## BertFlix

## **Documentation**



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#### **BE-CSE**

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CHITKARA UNIVERSITY, RAJPURA
January 2024

# **Abstract**

"BertFlix" is a modern web application project developed using the MERN (MongoDB, Express.js, React, Node.js) stack, aiming to provide an immersive and user-friendly platform for streaming and managing video content. Inspired by popular streaming services, BertFlix combines a robust backend, a responsive frontend, and a scalable database to deliver an engaging and seamless user experience.

The backend, powered by Node.js and Express.js, facilitates data management and communication with the MongoDB database. MongoDB stores metadata, user information, and video details, ensuring efficient data retrieval and storage. The RESTful API architecture enables secure and efficient communication between the frontend and backend, supporting essential functionalities like user authentication, video retrieval, and user profile management.

On the frontend, BertFlix utilizes React to create a dynamic and interactive user interface. Leveraging React's component-based architecture, the application provides a responsive and intuitive design, allowing users to navigate through the extensive video library effortlessly. React Router is employed for smooth client-side routing, enhancing the overall user experience.

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#### 1. Introduction

"BertFlix" is a modern web application project developed using the MERN (MongoDB, Express.js, React, Node.js) stack, aiming to provide immersive and user-friendly platform streaming and managing video content. Inspired by popular streaming services, BertFlix combines a robust backend, a responsive frontend, and a scalable database to deliver an engaging and seamless user experience.

#### 2. Key Features:

Key features include user authentication, a comprehensive video catalog, personalized user profiles, and a recommendation system. The MERN stack's flexibility, scalability, and ease of integration empower BertFlix to adapt to evolving user needs and deliver a cutting-edge streaming platform in the ever-evolving digital entertainment landscape.

User registration and login	Password Update
Authentication using JWT Tokens	Watch the trailer on You Tube
Add Favorites	404 page and many more
Delete Favorites	Skeleton loading Effect and may more
Leave and Delete a Reviews	Dark Mode
Search Live	Responsive Design

## 3. Technology Stack:

BertFlix is built on the MERN stack, which provides a robust foundation for its functionalities:

## **Frontend**

**React js** - JavaScript library that is used for building user interfaces specifically for single-page applications

React Hooks - For managing and centralizing application state

react-router-dom - To handle routing

Axios - For making Api calls

Material UI - For User Interface

CK-Editor - Rich Text Editor

Formik - Manage status and validation of data on forms efficiently

**React Redux** - manage application state efficiently and provide a more structured mechanism for managing data React

Toastify - To display interactive and responsive notifications (toasts) in web applications

Swiper - To create responsive and interactive sliders or carousels on web pages

## **Backend**

Node js -A runtime environment to help build fast server applications using JS

**Express js** -The server for handling and routing HTTP requests

Mongoose - For modeling and mapping MongoDB data to JavaScript

axios - For making Api calls

isonwebtoken - For authentication

cookie-parser - Middleware module used in Node.js web applications to manage cookies

cors - Provides a Connect/Express middleware

**Dotenv** - Zero Dependency module that loads environment variables

**express-validator** - Used in Node.js applications with the Express framework to validate data submitted by users (user input)

nodemon - Development utility for Node.js applications. Node.js is a runtime platform .

#### 4. Conclusion:

In conclusion, BertFlix stands as a sophisticated streaming platform built on the robust MERN (MongoDB, Express.js, React, Node.js) stack. By seamlessly integrating the power of the backend technologies with the dynamic and user-friendly frontend, BertFlix aims to redefine the streaming experience. The utilization of MongoDB ensures efficient and scalable data management, while the RESTful API architecture enables secure communication between the client and server.

Live on -> <a href="https://mern-movie-main.vercel.app/">https://mern-movie-main.vercel.app/</a>

Github -> https://github.com/Tushar20-20Mahajan/mern-movie-main