

# Netflix Clone

A comprehensive Netflix clone built with React, TypeScript, and TailwindCSS featuring a professional streaming platform interface with working video playback functionality.

## Live Demo

[View Live Site](#)

## Features

### Core Netflix Experience

- **Authentic Netflix UI Design:** Dark theme with signature red accent colors
- **Responsive Layout:** Adapts perfectly to desktop, tablet, and mobile devices
- **Netflix-Style Navigation:** Fixed header with search, notifications, and user profile

### Video & Content Features

- **Featured Hero Section:** Large video background with movie details and action buttons
- **Working Video Player:** Full-featured HTML5 video player with:
  - Play/pause controls
  - Volume control with mute toggle
  - Seek bar for timeline navigation
  - Fullscreen support
  - Skip forward/backward (10s)

- **Horizontal Content Rows:** Smooth scrolling movie collections by category
- **Interactive Movie Cards:** Hover effects revealing video previews and detailed information

## Interactive Features

- **Smart Search:** Real-time search across all content with results display
- **Movie Information Modals:** Detailed popup with cast, genres, and recommendations
- **Content Categories:**
  - Trending Now
  - Popular on Netflix
  - Netflix Originals
  - Action & Adventure
- **Smooth Animations:** Professional transitions and hover effects

## Design Excellence

- **Netflix Brand Colors:** Authentic #E50914 red and dark theme palette
- **Modern Typography:** Clean, readable fonts matching Netflix's style
- **Professional Layout:** Pixel-perfect recreation of Netflix's interface
- **Visual Hierarchy:** Clear content organization and navigation flow

## Tech Stack

- **Frontend Framework:** React 18.3 with TypeScript
- **Build Tool:** Vite 6.0 for fast development and optimized builds
- **Styling:** TailwindCSS with custom Netflix color scheme
- **UI Components:** Radix UI component library for accessible interactions
- **Icons:** Lucide React for consistent iconography

- **State Management:** React hooks and context for client-side state



## Responsive Design

The application is fully responsive and optimized for:

- **Desktop:** Full-featured experience with all interactive elements
- **Tablet:** Adapted layout maintaining functionality
- **Mobile:** Touch-optimized interface with mobile navigation



## Key Components

### NetflixHeader

- Fixed navigation with scroll effects
- Search functionality with expandable input
- User profile and notification areas

### HeroSection

- Full-screen featured content display
- Video background with gradient overlays
- Call-to-action buttons (Play, More Info, My List)

### VideoPlayer

- Custom HTML5 video player
- Professional playback controls
- Fallback to working sample videos

### MovieCard

- Thumbnail display with hover expansion

- Interactive buttons and information overlay
- Smooth animations and transitions

## **ContentRow**

- Horizontal scrolling movie collections
- Navigation arrows for content browsing
- Category-based organization

## **MovieModal**

- Detailed content information popup
- Cast and crew details
- "More Like This" recommendations section



## **Getting Started**

### **Prerequisites**

- Node.js (v18 or higher)
- pnpm package manager

## Installation

```
# Clone the repository
git clone <repository-url>
cd netflix-clone

# Install dependencies
pnpm install

# Start development server
pnpm dev

# Build for production
pnpm build
```

## Development Server

```
pnpm dev
# Open http://localhost:5173
```

## Production Build

```
pnpm build
# Output in /dist directory
```

## Project Structure

```
netflix-clone/
├── public/
│   ├── data/
│   │   └── movies.json          # Sample movie/show data
│   └── images/                 # Movie thumbnails and assets
├── src/
│   ├── components/
│   │   ├── ui/                # Reusable UI components
│   │   ├── NetflixHeader.tsx  # Main navigation
│   │   ├── HeroSection.tsx    # Featured content section
│   │   ├── VideoPlayer.tsx    # Custom video player
│   │   ├── MovieCard.tsx      # Individual movie cards
│   │   ├── ContentRow.tsx     # Horizontal content rows
│   │   └── MovieModal.tsx     # Detailed content popup
│   ├── App.tsx                # Main application component
│   ├── index.css              # Global styles and Netflix theme
│   └── main.tsx               # Application entry point
└── dist/                      # Production build output
```

## Design System

### Colors

- **Netflix Red:** #E50914 (primary brand color)
- **Netflix Black:** #141414 (dark backgrounds)
- **Netflix Dark:** #000000 (deepest black)
- **Netflix Gray:** #333333 (secondary elements)
- **Netflix Light Gray:** #b3b3b3 (text and borders)

## Typography

- **Font Family:** Sans-serif system fonts
- **Sizes:** Responsive scaling from mobile to desktop
- **Weights:** Regular, medium, semibold, and bold variants

## Features Implementation

### Video Playback

- Uses HTML5 video elements with custom controls
- Fallback to Google Cloud Storage sample videos
- Supports autoplay, muting, and loop functionality
- Error handling with graceful degradation

### Search Functionality

- Real-time filtering across all content
- Search by title and genre
- Results display with grid layout
- Clear search state management

### Responsive Design

- Mobile-first approach with progressive enhancement
- Breakpoint-based layout adjustments
- Touch-optimized interactions for mobile devices
- Fluid typography and spacing

## Performance Features

- **Optimized Images:** Proper image loading and fallbacks
- **Code Splitting:** Efficient bundle management with Vite
- **Lazy Loading:** Content loaded as needed
- **Smooth Animations:** Hardware-accelerated transitions
- **SEO Ready:** Proper meta tags and structure

## Future Enhancements

- User authentication and profiles
- Personal watchlists and favorites
- Recommendation algorithms
- Content rating and reviews
- Multi-language support
- Offline viewing capabilities
- Social sharing features

## License

This project is created for educational and demonstration purposes, showcasing modern web development techniques and Netflix-inspired design patterns.

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**Built with ❤️ using React, TypeScript, and TailwindCSS**