BingeWatcher's Twitter - React JS

React JS is a javascript based library for developing SPAs i.e single page applications. React JS is easy to learn, open source, has a great community support and has a great industrial demand. React JS is one of the best frameworks to add to your web developer's portfolio. So, Let's start our React JS journey with a fun and useful application that is similar to twitter.

What you will learn:

- Basics of React JS
- Class Based components and Function Based components
- Hooks like useState and useEffect
- Routing in React using react-router-dom
- API calls using React JS.
- CRUD operations using Firebase and React
- Authentication using Firebase

This project will be a strong foundation for React JS journey and will learn how to make and manage industrial level applications. Main use of React JS is to make user interfaces of a single page application and Firebase adds the functionality of a simple backend and noSQL database. But still you can learn backend frameworks like Express JS(based on Node.js) if you wish to explore backend development.

Project Demo Video: [WoC 4.0] ReactJS - BingeWatcher's Twitter

Prerequisites for React JS and this Project: HTML, CSS and JavaScript

Resources for React JS:

React JS Docs: https://reactjs.org/docs/getting-started.html

React Router Docs: https://reactrouter.com/docs/en/v6

Youtube Video(7hrs, English): https://www.youtube.com/watch?v=nTeuhbP7wdE

Youtube Playlist(Hindi):

https://www.youtube.com/playlist?list=PLbGui_ZYuhignjLLXTJWkRJKN-SgAqCIL

Youtube Video(React Router): https://www.youtube.com/watch?v=UjHT_NKR_gU

The main things to learn for this project are: Setting up React, JSX, States, Props, functional based components, class based components, hooks like useState and useEffect, forms and event handling, routing and API handling. There are many more things to learn in React JS. You can follow the above provided youtube video and playlist but you should keep looking into the docs as well because official docs keeps you updated with the latest changes and code patterns.

Resources for Firebase:

Firebase Docs for Auth: https://firebase.google.com/docs/auth/web/password-auth

Firebase Docs for CRUD: https://firebase.google.com/docs/firestore

Authentication in Firebase: https://www.youtube.com/watch?v=9bXhf_TELP4

CRUD in firebase: https://www.youtube.com/watch?v=jCY6DH8F4oc&t=2202s

The above two youtube videos are latest videos that teach latest version of firebase with react. But no video can teach each and every function of firebase. So it is a necessity to learn how to develop reading docs. You can learn how to add firebase in react and work with them. But for the project you will have to go through the docs provided above.

Checkpoints:

Checkpoint 1: Create a basic react app that has multiple routes:

- 1) / Create a basic component that shows tweets using dummy data.
- **2)** /trending Fetching data from the https://api.themoviedb.org and showing the data. [Docs: https://developers.themoviedb.org/3/trending/get-trending]
- 3) /auth Create forms for sign in and create account.

Checkpoint 2:

- Add firebase authentication functionality to the project. The forms created above for sign in and create account created in checkpoint 1 should be used for this functionality.
- 2) Also create a textbox on homepage('/') which can be used to create tweets. Basically the input obtainer here should be stored in firestore of firebase.
- 3) Fetching the tweets from firebase firestore and showing them on homepage instead of showing dummy tweets.

Checkpoint 3:

- 1) We need to store username also so storing user info in firebase after creating account. Also fetching username when the user signs in.
- 2) Adding user info when creating a tweet. Also when showing tweets on homepage it should show the user's name who created the tweet.
- 3) Adding edit and delete button on the tweet. Edit and delete should be allowed to the user who has created the tweet.

Checkpoint 4:

- 1) Create a profile page that shows user info and tweets made by that user.
- 2) Adding like functionality for each tweet.

Add-ons to the project(not necessary but worth giving a try):

- 1) Add a comment functionality for each tweet.
- 2) Add a follow functionality for each user.
- 3) Adding a retweet functionality.

Where to go after this: Try to go deep into react and learn context, redux and make some complex projects in react. Once you are confident with React then you have two choices. One is Node.js which makes you a full stack developer i.e MERN(MongoDB, Express, React, Node) stack developer. Another choice is learning React Native and making mobile applications using that.

Mentors for this Project

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