FACULTY OF APPLIED AND COMPUTER SCIENCE DIPLOMA:

INFORMATION TECHNOLOGY

Department: Information and Communication Technology

Diploma: Information Technology

Subject: Web Management 3.2
Assignment

Due date: 31st October 2025

Subject: Web Development 3.2

Internal code: AIWEY3A

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Moderator: Mr. X. Piyose

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1. Executive Summary

Movie Finding Made Easy (MFME) is a web-based application developed to help users easily search for and explore movie information. The system was built using HTML5, CSS3, JavaScript, PHP, and JSON, and includes features such as real-time search, responsive layouts, and a secure admin dashboard.

The main goal of this project was to create a platform that combines both simplicity and functionality. It reflects our team's understanding of full-stack development, responsive design, and teamwork. The project meets all the requirements for Web Development 3.2 and demonstrates our ability to build a complete, working system from scratch.

2. Introduction

With so many streaming services available today, finding information about movies can be time-consuming and confusing. People often must visit multiple sites just to get details about one movie.

Movie Finding Made Easy was created to solve that problem. It offers a single, easy-to-use website where users can search for movies and get quick results without having to jump between different platforms.

This project gave us the chance to apply everything we learned throughout the course, from frontend design to backend programming, while also improving our problem-solving and teamwork skills.

3. Problem Statement

Finding movies online often comes with a few problems:

- Having to use several different sites to find complete information.
- Too much unfiltered or unnecessary data.
- Limited access to information because of regional or subscription restrictions.

Our system aims to fix these issues by offering one central platform that brings movie information together and makes searching fast and simple.

4. ProjectObjectives

4.1. Technical Objectives

- Build a responsive website using HTML, CSS, JavaScript, and PHP.
- Store movie data in JSON for easy management.
- Add real-time search and filtering features.
- Develop a secure admin section for adding and editing content.

4.2. User Experience Objectives

- Create a mobile-first interface that adjusts to any screen size.
- Maintain a consistent colour scheme and design style.
- Ensure the site works on all major browsers.

5. Project Methodology

We used an Agile approach for this project, working in short stages and testing our progress often. This allowed us to quickly identify and fix issues.

Team Roles

Each member had a clear role:

- Lead Developer: Handled the main structure and backend logic.
- UI/UX Designer: Focused on layout, visuals, and usability.
- Frontend Developer: Worked on interactivity and styling.
- Content Manager: Organized and checked movie data.

- Backend Developer: Managed data storage and user authentication.

Tools Used

We used Visual Studio Code for development, XAMPP to run PHP locally, and GitHub for version control. Regular team meetings helped us stay on track and solve problems together.

6. System Overview

The system is built on a three-tier architecture:

- Frontend: Built with HTML5, CSS3, JavaScript, and Bootstrap.
- Backend: Powered by PHP for data handling and form processing.
- Data Layer: Uses JSON to store and manage movie details.

This setup made it easier to keep the system lightweight and simple to maintain, while still supporting future improvements like connecting to an external database.

7. Implementation

7.1. Frontend

We focused on creating a clean and modern interface using Flexbox and Grid for layout. The design uses a dark background with red highlights to give it a cinematic feel. Animations were added to make the interface more engaging, and the layout adjusts perfectly on mobile, tablet, and desktop screens.

7.2. Backend

The backend handles authentication, data validation, and movie management. Admin users can log in securely, and all input is checked before it’s saved to prevent errors or security risks. Movie details are stored in a JSON file, which makes updates fast and simple.

7.3. Main Features

- Real-time movie search with instant results.
- Interactive movie cards that display key information.

- Admin dashboard for managing movie listings.
- Contact form connected to the backend.

8. User Interface Design

- Colour Scheme: Dark theme with red accents.
- Font: Roboto, chosen for readability.
- Layout: Consistent grid-based structure on all pages.
- Accessibility: High contrast and clear navigation for easy use.

The design keeps things simple and intuitive, so users can find what they need quickly without confusion.

9. Testing and Quality Assurance

- System thoroughly tested before project completion.
- Focus areas: form validation, navigation, search functionality, and admin operations.
- Functions tested on multiple devices for responsiveness and usability.
- Movie search feature returned accurate results.
- Admin dashboard allowed secure content management without errors.
- Minor design inconsistencies fixed via CSS adjustments.
- System performed smoothly across all tested browsers and devices.

10. Challenges and Solutions

- No database was used, so we switched to JSON for simple file-based storage.
- Image resizing issues were fixed by using CSS object-fit to maintain proportions.

- Browser inconsistencies were handled through progressive enhancement and thorough testing.
- Team coordination was improved by managing tasks via GitHub and weekly meetings.
- Working as a team taught us the importance of communication and version control.

11. Future Improvements

There are several features we plan to add in the future:

- Allow users to create accounts and save favourite movies.
- Add more advanced search filters (by genre, rating, or release year).
- Move data storage to **MySQL** for better scalability.
- Add **AI-based recommendations** and a mobile app version.

These improvements would make the system more personalized and scalable.

12. Conclusion

The Movie Finding Made Easy project gave us valuable hands-on experience in building a real-world web application. We learned how to design a responsive interface, manage data with PHP and JSON, and handle user interactions efficiently.

Overall, the project met its goals and functioned as expected. It provides a reliable, easy-to-use platform for movie discovery and demonstrates our ability to apply both technical and design skills in a practical environment.

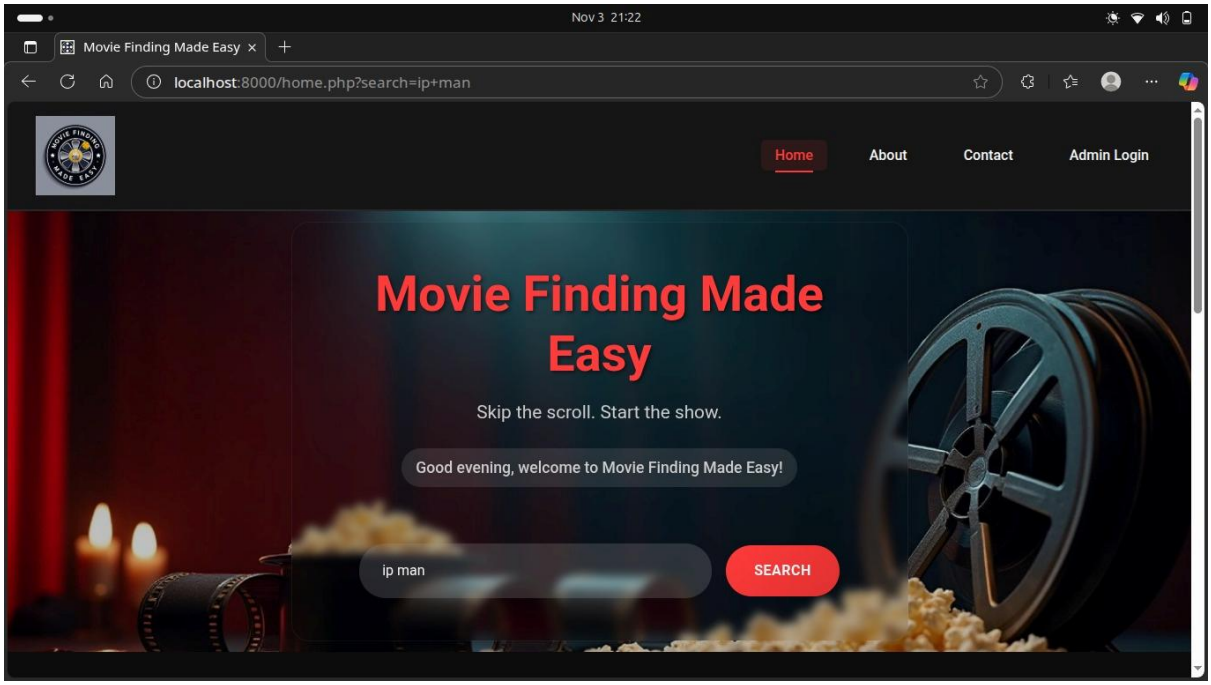
13. References

- MDN Web Docs (2024): HTML5, CSS3, JavaScript
- PHP Official Documentation (2024)

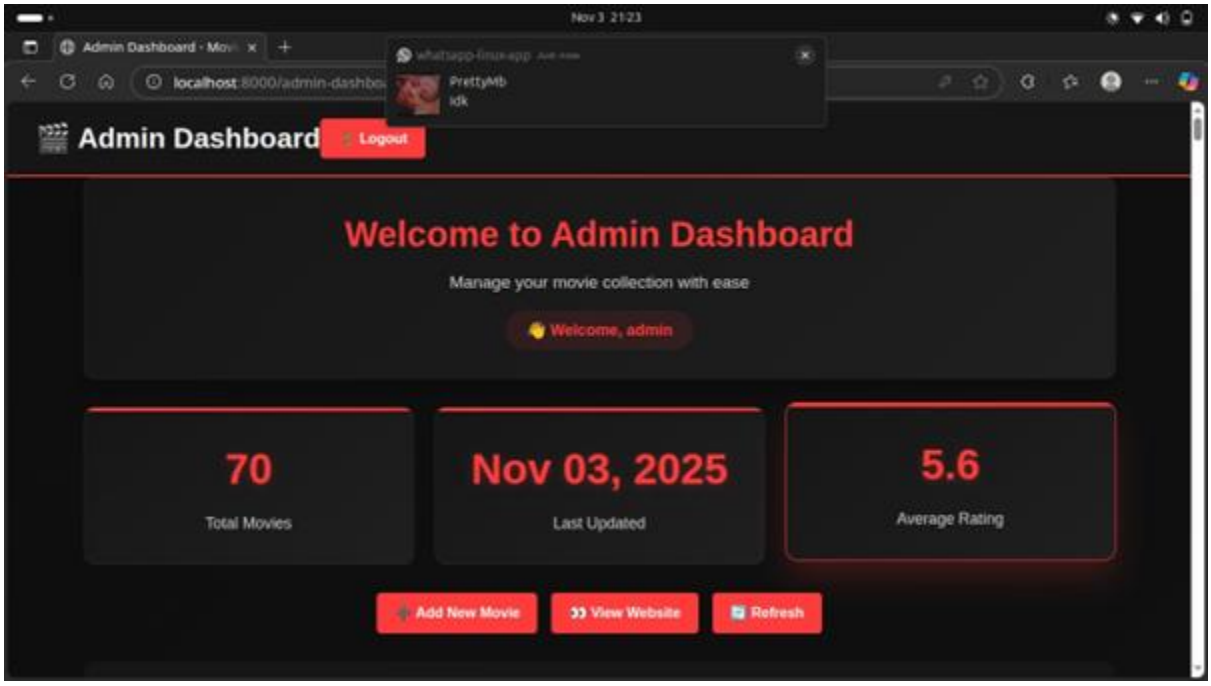
- Bootstrap Framework (2024)
- BeautifulSoup & Requests Library
- W3Schools / MDN Web Docs
- GitHub Repository: https://github.com/SIDNEY081/Movie_Finding_Made_Easy

14. Screenshort:

Homepage with search bar and featured movies.



Admin dashboard for managing content.



Add/Edit movie form.