Distributed Operating System Principle

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Build Process

- Unzip file `unzip NegiYadav.zip`
- `dotnet build src/FsTweet.Web/FsTweet.Web.fsproj` to build project
- Since this project makes use of Postgres Databae, you'd need to load the dump using `psql -U postgres database < dump_file` to load all the schema necessary for this project
- `dotnet run --project src/FsTweet.Web/FsTweet.Web.fsproj` to run the project
- Visit `localhost:5000` to view this project

What is Working

- Register account
- Send a tweet. Tweets can have hashtags (e.g. #COP5615isgreat) and mentions (@bestuser)
- Subscribe to user's tweets
- Re-tweets (so that your subscribers get an interesting tweet you got by other means)
- Allow querying tweets subscribed to, tweets with specific hashtags, tweets in which the user is mentioned (my mentions)
- If the user is connected, deliver the above types of tweets live (without querying)

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API Details

Open Endpoints

Open endpoints require no Authentication.

- Login : `POST /login/`

Endpoints that require Authentication

Closed endpoints require a valid Token to be included in the header of the request. A Token can be acquired from the Login view above.

User

Each endpoint manipulates or displays information related to the User whose Token is provided with the request:

- Show signup page : `GET /signup`
- Create User for login : `POST /user/`
- Signup success: `GET /signup/success/%s`
- Logout: `GET /logout`

UserProfile

`%s` means it accepts a username of type string

- Show user profile page : `GET /%s`
- Get timeline view : `GET /wall/`
- Get all the followers : `GET /followers/`
- Get all the user that it follows : `GET /followees/`
- Create Tweet/Retweet : `POST /tweets/`
- Fetch all the tweets in system : `GET /all/`
- To follow a user: `POST /follow`

Websocket APIs

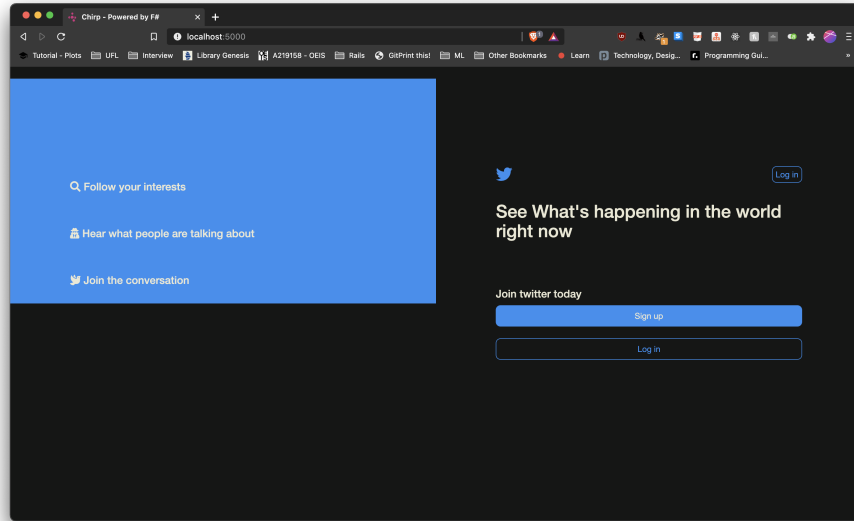- Get live tweets: `GET /websocket`
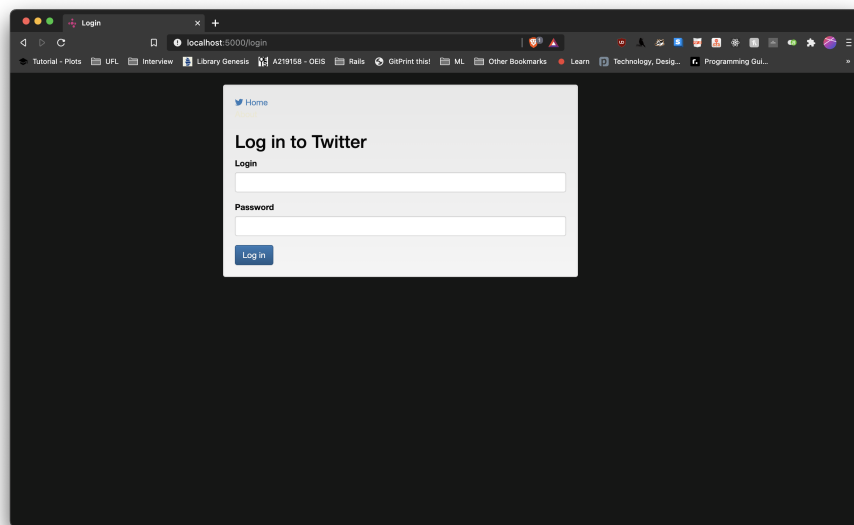
Video Link

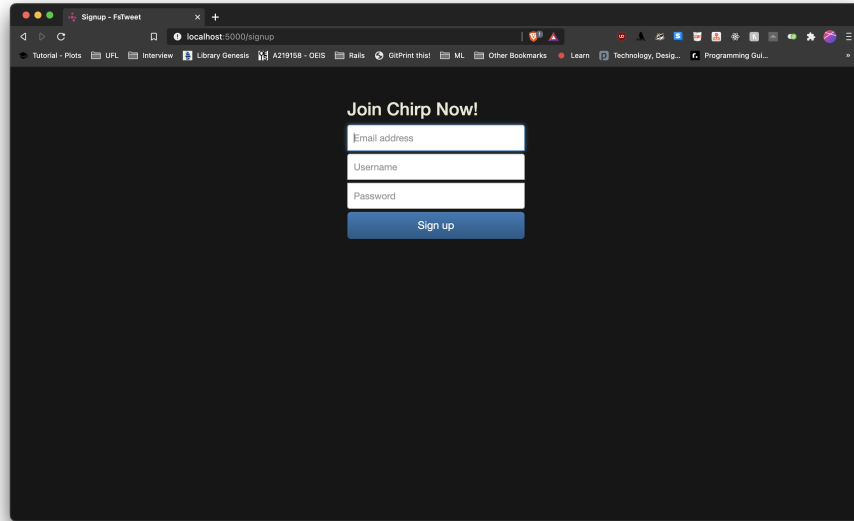- Part 1
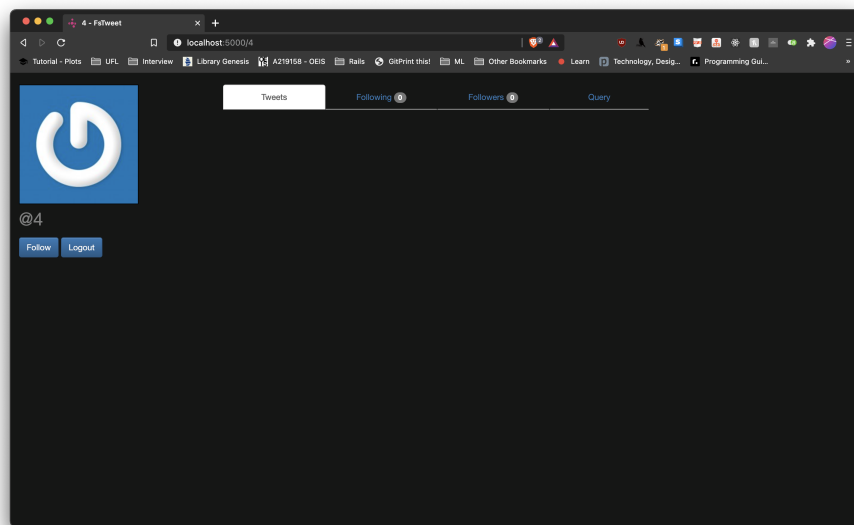- Part 2

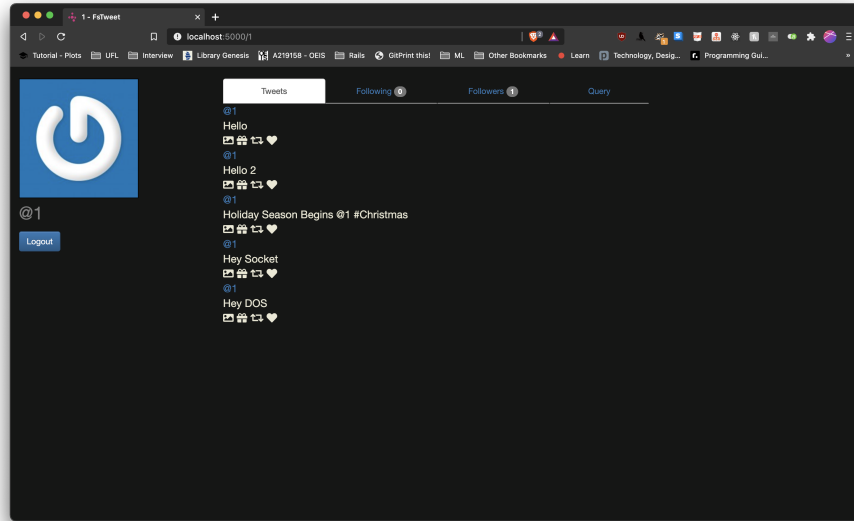Figure 1: Index Page

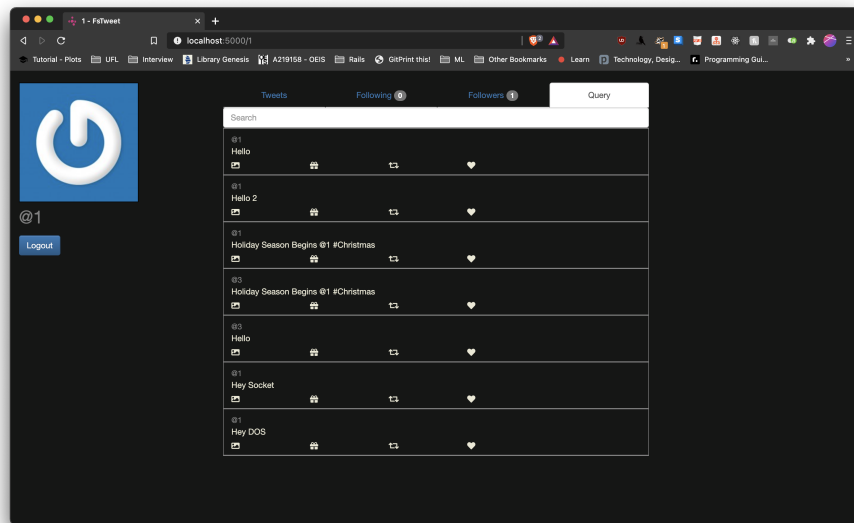Figure 2: Tweet

Figure 3: Tweet
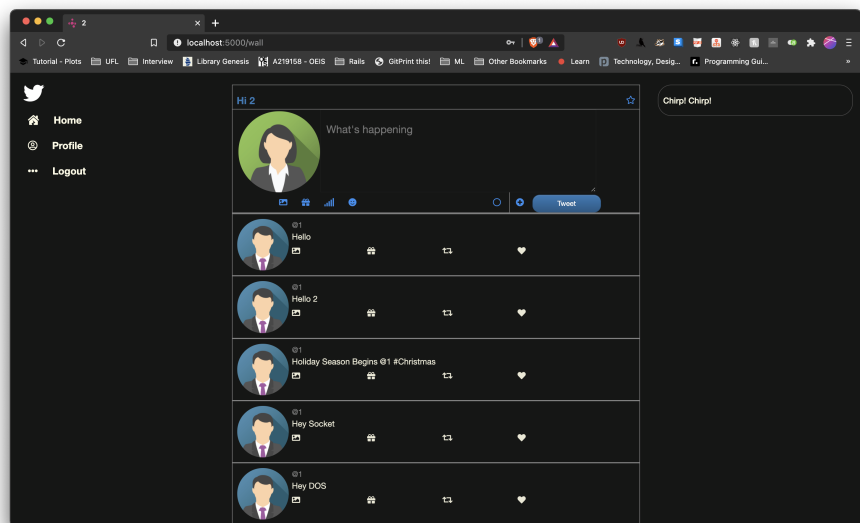

Figure 4: Tweet

Figure 5: Register

Figure 6: Register

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Figure 7: Register