

★ MyFlix Movie App – Case Study

[A Full-Stack Web Application Built with React, Node.js, Express & MongoDB](#)

🔗 Live App: <https://myflix-movies-sagunanathani.netlify.app/>

🎬 1. Project Overview

MyFlix is a full-stack movie application that allows users to browse movies, view details, create an account, and manage their favorite films. This project demonstrates my ability to design, build, and deploy a complete web application using modern JavaScript technologies.

✖️ 2. The Problem

Users often struggle to keep track of movies they enjoy or want to watch. Many apps feel cluttered or overwhelming.

My goal was to create a **simple, clean, and responsive movie discovery experience** with:

- Easy browsing
- Clear movie details
- Secure user accounts
- Personalized favorites list

👤 3. My Role

- Full-Stack Developer
- UI/UX implementation
- API design & database modeling
- Frontend development (React)
- Backend development (Node.js, Express)
- Deployment & testing

4. Tools & Technologies

Frontend: React, React Router, Axios, JavaScript, CSS

Backend: Node.js, Express

Database: MongoDB

Other: JWT Authentication, Postman, Git, GitHub, Netlify, Render

5. Process & Phases

Phase 1: Research & Planning

I analyzed existing movie apps to understand user expectations.

Key insights:

- Users want simple navigation
- Movie information must be clear
- Account management should be easy

I created a basic user flow:

Register → Login → Browse Movies → View Details → Add to Favorites

Phase 2: Backend Development

I built a REST API using **Node.js + Express**.

Key Features

- User registration & login
- JWT authentication
- CRUD operations for user profiles
- Endpoints for movies and favorites

Challenge

Secure authentication without complexity.

Decision

Use **JWT** for stateless authentication and **bcrypt** for password hashing.

_PHASE 3: Database Modeling

Using **MongoDB**, I created two collections:

- **Users**
- **Movies**

Challenge

Designing a flexible schema for movie data.

Decision

Use embedded documents for genres and directors for faster queries.

_PHASE 4: Frontend Development

I built the UI using **React**, focusing on clarity and responsiveness.

Key Screens

- Login
- Signup
- Movie List
- Movie Details
- Profile
- Search

Challenge

Managing state across multiple components.

Decision

Use React hooks and React Router for clean, modular code.

Phase 5: Visual Design

I followed a clean, minimal UI approach:

- Light color palette
- Large movie posters
- Clear typography
- Card-based layout

Phase 6: Testing

Tools used:

- Postman
- Manual UI testing
- Mobile responsiveness checks

Challenge

Ensuring consistent behavior across devices.

Decision

Use Flexbox and responsive units for layout stability.

Phase 7: Deployment

- Frontend: [Netlify](#)
- Backend: [Render](#)
- GitHub Repo: [myFlix-client](#)
- Database: MongoDB Atlas

⭐ 6. Final Solution

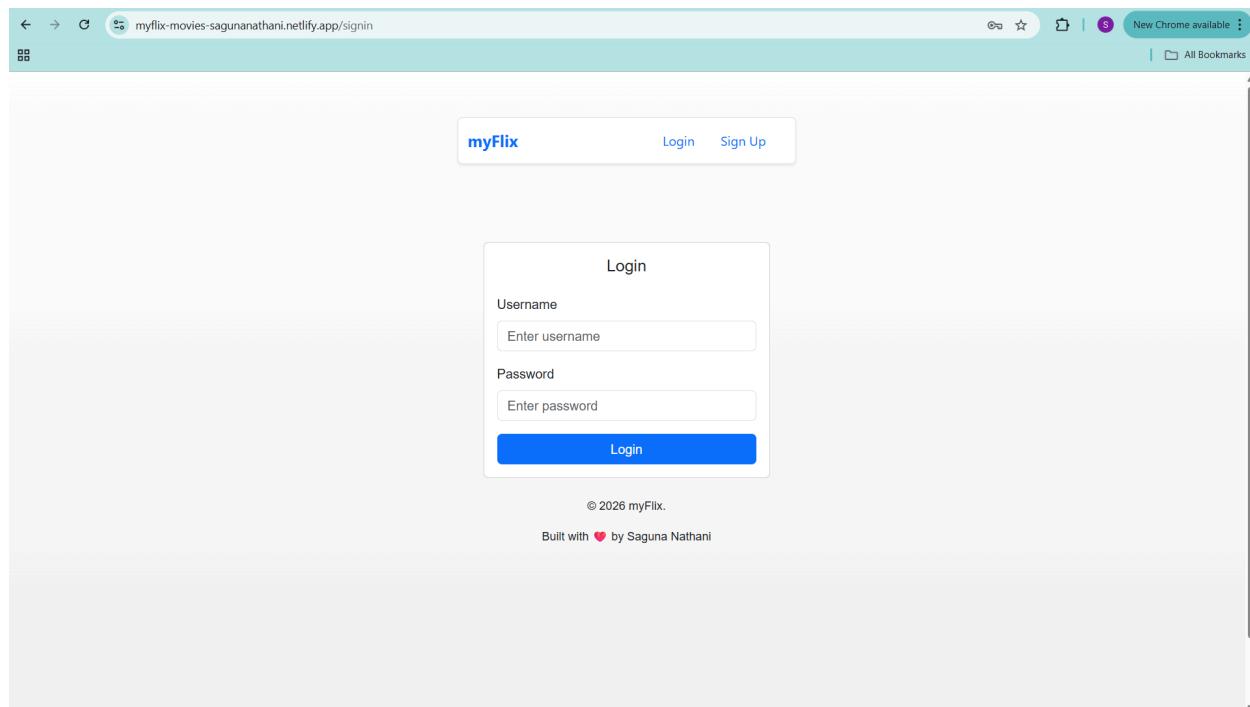
The final MyFlix app is:

- Fully responsive
- Secure and scalable
- Easy to navigate
- Built with a modern full-stack architecture

Users can register, log in, browse movies, view details, and save favorites.

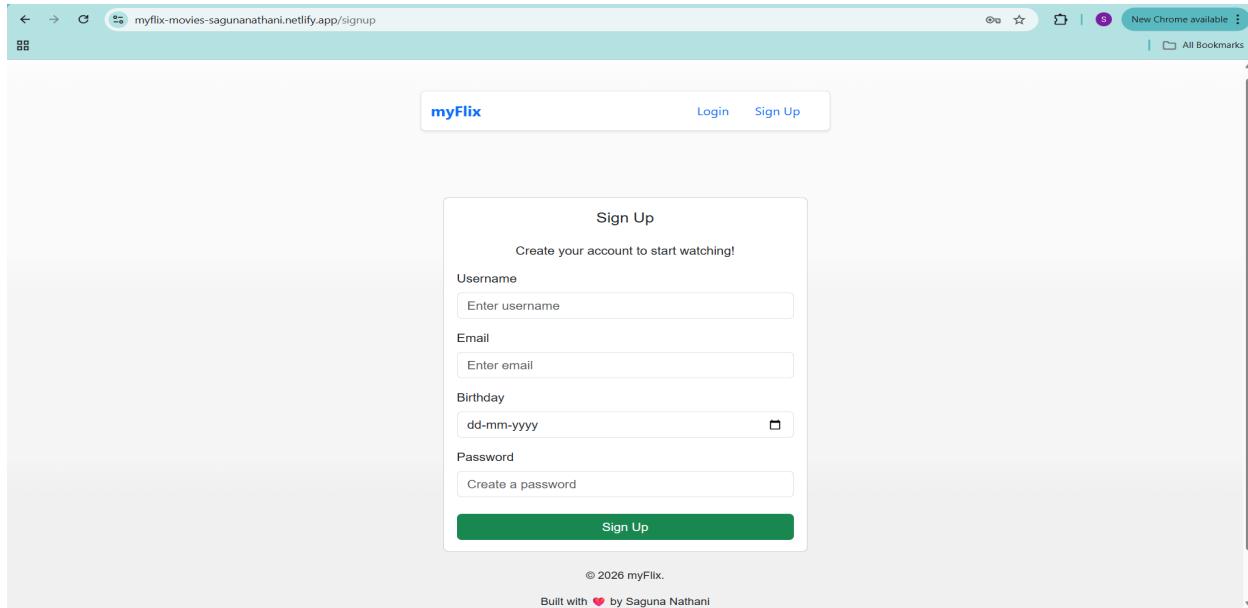
🖼 7. Screenshots

🔒 Login View



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Signup View



myFlix

Sign Up

Create your account to start watching!

Username

Email

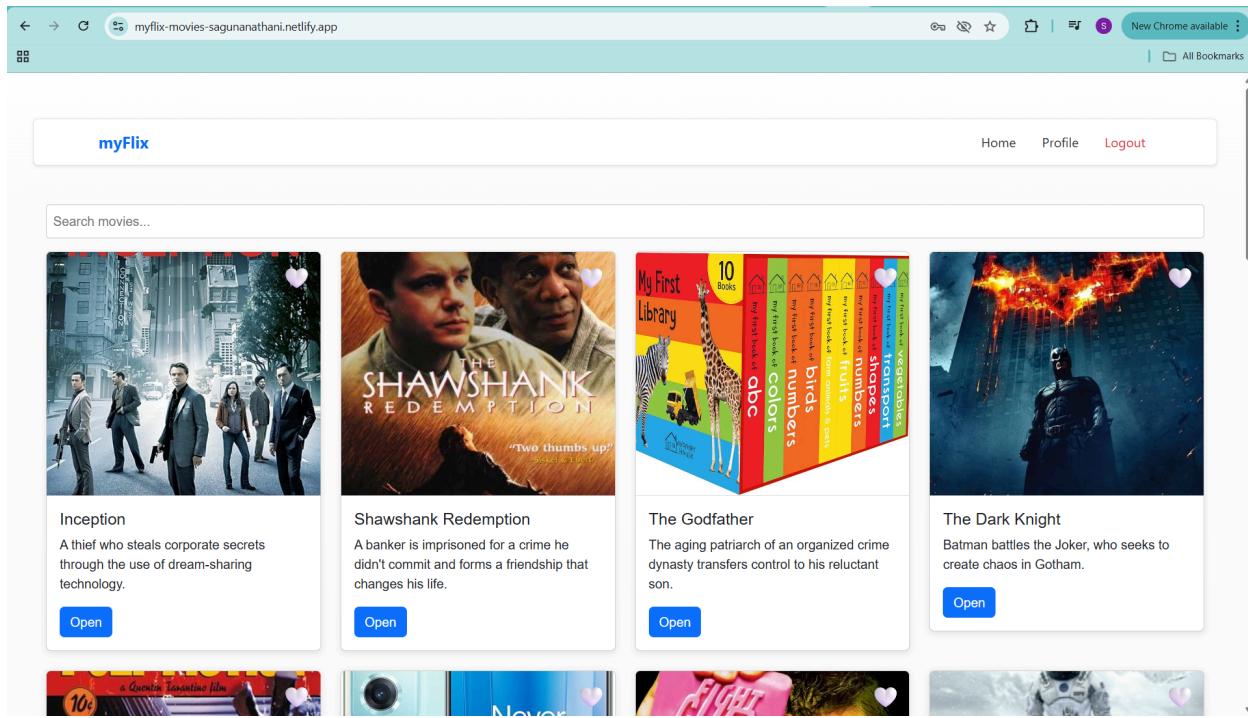
Birthday

Password

Sign Up

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Built with ❤️ by Saguna Nathani

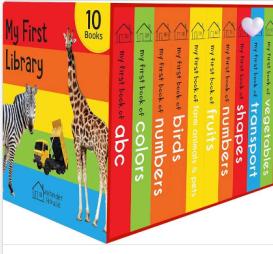
Main View – All Movies



myFlix

Home Profile Logout

Search movies...

 Inception A thief who steals corporate secrets through the use of dream-sharing technology. Open	 Shawshank Redemption A banker is imprisoned for a crime he didn't commit and forms a friendship that changes his life. Open	 The Godfather The aging patriarch of an organized crime dynasty transfers control to his reluctant son. Open	 The Dark Knight Batman battles the Joker, who seeks to create chaos in Gotham. Open
			

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🔍 Search Movie View

myFlix

Home Profile Logout

The Godfather

The aging patriarch of an organized crime dynasty transfers control to his reluctant son.

[Open](#)

The Dark Knight

Batman battles the Joker, who seeks to create chaos in Gotham.

[Open](#)

Forrest Gump

A man with a low IQ witnesses and influences historical events.

[Open](#)

Fight Club

An office worker forms an underground fight club.

[Open](#)

🎬 Movie Details View

Inception

Description: A thief who steals corporate secrets through the use of dream-sharing technology.

Genre: Sci-Fi

Director: Christopher Nolan

[← Back to Movies](#)

Similar Movies

Interstellar

Astronauts travel through a wormhole to save humanity.

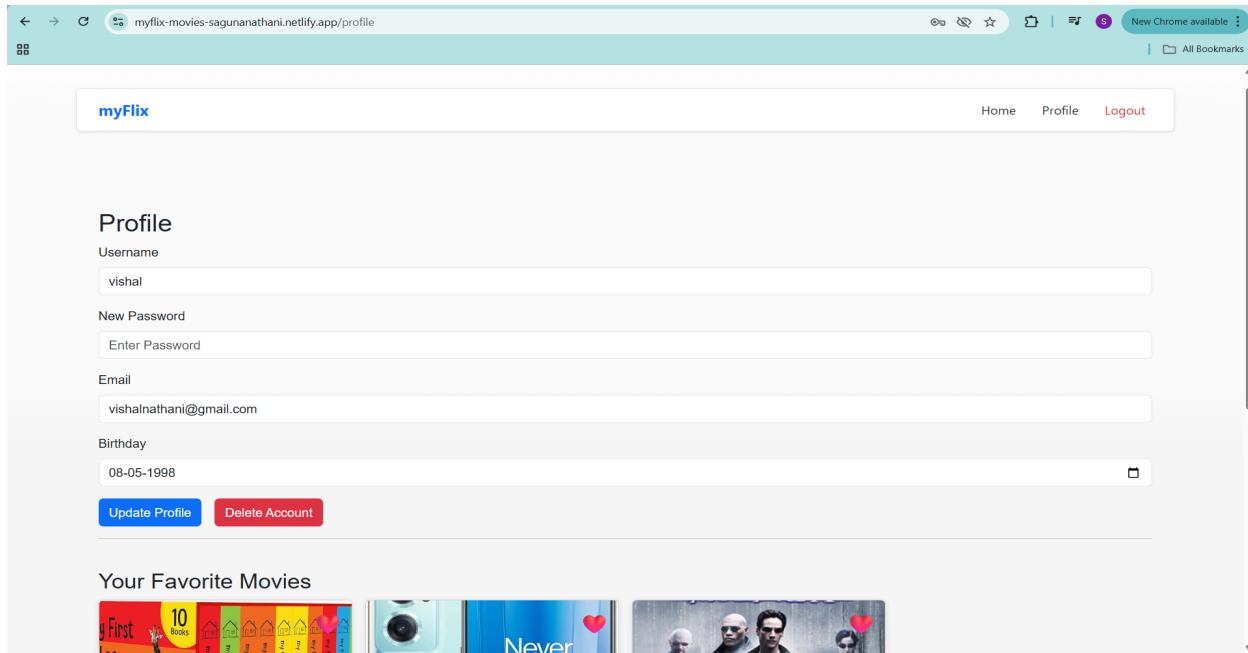
[Open](#)

The Matrix

A hacker discovers reality is a simulation and joins a rebellion.

[Open](#)

Profile View



The screenshot shows a web browser window for the URL myflix-movies-sagunanathani.netlify.app/profile. The page title is "myFlix". The main content area is titled "Profile". It contains fields for "Username" (vishal), "New Password" (Enter Password), "Email" (vishalnathan@gmail.com), and "Birthday" (08-05-1998). Below these fields are two buttons: "Update Profile" (blue) and "Delete Account" (red). A section titled "Your Favorite Movies" displays a grid of movie thumbnails, including "My First 10 Books", "Never", and "The Dark Knight".

8. Key Learnings

- Strengthened full-stack architecture understanding
- Improved React component structure
- Learned secure API design
- Gained confidence in deployment
- Enhanced debugging and problem-solving skills

9. Project Links

Live App: <https://myflix-movies-sagunanathani.netlify.app/>

GitHub Repository: <https://github.com/sagunanathani/myFlix-client>

Wrapping Up: Thank you for taking the time to explore my MyFlix project. I look forward to building more applications that combine clean design, strong functionality, and thoughtful user experience.