

1. Introduction

This internship at NullClass focused on building a fully functional movie web application using React. The aim was to enhance front-end development skills and integrate third-party APIs effectively.

2. Background

With the growing demand for dynamic web applications, React has become a leading library. This project involved creating a responsive and interactive movie app, simulating the functionality of platforms like IMDb and TMDb.

3. Learning Objectives

- Strengthen ReactJS fundamentals (components, hooks, props, state management)
- Implement API integration using TMDb/OMDb
- Utilize localStorage for persistent watchlist
- Apply responsive design principles
- Host the project online using Netlify or Vercel

4. Activities and Tasks

- **Task 1:** Created reusable MovieCard component with hover trailer preview using Framer Motion
- **Task 2:** Built a Watchlist system with useContext, localStorage, and add/remove feature
- **Task 3:** Integrated OMDb/TMDb API to fetch movies dynamically based on search query
- **Deployment:** Published app on GitHub and deployed using Netlify
- **Bonus:** Styled the app using CSS, fixed layout bugs, and handled edge cases like missing posters

5. Skills and Competencies

- ReactJS (Functional Components, Hooks, Context API)
- API Handling (TMDb & OMDb)
- CSS Flexbox, Media Queries

- Git, GitHub version control
- Netlify deployment
- Debugging and performance tuning

6. Feedback and Evidence

- Successfully submitted daily reports (starting July 24)
- All 3 major tasks were completed with working demo
- Mentorless work improved self-research and problem-solving ability
- GitHub repo and deployed live site shared as project evidence

7. Challenges and Solutions

- **Issue:** API fetch errors and environment variable issues during deployment
Solution: Verified .env usage, changed Vite config, and used Netlify environment variables
- **Issue:** Trailer preview only loading for first movie
Solution: Fetched video info per movie using /videos endpoint in TMDb

8. Outcomes and Impact

- Understood real-world project workflow from design to deployment
- Improved confidence in building React-based front-end apps
- Gained experience in API consumption and error handling
- Developed a strong project to include in portfolio

9. Conclusion

This internship provided a valuable hands-on experience in building a complete web application using React and third-party APIs. The learning curve was steep but rewarding, and the project reflects a solid foundation for front-end development.