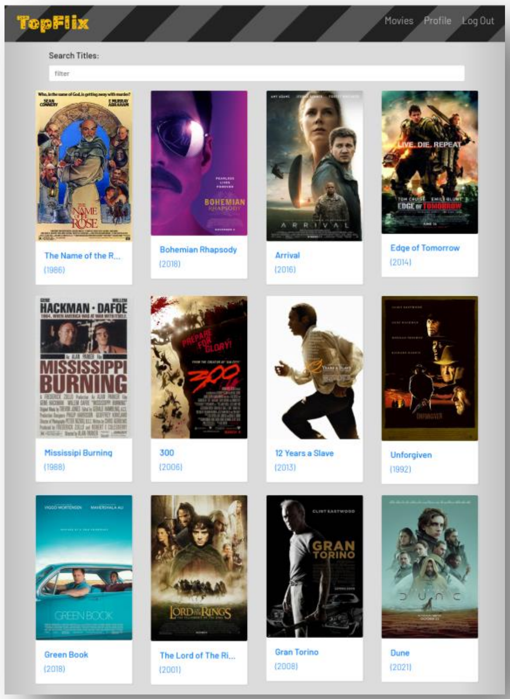
Case Study for TopFlix full-Stack MERN project

Overview

TopFlix is a web app that aims to provide high quality **movie recommendations** from a selection of top rated movies that excel in their own genre, privileging at its core superior choices. Besides being able to register, login and edit their profile, users of TopFlix can navigate through the app's fluid interface to find movies either by title, genre or director, and hand-pick movie titles for their own favorites list.

Purpose & Context

TopFlix is a personal project, built with the express purpose of creating a full-stack MERN app —*MongoDB, Express, React and Node.js*— for my immersive web development course at CareerFoundry and to showcase my capabilities as a **proficient JavaScript Developer**.



Objective

To develop a complete project with the MVC (Model View Controller) architecture from scratch, that could handle what are the most required capabilities in any **modern web application** with a server-side and a performant and intuitive client-side UI, to add to my professional portfolio.

Capabilities and Tools

The Server-Side

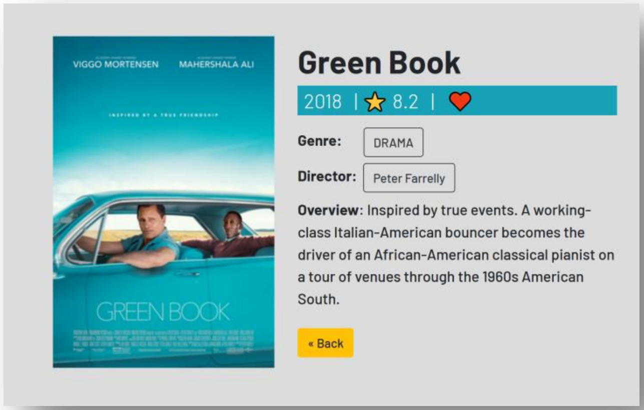
First, I decided upon how to structure the data to represent movies and users information, and then I created the database, with its collections and various documents in MongoDB.

After that, I developed the RESTful API with Node.js and Express, designing it's various endpoints (tested with Postman) to serve raw data in JSON format upon HTTPS requests.

You can open this link to check out the API documentation.

The application data is modelled using Mongoose's schema-based solution.

Upon logging in in with basic HTTP authentication, users are provided a JWT for a token-based authentication for further access and usage of the app.


Green Book

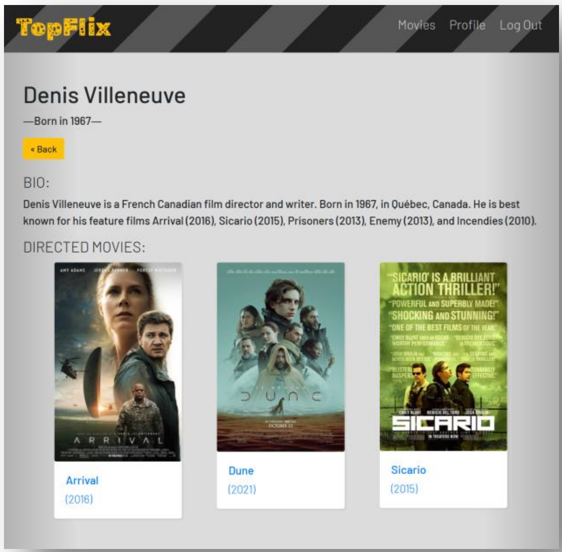
2018 | ⭐ 8.2 | ❤

Genre: DRAMA

Director: Peter Farrelly

Overview: Inspired by true events. A working-class Italian-American bouncer becomes the driver of an African-American classical pianist on a tour of venues through the 1960s American South.

« Back



Denis Villeneuve

—Born in 1967—

« Back

BIO:

Denis Villeneuve is a French Canadian film director and writer. Born in 1967, in Québec, Canada. He is best known for his feature films Arrival (2016), Sicario (2015), Prisoners (2013), Enemy (2013), and Incendies (2010).

DIRECTED MOVIES:

Arrival (2016)

Dune (2021)

Sicario (2015)

The Client-Side

Once the web server was up and running, I started creating the frontend of the app with its various views like: a registration view for new users to sign up, a login form for registered users to access the app upon submitting their credentials, the main view in which all the movies are displayed as cards and the single movie view that presents detailed information about any selected movie among few other views.

The UI is a responsive, component-based, single page application built with React, Bootstrap, React-Router for navigation and Redux to centrally manage the app's state.

Challenges

I really enjoyed creating this app: from designing the DB, thinking through and implementing API endpoints, and building the user interface (UI). With every challenge along the way—and given a natural frustration at times—got me to learn a lot through researching online, checking the libraries documentation, troubleshooting and debugging.

Some examples:

* *I initially gathered links of movie posters from sites which wouldn't display in the UI. This led me to learn more about CORS restrictions and finding resources on more permissive sites.*

* *When installing React-Router-Dom version 6… it didn't worked as expected! It's developers took the drastic decision that moving forward they'll only support function components and React hooks—no more class Components—.* This made me more aware that despite React's power and flexibility, it is important to mind the constant evolution of React itself and its many aiding libraries which can cause breaking changes and introduce unexpected bugs.

Credits

Lead Developer: Alejandro Lubos | **Mentor**: Bless Darah | **Tutor**: Nizar Tricky

Project's GitHub page **Project's live website**