Netflix Clone

20ᵗʰ November 2023

OVERVIEW

The NextJS 13 App embodies a movie streaming platform Netflix.This App uses TypeScript as the coding language.Tailwind CSS is used as a styling library. It has a home page, Register/signIn Page, browse movies page, and watch video page.,Additionally to complete the website functionality, Authentication using NextAuth and storage of user accounts using MongoDB with Prisma is done.

GOALS

1. Develop custom layouts resembling various Netflix interfaces (movie screen, header, footer, player, search, etc.).
2. Use Tailwind CSS for styling.
3. Utilize React states and custom hooks.

Results

1. App: https://netflix-clone-kvora125.netlify.app/ (Pls ignore dangerous app warning)
2. Github Repo: https://github.com/kvora125/netflix

CODE INSIGHTS

The App is built on NextJS 13 and Tailwind CSS. We have used Multiple custom hooks for data fetching and it integrates SWR (stale-while-revalidate) : a HTTP cache invalidation strategy popularized by HTTP RFC 5861. SWR is a strategy to first return the data from cache (stale), then send the fetch request (revalidate), and finally come with the up-to-date data. It integrates SSR, ISR, and creates fast real-time app experience while keeping the app efficient and lightweight.we have used dynamic as well as stale content using revalidation parameters for non-static and static sources respectively. This has been done to create an environment similar to a fully functional web app with a backend.

MILESTONES

Initial config and static data - 14 NOV

The initial config of the next app and static data was sourced from the internet . publicly available data from google common data storage is used. Next app was set up to use tailwind and typescript.

Sign In and auth added - 14 Nov

We created Sign In functionality using next-auth, and mongo DB and added auth protection to apis for our content to be protected and not available to users not signed in.

Created Navbar component and profiles page - 15 Nov

We added a navbar component for logged in users. This allowed users to see their logged in users and logout and access home . genre and search are static and added as placeholders.

Created Movie List view and viewer - 16 Nov

A movie list view was created with info modal and Bill board view, as well as movie fonts using next fonts were implemented. Movie viewer using html5 video component was added where random uuids were added and UUID based routing helped watch movies

Home Page - Unauthenticated Users Added - 17 Nov

A Home page for unauthenticated users was created. It is similar to the netflix home page. The page is for unauthenticated users.

Deployments Test and integrations on env check - 18 Nov

A comprehensive functionality check on the deployed version of the app and fixes to issues were done.

EXTERNALLY SOURCED CODE.

Next -auth and mongo DB tutorial :
https://reacthustle.com/blog/how-to-implement-mongodb-authentication-in-nextjs-nextauthjs
Using this tutorial and modifying its code I learnt how to integrate mongodb next auth and prisma to create an authentication backend. Initially I was planning to use a static username and

password or allow just anything but then it just didn't feel right to do and made the app incomplete.

SWR : https://swr.vercel.app/examples/basic
Used SWR examples to understand how to use it.

Conclusion

The assignment was quite interesting and allowed me to explore NextJS more. I created this clone to allow all the types of devices and cross-device compatibility was a real challenge while making CSS. I explored SWR & custom hooks a lot. I got to understand importance of request caching and creating this mvp clone also helped me appreciate the beauty of what netflix engineers have created.