



# Case Study

---

Career Foundry Achievement Project 3  
PopOpolis Movie Application

# Career Foundry Achievement Project 3

## Overview

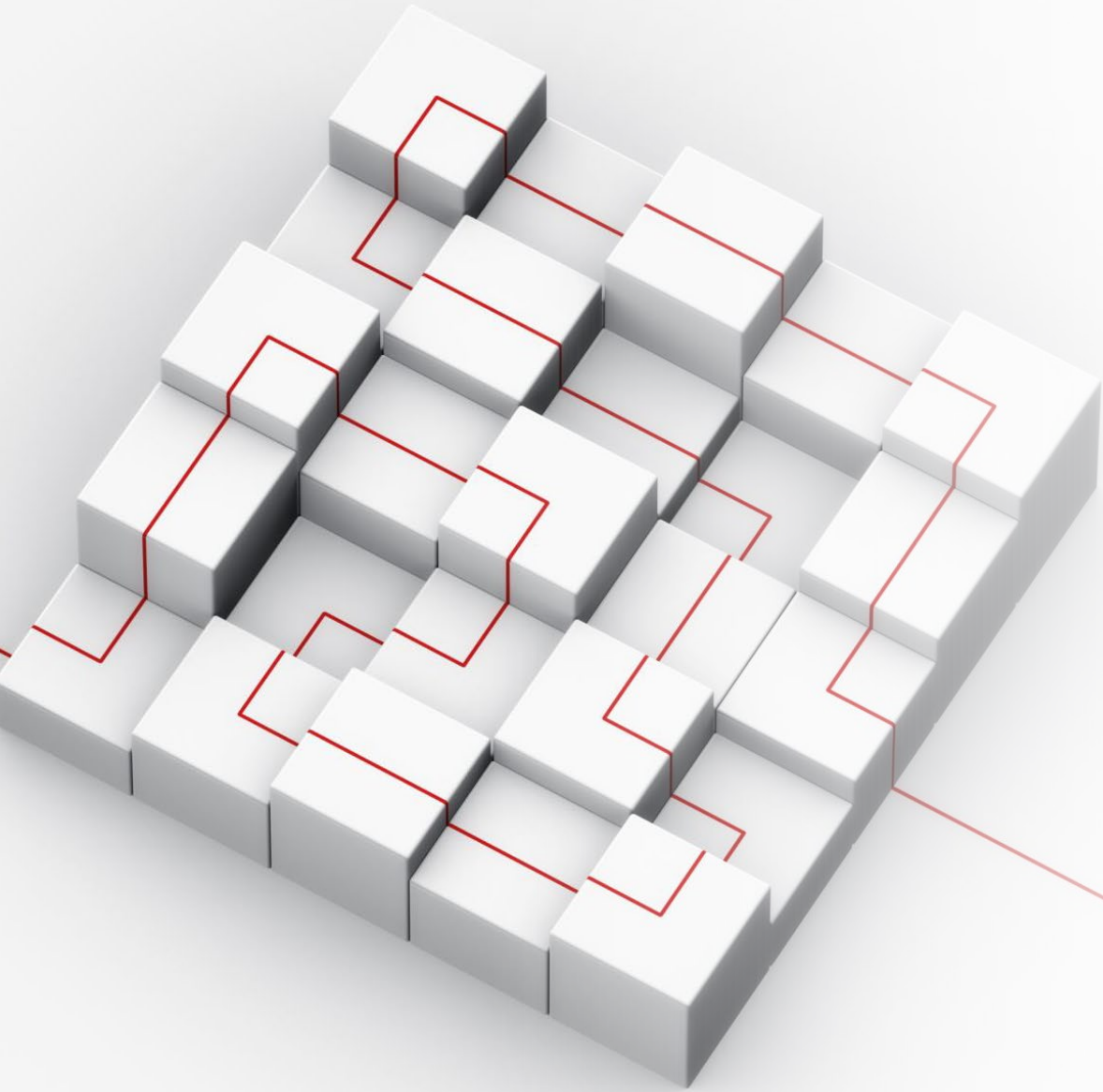
This project is a single-page, responsive app with several interface views and a polished user experience.

## Purpose & Context

This app was built to add to my portfolio while taking the CareerFoundry Full-Stack Web Development course. It was instrumental in learning to utilize the MERN tech stack.

## Objective

The aim of this project was to build the client-side to complement a previously built server-side API (application programming interface). Together, these applications allow a user CRUD interactivity (the ability to create, read, update, and delete information) with a movie application in the form of creating and deleting an account, viewing information about movies, editing user information, and maintaining a list of their own favorite movies.



# Development Steps

---

1. Planning and setting up the project
2. Creating the initial components
3. Client-side routing
4. Creating additional components
5. Deploy



# 1 - Planning

---

## **Goal:**

To decide on the technologies needed to build the project and start setting up the file and component structure based on the project brief.

## **Challenge:**

Learning React and about many different frameworks and tools took some time and going through a lot of documentation.

## **Solution:**

I implemented Parcel, ESLint and prop-types to start.

# 1a – Project Brief Wireframes

The project brief provided mockups for a handful of initial interface views.

Welcome to  
**myFlix**

Signup

[Already have an account?](#)

myFlix

Home

Profile

Logout

Movie Title

Director

Genre

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies. Sed commodo maximus ribh sed egestas. Nullam mollis elit nec risi venenatis vestibulum.

Similar movies

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Welcome to  
**myFlix**

Login

[Don't have an account?](#)

myFlix

Home

Profile

Logout

Account Information

Update

[Remove account permanently](#)

Favorites

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

myFlix

Home

Profile

Logout

Search

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre

Movie title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc gravida nec uma eget ultricies.

Genre



# 2 – Creating the Initial Components

---

## Goal:

To learn and implement React and JWT authentication to create five views (components) and to implement Bootstrap to style the user interface.

## Challenge:

I had a hard time extracting the movie data from the parent component, MainView, and passing it to the MovieCard so that it would display data from within the movie object.

## Solution:

I took courses through Codecademy to supplement my knowledge of React.

I also worked with my mentor, who discovered a syntax error that solved the problem with movie data not displaying:

✗ `{movies.map(movie => {`

✓ `{movies.map(movie => (`

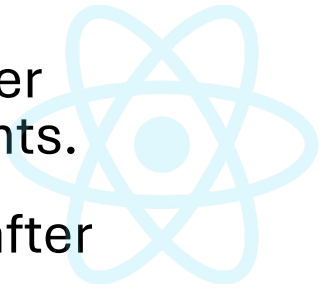
# 2a – Technologies

---

## **The backbone of this application is React:**

A JavaScript library that uses components and state management to create user interfaces. The parent component stores data and passes it to child components.

In this application, for example, the MainView component is the landing page after logging in and loads the data for all the movies. It then passes that data to MovieCard, MovieView and ProfileView components.



## **Bootstrap:**

A framework for responsive websites that follows a grid system to organize the layout of your user interface and has prebuilt components, utilities, and styling.

Components utilized in this application were the navigation bar, cards, forms, search bar, modal, and buttons.



```

return (
  <BrowserRouter>
    <Routes>
      <Route
        path="/"
        element={
          <MovieCard movie={movie} />
        }
      />

      <Route
        path="/profile"
        element={
          <ProfileView user={user} />
        }
      />
    </Routes>
  </BrowserRouter>
)

```

## 3 – Client-Side Routing

popopolis.netlify.app/ ➡ popopolis.netlify.app/profile

### Goal:

To link the different components together, using React Router and react-router-dom, so that they can be accessed from the single-page application.

### Challenge:

Rearranging most of the return code in MainView.

### Solution:

It was a good opportunity to review how I was rendering each component and to fine tune my Bootstrap columns and rows.



# 4 – Create Additional Components

---

## **Goal:**

To add profile view, search bar and navigation bar components as well as add the ability for users to add and remove movies from their list of favorites.

## **Challenge:**

- Search bar functionality and state management
- Favorite movies persisting after leaving profile view

## **Solution:**

- Passing the `onSearchTermChange` function and the `searchInput` state variable as props from `MainView` to the `Searchbar` component and back to `MainView`.
- Updating the user state variable after each use of the add or remove favorite movie function.

# 5 – Deploy on Netlify

## Goal:

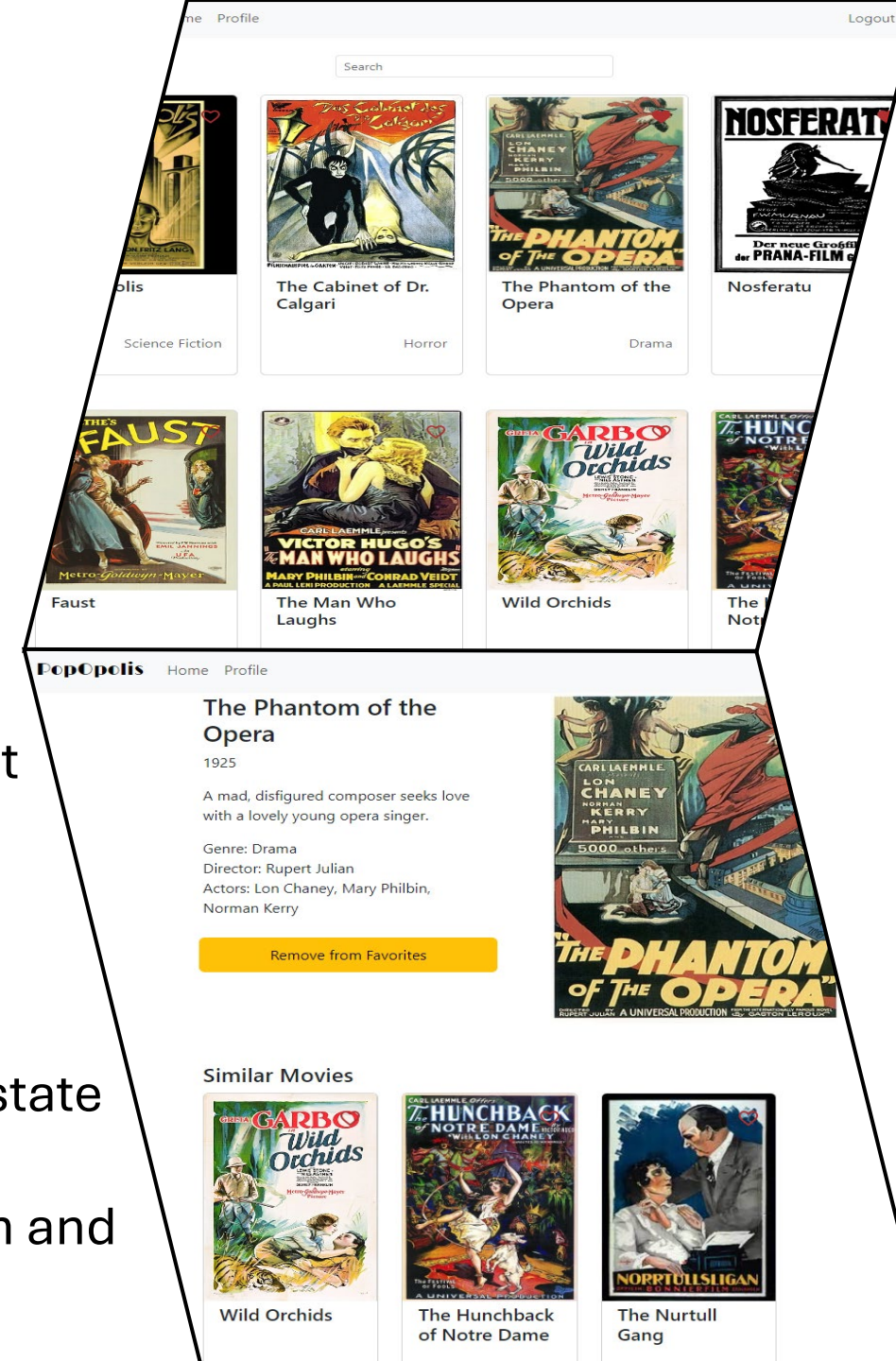
To deploy an application that meets the requirements of the project brief.

## Challenge:

The user object was stored in localStorage at login and wasn't updating when a movie was added or removed. It was also disappearing when the page was refreshed.

## Solution:

Don't store the user in localStorage, set the user object as a state variable at login. On the login screen / within the LoginView component, check for a stored token and if there is one, fetch and pass the user to MainView.



# Finished Product – Popopolis

## Outcome:

- I am very proud of the end result – this application works smoothly and looks like the wireframes.
- In the process, I learned a lot about using React, Bootstrap, Node.js, MongoDB, React Router, Parcel, user authentication and authorization, and using the terminal.
- I also greatly increased the tools at my disposal when troubleshooting.

## Credits:

- My Role: Lead Developer • Mentor: Vini De Antoni
- Tutor: Jason Early

# PopOpolis

Welcome to

## PopOpolis

Login

[Don't have an account?](#)

PopOpolis Home Profile

Logout

### Account Information

Username: testuser  
Email: testuser@mail.com  
Birthday: 1999-02-02

#### Update your account:

Update

[Remove account permanently](#)

### Favorite Movies



The Phantom of the Opera

Drama



Nosferatu

Horror

PopOpolis

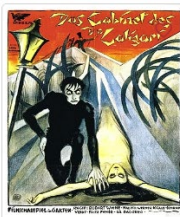
Home Profile

Logout



Metropolis

Science Fiction



The Cabinet of Dr. Calgari

Horror



The Phantom of the Opera

Drama



Nosferatu

Horror

PopOpolis

Home Profile

Logout

### The Phantom of the Opera

1925

A mad, disfigured composer seeks love with a lovely young opera singer.

Genre: Drama

Director: Rupert Julian

Actors: Lon Chaney, Mary Philbin, Norman Kerry

Remove from Favorites



### Similar Movies



Wild Orchids

Drama



The Hunchback of Notre Dame

Drama



The Nurtull Gang

Drama



Welcome to

# PopOpolis

Login

[Don't have an account?](#)

I