Project 4 Part 2

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How to run our code?
1. Unzip project4.zip
2. Goto project4 folder
3. Run: mix phx.server

What is working?

We have created a UI in HTML/Javascript which acts as an interface for our channels in phoenix to be connected the server written in elixir.

The UI is a very primitive one to show the basic functionalities of twitter.

Our UI has the following functionalities:

1. Register user: whenever a new user is registered we add an entry of the user into our ets table on the server side.

2. Login: For a single browser we maintain the user who is logged in get information according to that. We have authentication as well. If the user enters wrong password, the username and password fields get cleared and user has to try again.

3. Follow: You can write the name of the user you want to follow and you are added to that user's followers list and that user is added to your following list on the server side maintained in the ets table. Whatever tweets a user sends are going to be visible to its followers.

4. Get Tweets: Returns all the tweets of the users who the current user follows.

5. Retweet: Given the list of tweets that the user can see, he can select any one of them with the index and retweet it to his followers.

6. Query Mention: It gives all the tweets which have the mention specified by the user. The query should be prefixed with '@'

7. Query Hashtag: It gives all the tweets which have the hashtag specified by the user. The query has to be prefixed with '#'

IMPLEMENTATION

1. JSON based API - We used Phoenix channels to create an API wrapper over our previous code from Part 1. A wrapper was written for all the existing functionalities we had in the previous part.

2. Channels uses Websockets to communicate to clients.

3. In the Javascript part of the client, we have used sockets to connect to the server's phoenix channel.