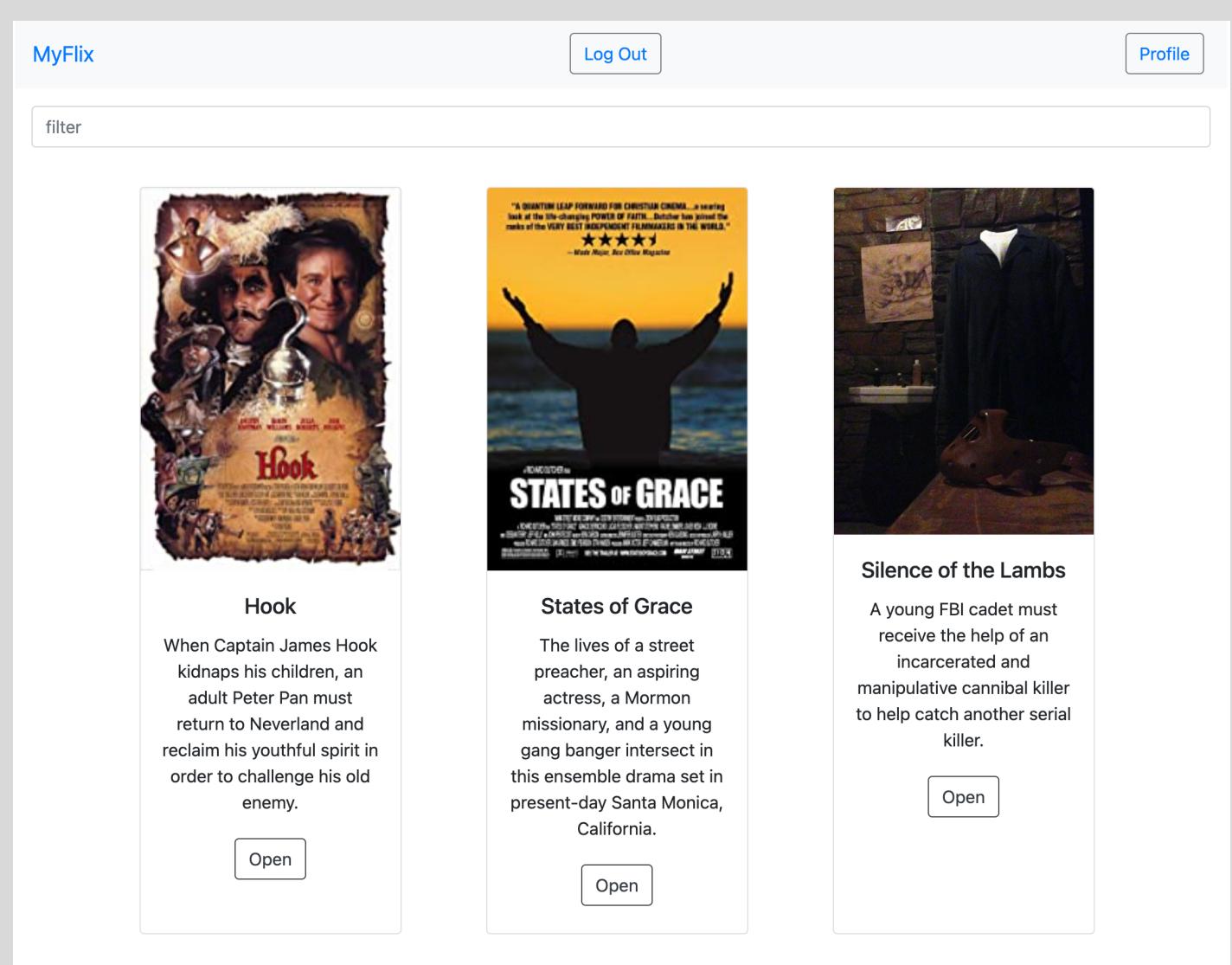


Case Study

MyFlix Full Stack Project

OVERVIEW: myFlix is a web app, developed using the MERN stack, that provides users with access to information about movies, directors, and genres. Users are able to create an account, update their personal data, and create a list of favorite movies.



Movie: Thor: Ragnarok
Description: Imprisoned on the planet Sakaar, Thor must race against time to return to Asgard and stop Ragnarök, the destruction of his world, at the hands of the powerful and ruthless villain Hela.

Movie: The Princess Bride
Description: While home sick in bed, a young boy's grandfather reads him the story of a farmboy-turned-pirate who encounters numerous obstacles, enemies and allies in his quest to be reunited with his true love.

Movie: Hook
Description: When Captain James Hook kidnaps his children, an adult Peter Pan must return to Neverland and reclaim his youthful spirit in order to challenge his old enemy.

Buttons: Director, Genre, Add to Favorites, Back

Context and Objective: myFlix was a personal project I built as part of my web development course at CareerFoundry to demonstrate my mastery of full-stack JavaScript development. The aim of the project was to have an ambitious full-stack project I can add to my professional portfolio. The problem I wanted to solve is to build the complete server-side and client-side for the application from scratch.

Server-Side:

I created a RESTful API using Node.js and Express, that interacts with a non-relational database (MongoDB). The API can be accessed via commonly used HTTP methods like GET or POST. To retrieve data from and store data in the database, CRUD methods are used. The API provides movie information in JSON format.

To test the API, I used Postman. I also included user authentication and authorization code in the form of basic HTTP authentication and JWT authentication.

Client-Side:

After completing the API, I started to build the interface users would need when making requests to, and receiving responses from, the server-side. It is a single-page, responsive application, developed with React and React-Redux. It provides several interface views, including: a main view, single movie view, a login view, a registration view and a profile view.

```
/* profile page to change info */
<Route path="/profile" render={({ history }) => {
  if (!user) return <Col>
    <LoginView onLoggedIn={user => this.onLoggedIn(user)} />
  </Col>
  if (movies.length === 0) return <div className="main-view" />;
  return <Col md={12}>
    <ProfileView user={user} setUser={user => this.setUser(user)};
      favoriteMovies={movies.filter(movie => favoriteMovies.includes(movie._id))} onLoggedOut={() => this.onLoggedOut()} onBackClick={() => history.goBack()}
    </Col>
  </Col>
}} />

/* specific movie */
<Route exact path="/movies/:movieId" render={({ match, history }) => {
  if (!user) return <Col>
    <LoginView onLoggedIn={user => this.onLoggedIn(user)} />
  </Col>
  if (movies.length === 0) return <div className="main-view" />;
  return <Col md={8}>
    <MovieView movie={movies.find(m => m._id === match.params.movieId)} addFavoriteMovies={this.addFavoriteMovies} onBackClick={() => history.goBack()} />
  </Col>
}} />
```

```
_id: ObjectId("61688c7e38e6de2bcb26f2e7")
Title: "Hook"
Description: "When Captain James Hook kidnaps his children, an adult Peter Pan must ..."
> Genre: Object
> Director: Object
ImageURL: "https://m.media-amazon.com/images/M/MV5BNmJjNTQzMjctMmE2NS00ZmYxLWE1Nj..."
Featured: true

_id: ObjectId("61688c7e38e6de2bcb26f2e8")
Title: "States of Grace"
Description: "The lives of a street preacher, an aspiring actress, a Mormon missiona..."
> Genre: Object
> Director: Object
ImageURL: "https://m.media-amazon.com/images/M/MV5BMjEwNjg3NTE3OV5BML5BanBnXkFtZT..."
Featured: false

_id: ObjectId("61688c7e38e6de2bcb26f2e6")
Title: "Silence of the Lambs"
Description: "A young FBI cadet must receive the help of an incarcerated and manipu..."
> Genre: Object
> Director: Object
Featured: true
ImageURL: "https://upload.wikimedia.org/wikipedia/commons/2/23/Hollywood_Museum_..."

_id: ObjectId("61688c7e38e6de2bcb26f2ed")
Title: "Thor: Ragnarok"
Description: "Imprisoned on the planet Sakaar, Thor must race against time to return..."
> Genre: Object
> Director: Object
ImageURL: "https://m.media-amazon.com/images/M/MV5BMjMyNDkzMzI1OF5BML5BanBnXkFtZT..."
Featured: false
```

Challenges

As this was the biggest project that I had undertaken as a new developer, it was also a huge undertaking to make from scratch. Learning both React and learning how to make a full stack website for the first time was both enlightening and challenging beyond belief, and took an amazing amount of time and patience for me.