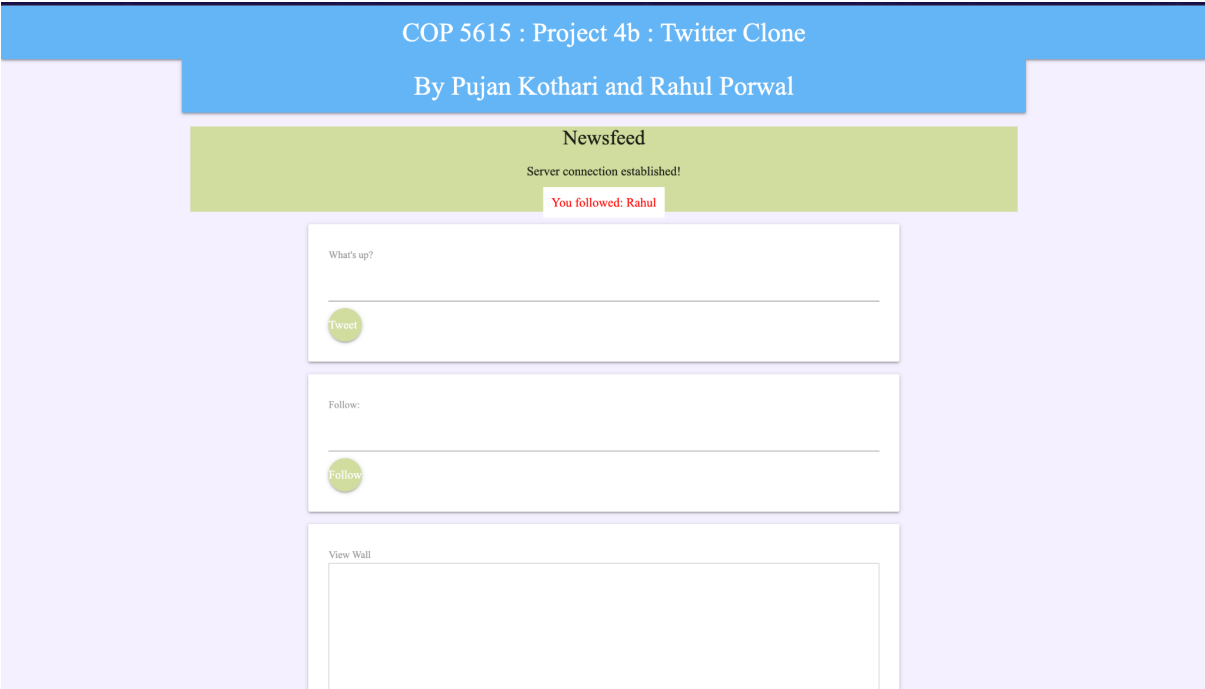
Tweet

Follow:

Rahul

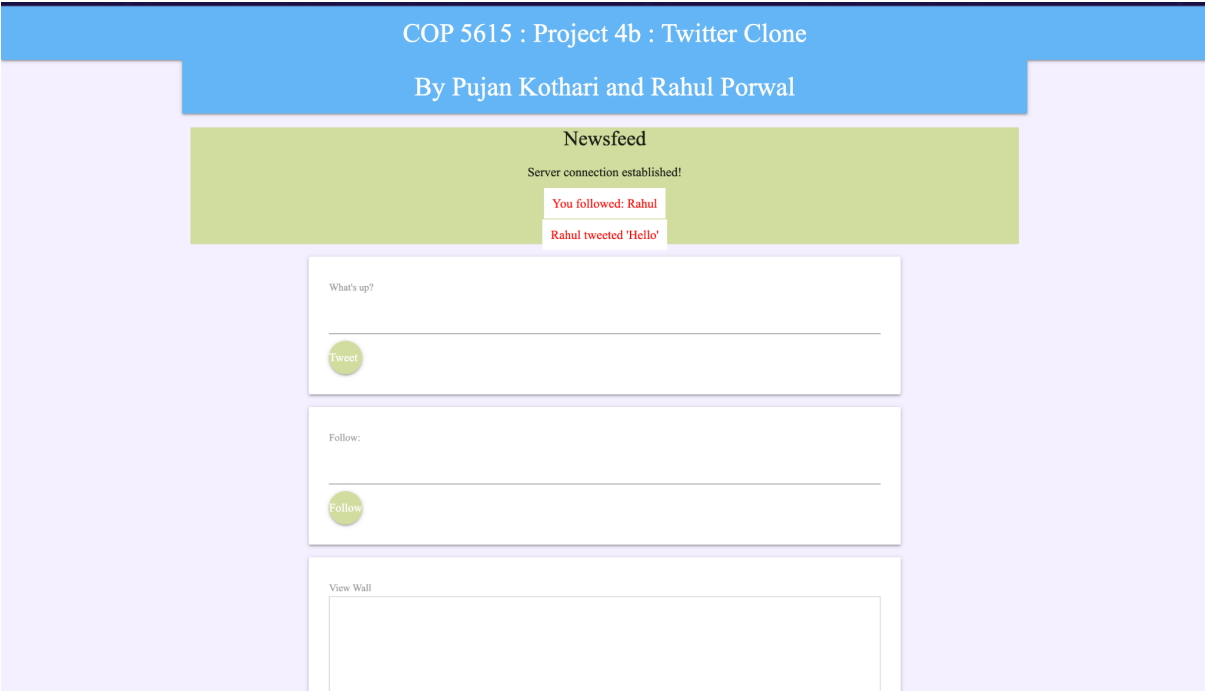
Follow

View Wall



- **Tweet**

Livefeed of Pujan shows Rahul's tweet



● Retweet

This page says
Tweet has been retweeted

OK

What's up?

Tweet

Follow:

Follow

View Wall

Hello
Hello again

VIEW ALL TWEETS

RETWEET THIS TWEET!

Mentioned Tweets

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By Pujan Kothari and Rahul Porwal

Newsfeed

Server connection established!

You followed: Rahul

Rahul retweeted Pujan's tweet: 'Great Game!!!'

What's up?

Tweet

Follow:

Follow

View Wall

- **Query all tweets with a specific hashtag (#)**

Querying all tweets of hashtag fifawc22

VIEW ALL TWEETS

RETWEET THIS TWEET!

Mentioned Tweets

VIEW

View Hashtag tweets

watching #fifawc22
great match ! #fifawc22

Which Hashtag?

VIEW

LOGOUT

- **Query all tweets**

Querying all tweets from Pujan's profile

Rahul tweeted 'Hello'

Rahul tweeted 'Hello again'

What's up?

Tweet

Follow:

Follow

View Wall

Hello
Hello again

VIEW ALL TWEETS

RETWEET THIS TWEET!

Mentioned Tweets

- Query all tweets where user is mentioned (@)

VIEW ALL TWEETS

RETWEET THIS TWEET!

Mentioned Tweets

Hello @Rahul
Whats up @Rahul ?

VIEW

View Hashtag tweets

Which Hashtag?