



myFlix

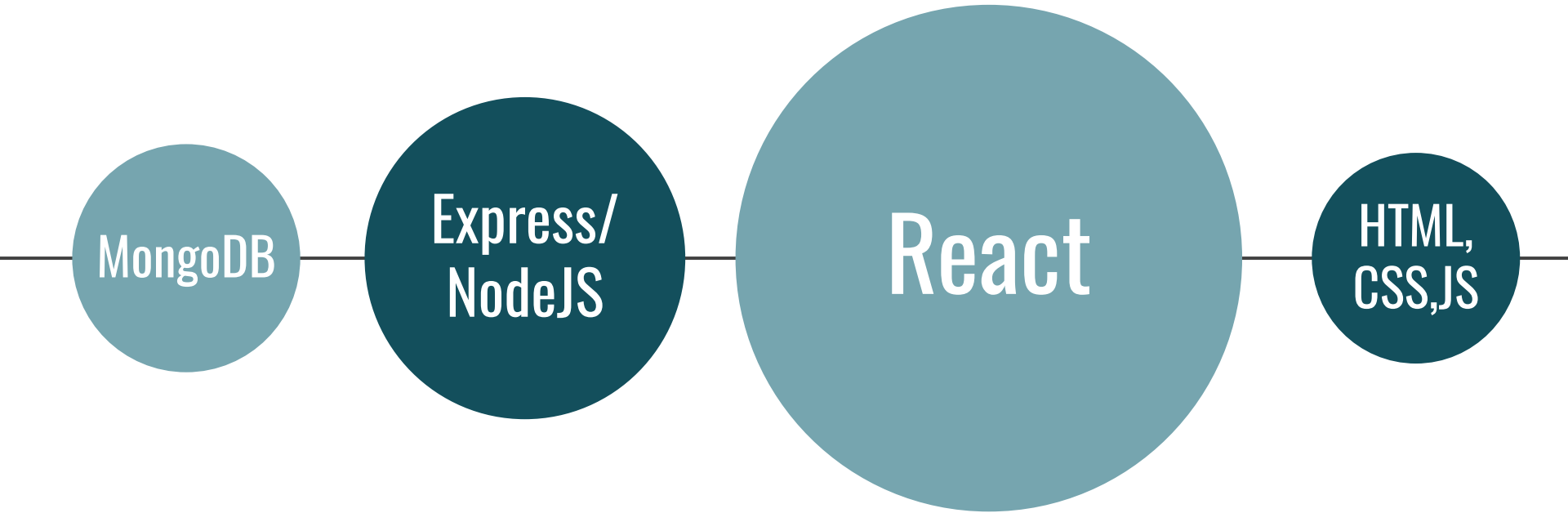
Full-Stack Case Study by: Caleb Dalrymple

The Challenge

To build the client and server-side of a movies application. The app will provide users with access to information about different movies, directors, and genres. Users will be able to sign up, update their personal information, and create a list of their favorite movies.

[Click here to see the live site!](#)

The Tech: MERN Stack



```
1 const express = require('express'),
2   merge = require('merge'),
3   fs = require('fs'),
4   path = require('path'),
5   mongoose = require('mongoose'),
6   Models = require('./models.js');
7
8 const { check, validationResult } = require('express-validator');
9
10 const app = express();
11 app.use(express.json());
12 app.use(express.urlencoded({ extended: true }));
13
14 const cors = require('cors');
15 let allowedOrigins = ['https://myflix-cr-d-netlify.app', 'http://localhost:8080', 'http://testsite.com', 'http://localhost:1234', ''];
16
17 app.use(cors({
18   origin: (origin, callback) => {
19     if (!origin) return callback(null, true);
20     if (allowedOrigins.indexOf(origin) === -1) {
21       let message = `The CORS policy for this application does not allow access from origin ' + origin`;
22       return callback(new Error(message), false);
23     }
24     return callback(null, true);
25   }
26 }));
27
28
29 let auth = require('./auth')(app);
30 const passport = require('passport');
31 require('./passport');
32
33 const Movies = Models.Movie;
34 const Users = Models.User;
35
36 // mongoose.connect('mongodb://localhost:27017/400', { useNewUrlParser: true, useUnifiedTopology: true });
37 mongoose.connect('process.env.CONNECTION_URI', { useNewUrlParser: true });
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Server-side

The REST API is written in JavaScript and integrated with Node.js, Express, and Mongoose.

The API is hosted on Heroku and communicates with the non-relational database stored on MongoDB Atlas. The API uses HTTP endpoints to send and receive JSON format data.

HTTP authentication with hashed passwords are used for successful signup and login. From there, a JWT token is created to grant access to the rest of the API endpoints.

myFlixDB.movies

STORAGE SIZE: 44KB LOGICAL DATA SIZE: 902KB TOTAL DOCUMENTS: 10 INDEXES TOTAL SIZE: 20KB

Find Indexes Schema Anti-Patterns Aggregation Search Indexes

Generate queries from natural language in Compass

Filter Type a query: { field: 'value' } Reset Apply Options

QUERY RESULTS: 1-10 OF 10

```
{
  "_id": "6671c4b7a3dc10fc5890df00",
  "Title": "Pulp Fiction",
  "Description": "The lives of two mob hitmen, a boxer, a gangster, and his wife intertwine.",
  "Genre": "Object",
  "Director": "Object",
  "ImagePath": "https://m.media-amazon.com/images/I/1V1npMWSL1...AC_SX679...jpg",
  "Featured": true
}
```

```
{
  "_id": "6671bc7a86ab0f463590defe",
  "Title": "Inception",
  "Description": "A thief who steals corporate secrets through the use of dream-sharing technology.",
  "Genre": "Object",
  "Director": "Object",
  "ImagePath": "https://m.media-amazon.com/images/I/71RotcG1ML...AC_SX679...jpg",
  "Featured": true
}
```

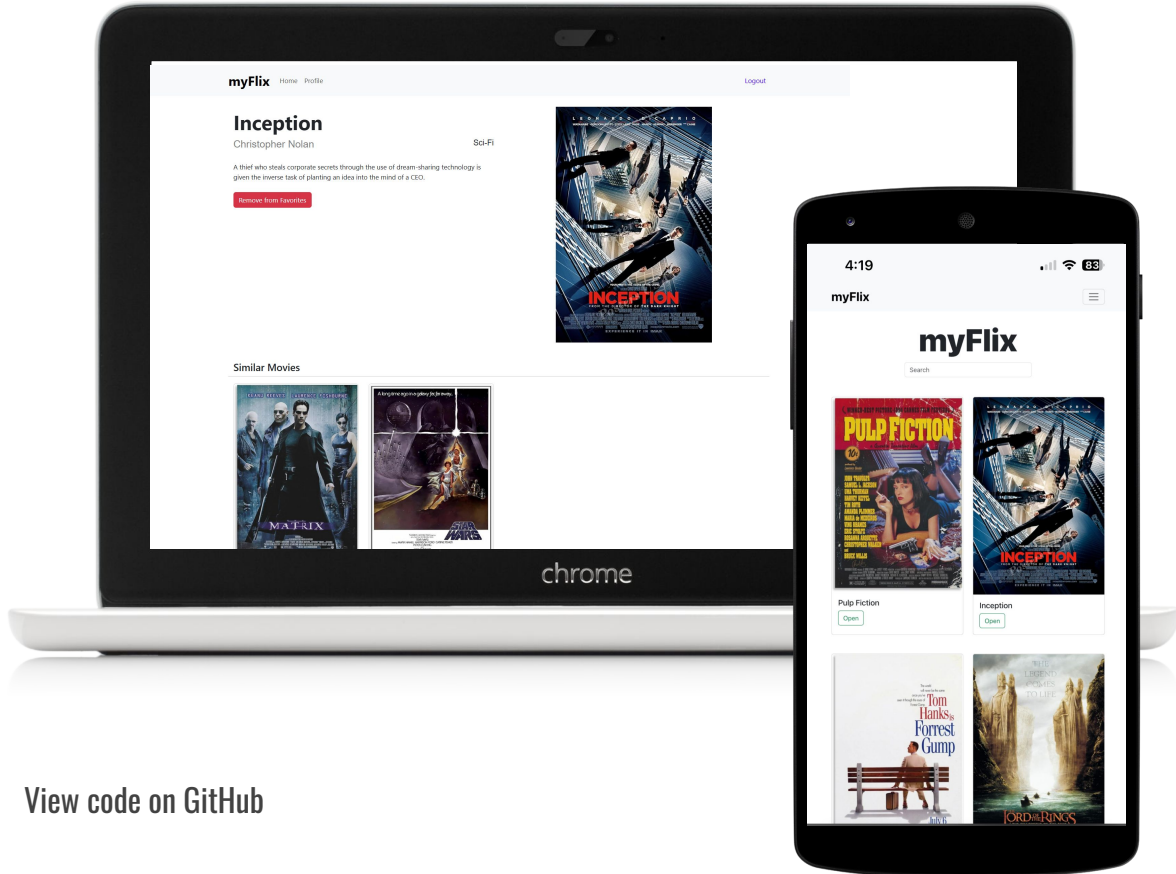
View code on GitHub

Client-side SPA

Using React and Bootstrap, I easily created a single page application that is consistent, responsive, and visually appealing.

Some additional features added outside the scope of the project:

- Search bar
- Drop down taskbar for smaller screens
- Similar movies section that suggests movies based on genres

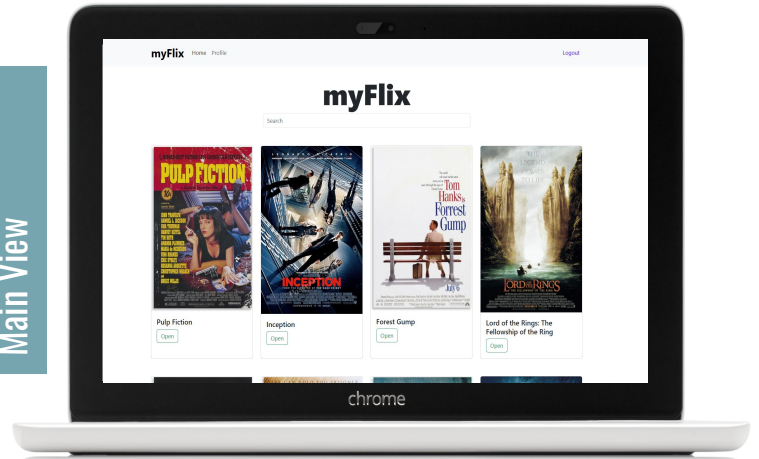


[View code on GitHub](#)

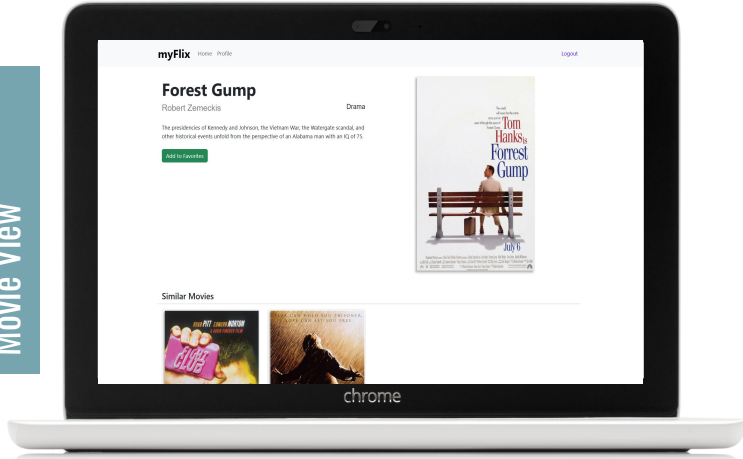
Login View



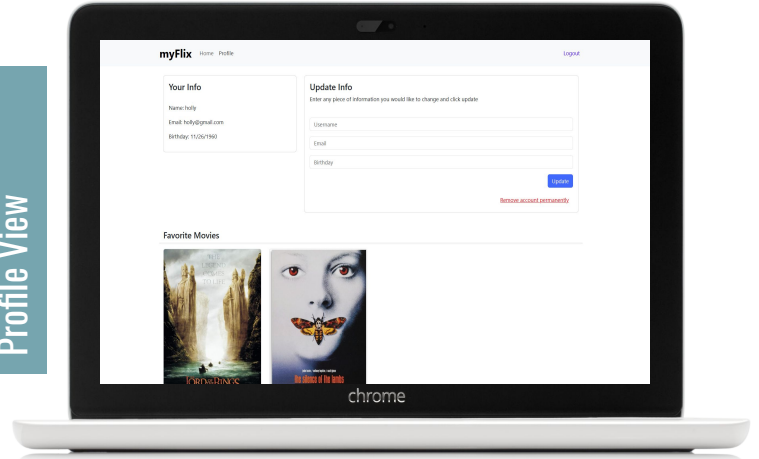
Main View



Movie View



Profile View



Reflections

The Adversity

When I started the project, it was only the second website I'd ever built with JavaScript, and the first that communicated with an API on an external server. I was just grasping how to write functions, and I had to create multiple page views from scratch. Without much experience to lean on, I think I worked on it for a total of 14 hours on two separate occasions before I made much progress at all. I was so new and I had so many questions. Each time I jumped back and forth from challenge to challenge, I lost track of where I was in solving the previous. It seemed like everything I tried was getting me nowhere, and I began to doubt my choice in changing careers.

I reached out to a friend in software development, and simply hearing his similar struggles gave me a huge boost of confidence. Something clicked shortly thereafter and I finally made a breakthrough. It was in this moment that I started to see coding as a fun puzzle rather than a mountain top I'll never reach. Sure, some puzzles take weeks or even months to complete, but by staying organized and diligent, placing one piece at a time, you're bound to finish.

The Outcome

Upon completion of the project, I was told that it was one of the cleanest applications submitted. My work was used as an example for other students.

Future Approach

- Start with a better plan of action by separating the work into smaller organized tasks to avoid feeling overwhelmed
- Remember to reach out to friends and colleagues for help, even if it's simply for a confidence boost
- Come with the understanding that failures are only necessary speed bumps along the road to honing your skills