Fortnite: Nakib Abedin, David Deng, Weichen Liu, Eric Sohel

SoftDev pd08

P05 – Twitter Clone

2023-06-01

Time Spent: 1.3 hrs

Target Ship Date: June 13, 2023

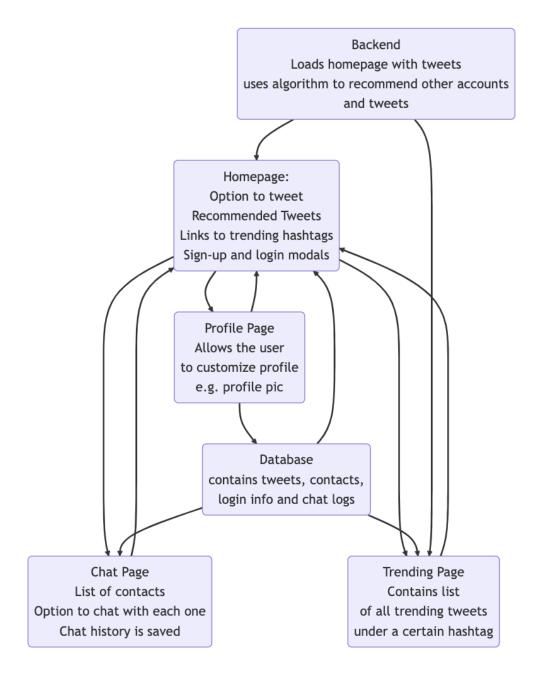
Project Description:

We want to create a clone of the website for Twitter. We plan on having a website where you can see tweets from other people, message them via twitter DMs, see posts that are trending, and make your own tweets.

Program Components:

- 1) Frontend (Home Page)
 - a) Will contain a long list of tweets. Some of these tweets will be pulled from the twitter API and some of them will be posts that the twitter user has made themselves.
 - b) Will have the option for the user to make a tweet real time
 - c) On the sides, there will be a list of other accounts the user can follow as well as other items that are trending
- 2) Frontend (Chat Feature)
 - a) Will use websockets in order to have real-time messaging going on
 - b) Will enable communication between two different accounts
- 3) Backend
 - a) Will make API calls to get tweets from the twitter API and send them to the frontend
 - b) REACH: We will try to implement algorithms which will recommend the user tweets to see and profiles that they can view
- 4) Database
 - a) One table will contain login information
 - b) One table will contain tweets from the user
 - c) One table will contain list of contacts
 - d) One table will contain chat message log

Component Map:



Login Information:

Username	Password
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Tweets:

PostID	Post Text	Post Time	Post Likes

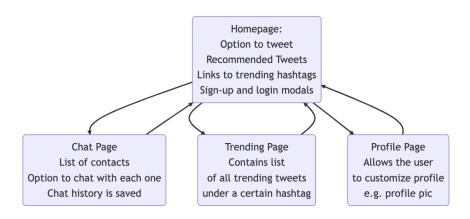
Contacts:

Contact Name	List of Chat IDs associated with user

ChatID:

Chat ID	Chat History

Site Map:



API:

Twitter API

- Will be used in order to get real tweets
 - REVISION: Since the twitter API does not give free access to an account's twitter timeline, we will be using the twitter API in order to allow the user to look for profiles to follow or view.

Duck API

• Will be used to generate random profile pictures for new accounts instead of sticking to the npc default picture used by twitter

Framework:

Bootstrap:

• As a whole, this is the front end framework that the team is most familiar with and the one we believe is most conducive to good clean programming

Task Delegation:

Nakib Abedin → Project Manager; Fullstack Developer

- In charge of staying up to date with instructions from Mr. Mykolyk
- Will setup API requests and display the information in tweet format in the frontend David Deng → Backend Engineer
 - Will develop the chat feature using websockets
- Will attempt to create recommendation algorithm to find new tweets and other profiles Eric Sohel → Database Manager
 - Will develop the databases to ensure that chat history is saved and that user tweets are stored
 - Will work on the likes, comments, and retweets features as they need to be stored in the database

Weichen Liu → Frontend Engineer

- Will attempt to make the website look like the actual twitter website
- Will work on the account registration features and will create animations for things like likes, retweets, and comments.