

CINEWISE

Project Report Submitted to
Mahatma Gandhi University, Kottayam

**SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF A DEGREE OF**

Bachelor of Computer Applications (BCA)

By

ROHITH R (Reg:210021090330)

SIDHARTH S NAIR (Reg:210021090338)

DHANANJAY SURESH (Reg:210021090305)

ASWIN A (Reg: 210021090298)

Under the Supervision of
Asst.Prof Dr. Meenu Suresh



SAINTGITS

PG Department of Computer Applications and
Artificial Intelligence

SAINTGITS COLLEGE OF APPLIED SCIENCES, PATHAMUTTOM

2023-2024



Saintgits College of Applied Sciences

Pathamuttom, Kottayam-Pin: 686532, Kerala

Ph-0481-2436169, 2436170

website : www.saintgits.org

DECLARATION

We **ROHITH R, SIDHARTH S NAIR, DHANANJAY SURESH** and **ASWIN A** hereby declare that this project titled “**CINEWISE**” is the original work done under the guidance and support of **Asst.Prof Dr. Meenu Suresh**, during the year 2023-24. We also declare that this report has been submitted fully for the award of the degree before. Further, this is submitted on the fulfilment of the award of the degree of Bachelor of Computer Applications of Mahatma Gandhi University, Kottayam, Kerala.

ROHITH R (Reg:210021090330)

SIDHARTH S NAIR (Reg:210021090338)

DHANANJAY SURESH (Reg:210021090305)

ASWIN A (Reg: 210021090298)

Place: Pathamuttom

Date:



Saintgits College of Applied Sciences

Pathamuttom, Kottayam-Pin: 686532, Kerala

Ph-0481-2436169, 2436170

website : www.saintgits.org

CERTIFICATE

This is to certify that the project report entitled “**CINEWISE**” is a bona fide report of the project work undertaken by **ROHITH R (Reg:210021090330)**, **SIDHARTH S NAIR (Reg:210021090338)**, **DHANANJAY SURESH (Reg: 210021090305)**, **ASWIN A (Reg: 210021090298)**) fifth semester BCA students under my supervision and guidance, in partial fulfilment of the requirement for the award of the **degree of Bachelor of Computer Application (BCA)** of **MAHATMA GANDHI UNIVERSITY, Kottayam Kerala**.

Dr. Ambily Merlin Kuruvilla
Head of the Department

Asst.Prof Dr. Meenu Suresh
Project Guide

Submitted for the viva-voice examination held on

Date:

External Examiner



Saintgits College of Applied Sciences

Pathamuttom, Kottayam-Pin: 686532, Kerala

Ph-0481-2436169, 2436170

website : www.saintgits.org

ACKNOWLEDGEMENT

First and foremost, we thankfully acknowledge our Principal **Dr Mathew Jacob** for giving us an opportunity to present this mini project. The constant encouragement and timely support rendered by our Head of the Department, **Dr Ambily Merlin Kuruvilla** is deeply remembered. We express our heartfelt gratitude to our project guide **Asst.Prof Dr.Meenu Suresh**, Department of Computer Application and Artificial Intelligence, for her valuable guidance, support and encouragement during course of the project and in the preparation of the report. We have greatly benefited from her experience and knowledge. The help extended by all other staff members of the department are gratitude.

We also remember with thanks to all our friends and well-wishers for their encouragement and support.

Above all, we would like to express our profound gratitude to **God Almighty** for immense blessings upon us that led to the successful completion of this project.

ROHITH R (Reg: 210021090330)

SIDHARTH S NAIR (Reg: 210021090338)

DHANANJAY SURESH (Reg: 210021090305)

ASWIN A (Reg: 210021090298)

CONTENTS

1 INTRODUCTION	6
Abstract	6
Objective and Scope	7
Problem Statement	8
Organization Profile	8
2 SYSTEM REQUIREMENTS	10
Hardware Specification	11
Software Specification	11
About the Development Tools	11
3 SYSTEM ANALYSIS	17
Preliminary Investigation	18
Existing System	18
Proposed System	19
Feasibility Analysis	20
Requirement Specification	21
4 SYSTEM DESIGN	23
Introduction	24
Data Flow Diagram	25
Input Design	28
Output Design	29
Database Design	29
Tables	31
5 SYSTEM DEVELOPMENT	33
Introduction	34
Implementation Logic	35
Coding	35
Coding Validation and Optimization	36
Sample Code	36

SYSTEM TESTING

55

Testing Methodologies and Strategies	49
Unit Testing	50
Integration Testing	50
User Acceptance Testing	51

6 SYSTEM IMPLEMENTATION 52

Introduction	53
Screen Layout	54

7 FUTURE ENHANCEMENT 59

Future Enhancement	60
--------------------	----

8 CONCLUSION 61

Conclusion	62
------------	----

9 APPENDIX 63

List of Tables	63
List of Figures	63

10 BIBLIOGRAPHY 64

Bibliography	64
--------------	----

CHAPTER 1

INTRODUCTION

PROJECT ABSTRACT

CINEWISE is an innovative movie search engine that operates through a centralized database housing comprehensive movie data. It serves as a one-stop hub for cinephiles, enabling them to explore, discover, and engage with their favorite movies. The platform is meticulously designed to offer an array of search options, allowing users to find movies by their titles, genres, release years, or even specific ratings. Upon conducting a search, users are presented with a curated list of results on the subsequent page, granting them the choice to delve deeper into their selections.

The website embodies a user-centric approach, where individuals can seamlessly opt to watch a movie's trailer or earmark it for later viewing by adding it to their personalized watch-later list. Notably, the watch-

later functionality is exclusively accessible for signed-in users, prompting easy account creation for new visitors. The database stands as the cornerstone, housing not only intricate movie details but also user information and individual watch-later lists, ensuring a cohesive and comprehensive user experience.

Account creation or sign-in processes are seamlessly integrated, empowering users to personalize their experiences and make the most of the platform's offerings. For instance, by signing in, users gain access to features like the watch-later list, enabling them to curate their movie-watching journey effortlessly.

CINEWISE aspires to foster a vibrant community of movie enthusiasts, offering a dynamic interface and a host of functionalities for an immersive experience. The core ethos is to facilitate seamless movie exploration, enhance user engagement, and enable effortless access to a diverse array of films. It's a platform tailored to cater to the varied needs of movie buffs while leveraging the centralized database as the backbone for a rich, intuitive, and user-friendly experience.

OBJECTIVE AND SCOPE

CINEWISE operates with a multifaceted set of objectives designed to enrich the movie exploration experience and build a robust community of film enthusiasts. The primary goal is to offer a comprehensive platform where users can seamlessly navigate and engage with a vast collection of movies. Providing a diverse range of search criteria, including genres, release years, and specific ratings, aims to cater to individual preferences, enhancing the discovery process. One of the key aspirations is to empower users by allowing them to delve into trailers and create personalized watch-later lists, thereby optimizing their movie exploration journey. This feature, accessible exclusively to signed-in users, encourages account creation to unlock this functionality, facilitating a more tailored and enjoyable experience. Beyond individual exploration, CINEWISE endeavors to foster a sense of community among movie buffs. Through personalized accounts, the platform aims to facilitate connections, shared recommendations, and discussions about beloved films, creating an engaging space for interaction and shared passion. Moreover, the platform seeks to establish partnerships that elevate the movie-watching experience. Potential collaborations with brands could offer targeted promotions and services, enhancing the overall movie discovery and viewing experience for the platform's dedicated audience..

CINEWISE has two main users: -

- Admin / Root User
- User

ADMIN

The admin is the main content manager of the website. The admin manage content that can be viewed by other users. The admin has the privilege to add, update and view movies and its details. The admin also can also delete users.

USER

The users can use the website to browse for movies based on the movie name, genre, release year, rating, etc. The users will be able to use the website without signing in, but they will missing out on the watch-later feature. The users will be able to sign in to their accounts or create an account if they don't have one. Once the user is signed in, the user will be able to use the watch later feature to add movie to watch at a later date.

PROBLEM STATEMENT

CINEWISE confronts a challenge in creating a compelling and personalized user experience, hindering optimal user engagement and community involvement. Much like various other platforms, the movie search engine encounters difficulties in delivering tailored content and fostering user interaction. Users may find the vast array of available movies overwhelming, impeding their ability to discover films that resonate with their preferences. Furthermore, the platform lacks substantial features for user interaction and community building, resulting in a sense of disconnection among movie enthusiasts. This absence of a thriving communal space could potentially lead to user disinterest and a quest for alternative sources that provide a more engaging and personalized movie-related experience.

ORGANIZATION PROFILE

MISSION

"Our mission at CINEWISE is to cultivate a dynamic and all-encompassing hub for movie aficionados, enabling seamless connections with beloved films while exploring new cinematic gems aligned with individual preferences. We're dedicated to crafting a personalized and captivating user journey, providing access to a diverse array of genres, encouraging connections among movie enthusiasts, and ensuring up-to-the-minute updates on cinematic events and news. Through nurturing a community of passionate movie fans, we aim to celebrate the transformative impact of movies and enhance the lives of global audiences through the power of cinematic storytelling."

QUALITY POLICY

At CINEWISE, our commitment lies in delivering a superior user experience that impeccably aligns with and exceeds the expectations of our diverse user base. We strive to maintain an environment where user needs and preferences are not just met, but consistently surpassed, ensuring an exceptional, seamless, and enriched journey through the cinematic world. Our dedication is to continuously refine and innovate our platform to uphold the highest standards of quality, ensuring an engaging, accessible, and comprehensive experience for all movie enthusiasts.

CHAPTER 2

SYSTEM CONFIGURATION

HARDWARE SPECIFICATION

Processor	-	Intel Core i3 7100u
RAM	-	8 GB DDR3
Hard Disk Drive	-	1TB SATA
Monitor	-	Intel Original DG41RQ
Keyboard	-	Logitech USB Keyboard

SOFTWARE SPECIFICATION

Tool Used	-	PHP
Database Used	-	MySQL Server
Operating system	-	Microsoft Windows 10

ABOUT THE DEVELOPMENT TOOLS

PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Ramus Lerdorf in 1995, the reference implementation of PHP is now produced by the PHP group. While PHP originally stood for personal home page, it now stands for PHP: Hypertext Pre-processor, a recursive acronym. PHP code is interpreted by a web server with a PHP processor module which generates the resulting web page. PHP commands can be embedded directly into a HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone incompatible with the GNU General Public License (GPL) due to restrictions on the usage of the term PHP. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

HTML

HTML stands for Hypertext Mark-up Language, was invented by Tim Burners Lee. It is a simple text formatting language used to create hypertext documents. It is a platform independent language unlike most other programming languages. HTML is neutral and can be used on any platform or desktop. It is this feature of HTML that makes it popular as standard

on the WWW. This versatile language allows the creation of hypertext links, also known as hyperlinks. The language used to develop web pages is called Hyper Text Mark-up Language (HTML). HTML is the language interpreted by a browser. HTML is specified as TAGS in an HTML document (i.e. the web page).

HTML TAGS

Tags are instructions that are embedded directly into the text of the document. An HTML tag is a signal to a browser that it should do something other than just throw text up on the screen. By convention all HTML tags begin with an open angle bracket (<) and end with a close angle bracket (>).

THE STRUCTURE OF AN HTML PROGRAM

Every HTML program has a rigid structure. The entire web page is enclosed within `<html></html>` tags. Within these tags two distinct sections are created using the `<head></head>` tags and the `<body></body>` tags.

JAVASCRIPT

JavaScript is an object based, cross-platform, loosely typed multiuse programming language that is used to add interactivity to the web pages. A JavaScript is a program that is included on an HTML page. Because it is enclosed in the `<script>` tag, the text of the script doesn't appear on the user's screen, and the Web browser knows to run the JavaScript program. The `<script>` tag is most often found within the `<head>` section of the HTML page. Scripts that write text to the screen or that write HTML is best put in the body section. JavaScript allows you create an active interface, giving the users feedback as they navigate your pages. JavaScript can be used to make sure that your users enter valid information in forms, which can save time and money. If the forms require calculations, you can do them in JavaScript the user's machine without needing to use a complex server CGI.

With JavaScript, you have the ability to create custom HTML pages depending on actions that the user takes. JavaScript controls the browser, because JavaScript has a set of date and time features. JavaScript deals with commands called event handles. An action by the user on the page triggers an event handler in your script. JavaScript is case sensitive. Scripts can be put in

either of two places on an HTML page: between the <head> and </head> tag or between<body>and</body>tag.

One of the main uses of JavaScript is to provide feedback to people browsing your site. An alert window can be created that pops up and gives the user the vitally important information that they need to know about the page. Different languages versions can be have had on different scripts on one page. One script might be for any JavaScript version, another for JavaScript1.1 and higher, and a third for JavaScript1.2. In the case of JavaScript, the function is a set of JavaScript statements that performs a task. Function can be called as many times as needed.

DBMS DESCRIPTION

A database is a collection of inter related data stored with minimum redundancy to serve many users quickly and efficiently. The general objective of database design is to make the database access easy, inexpensive and flexible to the user. Database design is used to define and then specify the structure of business used in the client/server system. A business object is nothing but information that is visible to the users of the system. The database must be normalized one. Database design is one of the important parts in developing software. It is a process of developing the conceptual model of data. It minimizes the artificiality embedded in using separate files. It is a definition of the entire information content of the organization and it specifies a relation between the data.

The primary objectives are fast response time to enquiries, more information at low cost, control of redundancy, clarity and ease-of-use and program independence, accuracy and integrity of the system, fast recovery, privacy and security of information and availability of powerful and user languages. For designing a table, the analyst must decide the fields of the tables, types of the fields, field length, default values etc. For this firstly the entity and relationship must be identified. Secondly, their attributes must be specified. This method of organizing the data table is known as normalization.

The data structure can be later redefined through a normalization process that groups data in the simplest way possible so that later changes can be made with ease. Normalization is designed to simplify relationship and establish logical links between files without losing information. An inherit problem is data redundancy and the inefficiency it generates. In other words, normalization implies splitting the tables into two or more tables with fewer columns.

Most designing techniques try to reach and a few 4NF, but many reach 5NF.

The six normalization rules are:

- 1NF – each row or column must have a single value with no repeating values.
- 2NF – each non-key column must depend on the primary key column.
- 3NF – no non-key column can depend on another non-key column.
- BCNF – no attribute of a composite key depends on the attribute of another composite key. 4NF – an entity cannot have a 1:1 relation between key column and non-key column.
- 5NF –if and only if every non-trivial join dependency in it is implied by the candidate key. It is also known as project join normal form.

OPERATING SYSTEM

This project work is done in Windows 10, which is the operating system. An operating system is a set of software tools designed to make it easy for people or programmers to make optimum use of the computer. People can be separated into two groups, users and programmers. The user wants a convenient set of commands to manage files of data or programs, copy and run application packages while a programmer uses a set of tools that can be held together and debug programs. No matter where you are working, your computer will be easier to use and manage, because Microsoft Windows 10 is more compatible and powerful than any workstation you have used.

The main features of Windows 10 are:

1. Easier to use
2. Easier to manage
3. More compatible
4. More powerful

1. EASIER TO USE

With Windows 10, you can have faster access to information, and you are able to accomplish tasks more quickly and easily.

Windows 10 makes it easier to:

- Work with files
- Find information.
- Personalize computing environment.
- Work remotely
- Work taking place the web

2. EASIER TO MANAGE

You and your network administrators can work more efficiently now, because many of the most common management tasks are streamlined with Windows 10.

With Windows 10 your workstation will be easier to:

- Setup
- Administrate
- Support

3. MORE COMPATIBLE

Windows 10 offers increased compatibility. With different types of networks and with wide array of hardware and software.

Windows 10 also provides:

- Improved driver support
- Increased support for new generation hardware multimedia technologies.

4. MORE POWERFUL

For all your computing needs Windows 10 provides:

- Industrial-strength reliability.
- The highest level of security
- Powerful performance.

KERNEL FEATURES

The kernel is considered to be the heart of the operating system that provides services to the programs running on the computer. It takes care of the hardware, software, network resources, file systems and the remaining services such as

- Security
- System fault tolerance
- Multitasking
- Multiprocessing
- Platform independence
- File system reliability
- File system security
- Flexible protocol support
- Support multi-client operating system
- Enhanced scalability
- Multi-user environment
- Communication.

CHAPTER 3

SYSTEM ANALYSIS

PRELIMINARY INVESTIGATION

The first stage of any project, sometimes called the preliminary assessment is brief investigation of the system under consideration, system study and analysis deals with the study of the current system, this is the critical process of information development. It can be defined as problem solving which consist of four phases that can be successfully completed by applying appropriate skill and carefully addressing each dimension of the information system. The purpose of preliminary study phase is to determine the initial feasibility of a project work. The product of the phase is a feasibility survey that is presented to a steering committee for a decision on whether the project should be developed.

During this phase, the team analyzed the suggested project and noted the requirements proposed for the new system and sanctioned to develop the project aftertaking the feasibility of the project into consideration.

After feasibility analysis, the next phase is the study of the current system. The purpose of this phase is to learn how the current system operates. The analyst identifies the problems, limitations and constraints forms preliminary solutions finally. The analyst updates the feasibility estimates and presents the findings as a problem statement for final study of phase reports.

The third phase of the system analysis is to define end-user requirements for a new system. The purpose of this phase is to identify what the new and improved information system must be able to do. The product of this phase is the requirement statement

The fourth phase to select a feasible solution from alternatives that are evaluated in terms of operational, technical, and economic feasibility the analyst will recommend the best solution to the management for approval.

EXISTING SYSTEM

A database housing a compilation of movies available for users to search, stream trailers, and add to a watch-later list. The movie repository is categorized based on genres, release years, and user ratings, enabling easy navigation and exploration.

LIMITATIONS OF EXISTING SYSTEM

- **Limited movie collection:** Despite a diverse array of movies available, the platform might lack certain titles or niche films that users seek, potentially leading to frustration when a specific movie is not part of the available selection.
- **Lack of personalization:** While movie websites may offer recommendations and genre's based on a user's watch history, these recommendations may not always be accurate or personalized to the user's specific tastes. This can lead to a less satisfying listening experience for some users

PROPOSED SYSTEM

Here is a proposed system for CINEWISE:

- **User-Generated Reviews and Ratings:** Implement a user review and rating system for movies. This will enhance user engagement and assist others in choosing movies based on community feedback.
- **Discussion Forums or Community Boards:** Introduce discussion forums where users can interact, discuss movies, share recommendations, and engage in conversations about their favorite films.
- **Integration with Streaming Services:** If feasible, consider partnerships or integrations with streaming services to provide links for users to watch movies directly, enhancing convenience and user experience.
- **Mobile App Development:** Consider developing a mobile application for CINEWISE to expand accessibility and convenience for users who prefer mobile devices for their movie searches and watch lists.
- **Collaborations and Exclusive Content:** Partner with movie studios or independent filmmakers to showcase exclusive content or early screenings to engage users and offer unique experiences.
- **Accessibility Features:** Ensure the website is accessible to all users by incorporating features like subtitles, multiple language options, and audio descriptions for a more inclusive experience.

ADVANTAGES OF PROPOSED SYSTEM

Here are some advantages of proposed movie website:

- **Enhanced User Engagement:** User-generated reviews and ratings, along with discussion forums, foster active user participation, encouraging community interaction and deeper engagement with the platform.
- **Informed Decision-Making:** User reviews and discussions help prospective viewers in selecting movies based on real user experiences, ensuring better-informed choices.
- **Convenience and Accessibility:** Integration with streaming services and mobile app development expand accessibility, offering users the convenience of watching movies directly and accessing the platform via mobile devices.
- **Community Building:** Discussion forums and collaborations create a strong sense of community among movie enthusiasts, fostering connections and shared experiences.

FEASIBILITY ANALYSIS

In any project, feasibility analysis is a very important stage: here the project is checked for its feasibility. Any project may face scarcity in resources, time or workforce. Hence all these are to be studied in detail and a conclusion should be drawn whether the project under consideration is feasible or not. The main objective of the feasibility is to test the technical, social and economic feasibility of a project. System feasibility is attested or evaluation of the complete system plan. Such an evaluation is necessary to define the application area along with its extended and complexity, to provide the scope of computerization together with suggested output and input format and potential benefits. During feasibility analysis for this project the following three primary areas of interest were considered.

1. Technical feasibility
2. Economic feasibility
3. Operational feasibility

1. TECHNICAL FEASIBILITY

Technical feasibility is the most important of all types of feasibility analysis. An idea from the outline design to system requirements in terms of inputs, outputs, files and procedures is drawn and the type of hardware, software and the methods required for running the system are analyzed. Keeping in mind the above considerations, the resource availability at this bookstore was observed. It was found that the bookstore has the efficient resources to develop the current project; hence the system is technically feasible.

2. ECONOMIC FEASIBILITY

This is judged by comparing the development cost against the income or benefit analysis, which is the basis for the economic justification of a system. In terms of benefits, we have to consider both tangible and intangible benefits and it was found that no new software or hardware is needed for the development of the system. Thus, the project is economically feasible for development in this company.

3. OPERATIONAL FEASIBILITY

Operational feasibility is concerned with the working of the system after its installation. The company has a good record of development, installation and maintenance of systems for its clients. So, this system can be installed in the client environment and the bookstore admins will manage the future maintenance of the bookstore.

REQUIREMENT SPECIFICATION

INTRODUCTION

Software requirement specification (SRS) is the requirement document that provides the technical specification for the design and development of the software. This document enhances the system's quality by formalizing communication between the system developer and the user and provides the proper information for accurate documentation. The produces a consequence of the analysis task at its culmination.

The introduction of the SRS states the goals and objectives of the software, describing it in the context of the computer-based system. It is nothing more than the software scope. The information description provides a detailed description of the problem that the software must solve. Information content, flow and structure are documented and hardware, software and human interfaces are described. A description of each function required to solve the problem is presented in the functional description. The behavioral description section of the specification examines the operation of the software as a consequence of external events and internally generated control characteristics.

Validation criteria are perhaps the most important and, ironically, the most often neglected section of the SRS. Specification of validation criteria act as an implicit review of all other requirement. Finally, the specification includes a Bibliography and Appendix. The bibliography contains references to all documents that relate to the software. The appendix contains information that supplements the specification. For example, tabular data, charts, description for algorithms etc.

SPECIFICATION REVIEW

A review of the SRS is conducted by both the software developer and the customer. The review is first conducted at a macroscopic level i.e.; reviewers attempt to ensure that the specification is completed, consistent and accurate when the overall information functional and behavioral domains are considered. Once the review is completed the SRS is "signed off" by both the customer and the developer. During the

review changes to the specification may recommended. Thus, it ensures that the developer and the customer will have the same perception of data.

SOFTWARE SPECIFICATION REQUIREMENT

This document describes the requirement of the system. It is meant for use by the developers, and will also be the basis for validating the final delivered system. Any changes made to the requirements in the future will have to go through a formal change approval process. The developer is responsible for asking the clarification, where necessary, and will not make any alterations without the permission of the client.

The developer is responsible for:

- Developing the site.
- Installing the software.
- Conducting demonstrations about the usage.

CHAPTER 4

SYSTEM DESIGN

INTRODUCTION

System design involves translating information requirements and conceptual design into technical specification and general flow of processing. After the user requirements are identified, related information is gathered to verify the problem and after evaluating the existing system, a new system is proposed. The proposed system consists of various tables, their maintenance and report generation.

For design of get unsettled software, care has been given for developing an efficient system, which is user friendly as well as high in performance. It has been assured that the system will have the functions and promises of the proposed system. In the system, the various techniques are used to present a simple efficient system. Design phase acts a bridge between the software requirement specification and the implementation phase, which satisfies the requirements.

The major step in design is the preparation of input forms and the design of all major output forms in a manner acceptable to the user in all aspects. The base lies in the complete understanding of the system. The data flow diagrams explicitly specify the process flow. Table design or database design is the next major step. Extreme care has to be given here and several concepts of normalization have to be applied at many levels.

Program specification comes next. Here we specify various aspects of the program and also will in detail the major components used in the program. The overall process flow is also explained in much detail. Validation rules and checks come next. Several degrees of validation have to be applied to all outputs and various other operations made on the system. Deviation, if any, has to be checked from these validation rules, imposing the 'not null' constraint is one of the best examples. It has been used many aspects. Various other constraints are also used. Security checks refer to avoiding unnecessary access to data that is under use and guarding data from any malice.

Inputs, outputs have to be designed as per predefined guidelines. Effective and meaningful navigation has to be applied. In the input design, the user-oriented inputs are converted into computer-based formats whereas in the output design, the emphasis is on producing the hard copy or softcopy of the information requested for.

DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a diagram that describes the flow of data and the processes that change data throughout a system. It's a structured analysis and design tool that can be used for flowcharting in place of or in association with information. Oriented and process-oriented system flowcharts. When analysts prepare the Data Flow Diagram, they specify the user needs at a level of detail that virtually determines the information flow into and out of the system and the required data resources. This network is constructed by using a set of symbols that do not imply physical implementations. The Data Flow Diagram reviews the current physical system, prepares input and output specification, specifies the implementation plan etc.

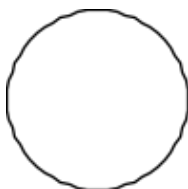
Throughout the project, the context flow diagrams, data flow diagrams and flow charts have been extensively used to achieve the successful design of the system. In our opinion, “efficient design of the data flow and context flow diagrams helps to design the system successfully without much major flaws within the scheduled time”. This is the most complicated part in a project. In the designing process, our project took more than the activities in the software life cycle. If we design a system efficiently with all the future enhancements, the project will never become junk and it will be operational.

Four basic symbols are used to construct data flow diagrams. They are symbols that represent data source, data flows, and data transformations and data storage. The points at which data are transformed are represented by enclosed figures, usually circles, which are called nodes.

Main symbols used in the data flow diagram are:



: **Square**, this defines source or destination of data



: **Circle**, this represents a process that transform

Incoming data and outgoing flow.



: **Arrow**, which shows data

flow



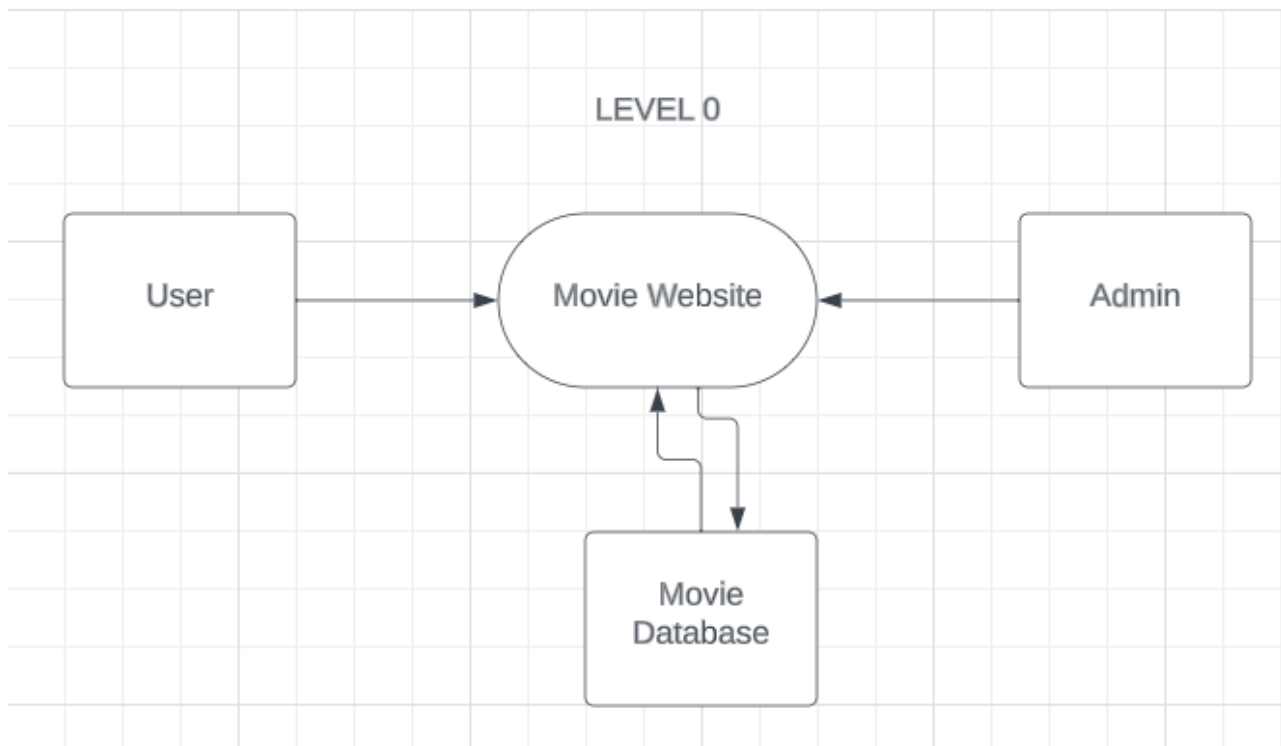
: **Rectangle**, which shows data store.

Steps to Construct Data Flow Diagrams:

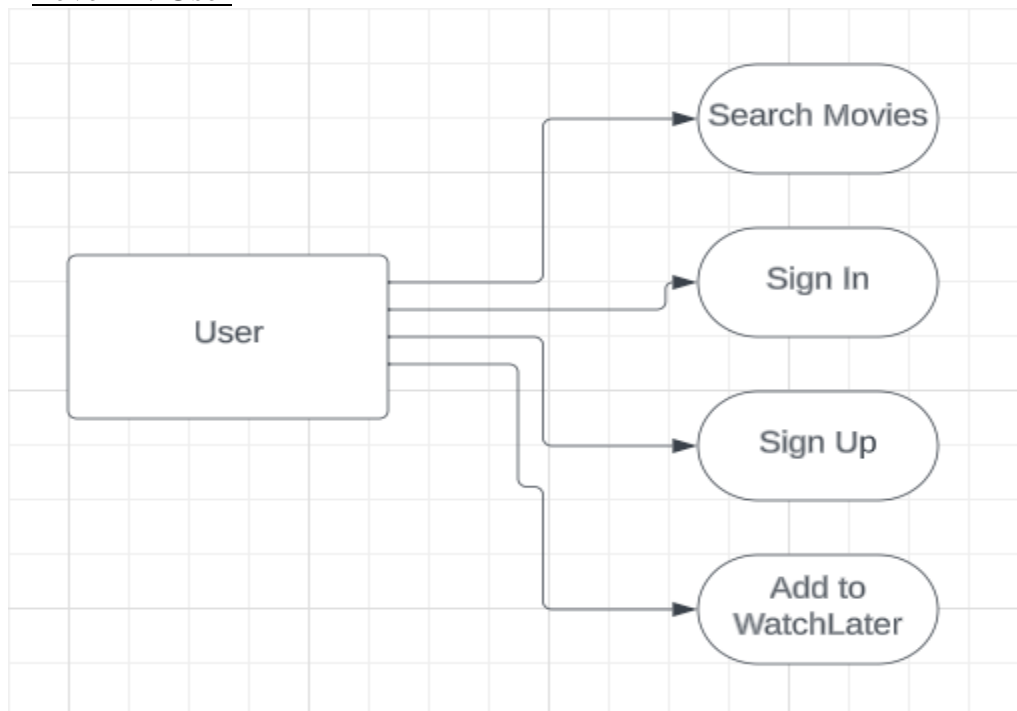
Four steps are commonly used to construct a DFD. They are

- Process should be named and numbered for easy reference. Each name should be representative of the process.
- The destination of flow is from top to bottom and from left to right.
- When a process is exploded in to lower-level details they are numbered.
- The names of data stores, sources and destinations are written in capital letters.

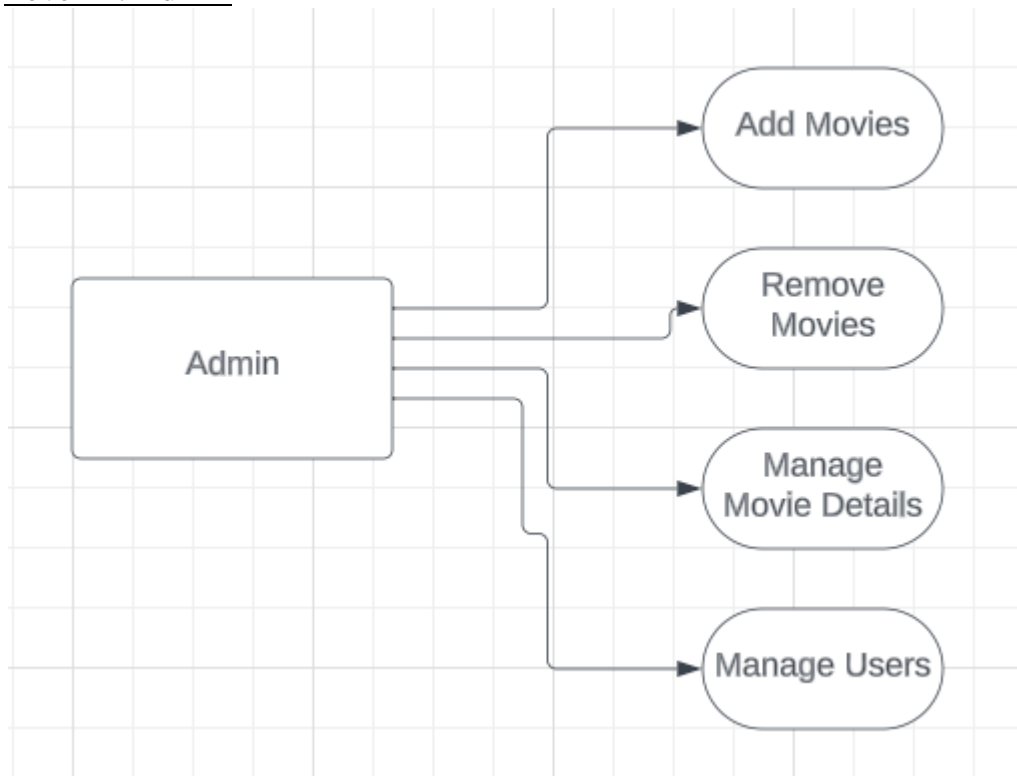
Data Flow Diagram



Level 1 : User



Level 1 : Admin



INPUT DESIGN

The input is the set of values that is provided by the user to the system. The input design must enable the user to provide the error free input to the system for efficient processing. The input design is the process of converting the user-oriented inputs into computer-based formats. The data fed into the system using simple interactive forms. The forms have been supplied with messages so that user can enter data without facing any difficulty. The data is validated wherever it requires in the project. The input data have to be validated, edited, organized, and accepted by the system before being proposed to produce the outputs.

The main objectives of input design are as follows:

Produce effective method of input

Achieve high level accuracy

Ensure that the input is acceptable and understood by the user
The different types of input data handled by the system are:

EXTERNAL

They are the primary inputs to the system. The external input is what the user supplies to the system. The user can give different types of external inputs in this project such as add new threads, post reply

INTERNAL

When the external inputs are obtained from the user, these inputs are transferred to the system as messages. These messages are captured and handled as input for further processing. In this project the input design is done with PHP codes. The external inputs are data given to the system by the user such as username and password for authentication process. The external input also includes the request as per the user's interest for displaying today's, yesterdays and last week's threads/posts and its replies. The internal input covers the fetching of data from the database and it will be the input for displaying the results of the screen. The necessary internal inputs are given to the system by Graphical User Interface (GUI) technology. The GUI system applied to this project enables the user to avoid error and conclusion arises while entering the input.

OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any systems results of the processing are communicated to the user and to the other systems through outputs design it is determined how the information is to be displayed for immediate need. It is the most important and direct source information to the user. Efficient and intelligent output design improves the systems relationship with the user and helps in decision making. The objectives of the output design is to convey the information of all the past activities, current status and to emphasize important events. The output generally refers to the results and information that is generated from the system. Outputs from computers are required primarily to communicate the results of processing to the users. The result for each query option that is submitted by the user, the system displays the output. The output that is obtained for each query submitted should be tested before conforming the result

DATABASE DESIGN

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for the users. The general theme behind a database is to integrate all the information. In database design several specific objectives are considered: -

Controlled redundancy

Ease of learning and use

Data independence

Accuracy and integrity

Recovery from failure

Performance

A database is an integrated collection of data which provides centralized access to the data. Usually, the centralized data managing the software is called RDBMS and the other DBMS is the separation of data as seen by the program and data has stored in direct access to stores device. This is the difference between logical and physical data.

DESIGN CONSIDERATION

The system is analyzed to the requirements and possible tables and fields are identified.

- Identifying keys: Once we have drawn up the list of possible tables and fields, the next step in the logic database is to identify and set foreign keys for each table.
- Primary keys: A primary key consist of a field or a set of fields that uniquely identify each record in that table. The “primary “field defines the primary key.
- Foreign key: A foreign key comprises a field or multiple fields that links to the primary key of another table.

DATABASE DESIGN AND TABLE

Database is recognized as standard of MIS and is available virtually for every computer system. The general theme behind a database is to integrate all the information. A database is an integrated collection of data and provides centralized access to the data. Databases are designed to manage large bodies of information. One of the major purposes of a database system is to provide users with an abstract view of data. A database is designed so that it can be used both to specify the overall logical structure of the database and provide a higher level description of the implementation. The database is structured in fixed format records of several types. Each record type defines a fixed number of fields or attributes and each field usually of a fixed length.

TABLES OF CINEWISE PROJECT

TABLE 1:
customerdata (contains the information of the users)

FIELD	TYPE	CONSTRAINTS	COMMENTS
username	Varchar(200)	primary key	Username of Users
password	Varchar(5000)	not null	Password of Users
email	Varchar(5000)	Not Null	Recovery Email

TABLE 2:
moviedata (contains all information about movies used for the website)

FIELD	TYPE	CONSTRAINTS	COMMENTS
id	int(50)	AUTO_INCREMENT	ID of movie
movieName	varchar(100)	Not Null	Movie Title
genre	varchar(15)	Not Null	Genre of Movie
description	varchar(5000)	Not Null	Description of Movie
link	mediumtext	Not Null	Link for Movie Trailer
rating	varchar(10)	Not Null	Rating of Movie
releaseYear	int	Not Null	Release Year of Movie

TABLE 3:**userdata** (contains information about admin users)

FIELD	TYPE	CONSTRAINTS	COMMENTS
id	int(50)	AUTO_INCREMENT	ID of Root
userName	varchar(100)	Not Null	Username of Root
passWord	varchar(100)	Not Null	Password of Root

TABLE 4:**watchlater** (contains movies added to watch-later list by users)

FIELD	TYPE	CONSTRAINTS	COMMENTS
watchlater_id	int(50)	AUTO_INCREMENT	ID of Movie in List
username	varchar(5000)	FOREIGN KEY	Username taken from table 'customerdata'
movieName	varchar(5000)	Not Null	Title of Movie added to List

CHAPTER 5

SYSTEM DEVELOPMENT

INTRODUCTION

Implementation is the stage of the project where the theoretical design is turned into a working system. At this stage the main workload, the greatest upheaval and the major impact on the existing system shifts to the user department. If the implementation is not carefully planned and controlled, it can cause chaos and confusion.

Implementation includes all those activities that take place to convert from the old system to new system. The new system may be totally new, replacing an existing manual or automated system or it may be a major modification to an existing system. Proper implementation is essential to provide a reliable system to meet the organization requirements. Successful implementation may not guarantee improvement in the organization using the new system, but improper installation will prevent it.

The implementation stage involves the following tasks:

- Careful planning
- Investigation of system and constraints
- Design of methods to achieve the changeover phase
- Training of staffs in the changeover phase
- Evaluation of the changeover method

The method of implementation and the time scale to be adopted are found out initially. Next the system is tested properly and the same time users are trained in the new procedures.

IMPLEMENTATION PROCEDURES

Implementation of software refers to the final installation of the package in its real environment, to the satisfaction of the intended users and the operation of the system, people who are not sure that the software is meant to make their job easier. In the initial stage, they doubt about the software but we have to ensure that the resistance does not build up as one has to make sure that

- The active user must be aware of the benefits of using the system.
- Their confidence in the software is built up.
- Proper guidance is imparted to the user so that he is comfortable in using the application.

Before going ahead and viewing the system, the user must know that for viewing the result, the server program should be running in the server. If the server object is not up running on the server, the actual processes won't take place.

IMPLEMENTATION LOGIC

Implementation includes all those activities that take place to convert from the old system to the new one. The new system may be totally new, replacing an existing manual automated system. Proper implementation is essential to provide a reliable system to meet customer requirements.

The process of putting developed system in actual use is called system implementation. This includes all those activities that take place to convert from the old system to the new system. The system can be implemented only after thorough testing is done and if it is found to be working according to the specifications. The system personally checks the feasibility of the system.

The implementation stage involves following tasks:

- Investigation of system and constraints.
- Design of methods to achieve the changeover.
- Evaluation of the changeover method.

The newly proposed system is implemented after the successful testing of the system. The final step of the system approach recognizes that an implemented solution should be monitored and evaluated. This is called post implementation review process. Since the success of a solution is reviewed after it is implemented. The focus on this stepwise to determine if the implementation solution has indeed helped the institution and the organizers of the event, meet their system objectives.

CODING

Coding is the phase of a software development project where developer's actually input the source code into a computer that will be compiled into the final software program. Source code is the high-level language like C#, java, python etc. that is typed into an IDE (Interactive Development Environment) and stored in the text file on the computer. This text

file is compiled into machine code, which are the instructions actually understood by the computer.

CODING VALIDATION AND OPTIMIZATION

It is verified whether the data entered in each form is added to the corresponding fields of the table. On the press of Submit button, controls will appear on the form and the entered data is saved.

The lower keys letters entered are detected and changed to upper case. Also numbers are not allowed to be entered in the text boxes.

- Validation is the status of the project when the theoretical designs turned into a working system.
- It is used to reduce the number of loops in the program.
- Optimization is the last part of the system development life cycle.
- If the number of loops increases no. of executions also increases. Then there may be a chance for the program to get stuck.

SAMPLE CODE

Connection.php

```
<?php
```

```
require 'index.php';
```

```
/*database connection */
```

```
$connection =new mysqli(DB_HOST,DB_USER,DB_PASS,DB_NAME);
```

```
/* if the database hasn't connected successfully, it will give the user an error message*/
```

```
if(mysqli_errno($connection)){  
    die(mysqli_errno($connection));
```

INDEX.PHP (homepage of website)

```
<!DOCTYPE html>
<html lang="en">
<html>
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>CineWise</title>
  <link rel="stylesheet" href="./styles.css"> <!--Custom CSS File-->
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link
href="https://fonts.googleapis.com/css2?family=Bricolage+Grotesque:opsz,wght@10..48,800
&family=Poppins:wght@300&display=swap" rel="stylesheet"><!--GOOGLE FONTS-->
  <link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css' rel='stylesheet'> <!--
-BOXICONS-->
  <link rel="icon" type="images/x-icon" href="./assets/favicon.ico"> <!--FAVICON
ICON-->
</head>
<body>
  <div class="mainbox">

    <section id="homePage" class="section">
      <div class="container">
        <div class="videoWrapper">
          <video autoplay loop muted plays-inline class="bgClip">
            <source src="./assets/live.mp4" type="video/mp4">
            Browser Not Supported!
          </video>
        </div>
        <div class="box"><H1 class="cw">CineWise</H1></div>
        <form action="./php/search.php" method="post">
          <input type="text" placeholder="Search The Movie / Genre" class="searchBar"
name="searchInput" id="searchInput" required>
        </form>
        <a href="#secondPage"><i class='bx bxs-down-arrow' id="arrow"
id="searchBtn"></i></a>
      </div>
    </section>

    <section id="secondPage" class="section">
      <div class="container2">
        <div class="cw2">
          <h1>CineWise</h1>
        </div>
        <div class="navbar">
          <?php
            session_start();
```

```

        if(isset($_SESSION['userName'])) {
            echo "<script>console.log('Second Page : User Is Signed In!');</script>";
            echo '
            <nav> <ul>
            <li><a href="#homePage"><b>Home</b></a></li>
            <li><a href="#AboutUs"><b>About Us</b></a></li>
            <li><a href="#ContactUs"><b>Contact</b></a></li>
            <li><a href="/watch-later.php" class="watchLater"><b>Watch Later
List</b></a></li>
            <li><a href="/php/logout.php" class="logoutBtn"><b>Log Out</b></a></li>
            </ul> </nav>
            ';
        } else {
            echo "<script>console.log('Second Page : User Is Not Signed In!');</script>";
            echo '
            <nav> <ul>
            <li><a href="#homePage"><b>Home</b></a></li>
            <li><a href="#AboutUs"><b>About Us</b></a></li>
            <li><a href="#ContactUs"><b>Contact</b></a></li>
            <li><a href="http://localhost/cinewise2.0/signin.html" target="blank"
id="signinButton"><b>Sign In</b></a></li>
            </ul> </nav>
            ';
        }
    ?>

</div>
<p class="cw-intro">
/*content goes here*/
<h3>FAQs</h3>
<div class="faqbox">

    <div class="faq">
        /*content goes here*/
    </div>
</div>
</div>
</section>

<section id="AboutUs" class="section">
    <div class="container3">
        <h1>About Us!</h1>
        <?php
            if(isset($_SESSION['userName'])) {
                echo "<script>console.log('Third Page : User Is Signed In!');</script>";
                echo '
                <nav> <ul>
                <li><a href="#homePage"><b>Home</b></a></li>
                <li><a href="#ContactUs"><b>Contact</b></a></li>

```

```

        <li><a href="./watch-later.php" class="watchLater"><b>Watch Later
List</b></a></li>
        <li><a href="./php/logout.php" class="logoutBtn"><b>Log Out</b></a></li>
    </ul> </nav>
    ';
    } else {
        echo "<script>console.log('Third Page : User Is Not Signed In!');</script>";
        echo '
        <nav> <ul>
        <li><a href="#homePage"><b>Home</b></a></li>
        <li><a href="#ContactUs"><b>Contact</b></a></li>
        <li><a href="http://localhost/cinewise2.0/signin.html" target="blank"
id="signinButton"><b>Sign In</b></a></li>
        </ul> </nav>
        ';
    }
    ?>
<p>/*content*/</p><br>

```

```

<h3>Our Founding Vision</h3>
<p>/*content*/</p> <br>

```

```

<h3>The Ultimate Movie Information Hub</h3>
<p>/*content*/</p> <br>

```

```

<h3>Comprehensive Movie Details</h3>
<p>/*content*/
</p>
</div>

```

```

</section>
<section id="ContactUs" class="section">
    <div class="container4">
        <h1>Contact Us!</h1>
        <?php
            if(isset($_SESSION['userName'])) {
                echo "<script>console.log('Fourth Page : User Is Signed In!');</script>";
                echo '
                <nav> <ul>
                <li><a href="#homePage"><b>Home</b></a></li>
                <li><a href="#AboutUs"><b>About Us</b></a></li>
                <li><a href="./watch-later.php" class="watchLater"><b>Watch Later
List</b></a></li>
                <li><a href="./php/logout.php" class="logoutBtn"><b>Log Out</b></a></li>
                </ul> </nav>
                ';
            } else {
                echo "<script>console.log('Fourth Page : User Is Not Signed In!');</script>";
                echo '
                <nav> <ul>
                <li><a href="#homePage"><b>Home</b></a></li>

```

```

        <li><a href="#AboutUs"><b>About Us</b></a></li>
        <li><a href="http://localhost/cinewise2.0/signin.html" target="blank"
id="signinButton"><b>Sign In</b></a></li>
    </ul> </nav>
    ';
    }
    ?>
    <p>/*content*/</p> <br>
    <p>-> Customer Support Email: <span
class="email">support@cinewise.com</span><br>
/*content*/
</p> <br>
    <p>-> General Inquiries: <span>info@cinewise.com</span> <br>
/*content*/</p> <br>
    <p>-> /*content*/.</p> <br>
    <p>
    -> Feedback and Suggestions: <span>feedback@cinewise.com</span>
<br>
/*content*/.</p>
</div>
</section>

</div>
</body>
</html>

```


SEARCH.PHP (php script to search for a movie in database)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Search Results</title>
  <link rel="icon" type="images/x-icon" href="./assets/favicon.ico">  <!--FAVICON ICON-->
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css" integrity="sha512-z3gLpd7yknf1YoNbCzqRKc4qyor8gaKU1qmn+CShxbuBusANI9QpRohGBreCFkKxLhei6S9CQXFont-family: 'Poppins', sans-serif;EbbKuqLg0DA==" crossorigin="anonymous" referrerpolicy="no-referrer" /> <!--FA-->
  <style>
    @import
url('https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,400;1,200&display=swap'
);
    * {
      margin : 0;
      border : 0;
      box-sizing : border-box;
      scrollbar-width : none;
    }
    body {
      background-color : #0c1216;
      color : #f4f8fb;
      font-family: 'Poppins', sans-serif;
    }
    .header{
      display : grid;
      place-items : center;
      border-bottom : #f4f8fb 2px solid;
      margin-bottom : 5px;
    }

    .container {
      display : flex;
      flex-direction: row;
      flex-wrap: wrap;
    }

    /*MOVIE CARD STYLES*/
    .box-container {
      border : 2px solid #a3c5db;
      width : 250px;
      margin : 10px;
    }
  </style>
```

```
.movie-title{
  border-bottom : #4b8db9 1px solid;
  display : grid;
  place-items : center;
  font-size : 20px;
  padding : 5px;
}
```

```
.movie-description {
  padding : 7px;
  text-align : center;
  border-bottom : #4b8db9 1px solid;
  font-size : 13px;
}
```

```
nav ul {
  display : flex;
  justify-content : space-around;
  list-style : none;
  padding : 6px;
  border-bottom : #4b8db9 1px solid;
  font-size : 15px;
}
```

```
nav a {
  color : white;
  text-decoration : none;
  transition : .2s ease-in-out;
}
```

```
a:hover {
  color : #a3c5db;
}
```

```
.rating {
  padding-left : 5px;
}
```

```
.footer {
  display : flex;
  justify-content : space-between;
  padding-left : 20px;
  padding-right : 20px;
  padding-top : 5px;
  font-size : 15px;
}
```

```
.arrow
{
  position: absolute;
  top : 7px;
  left : 7px;
```

```
font-size : 25px;
transition: .2s ease-in-out;
-webkit-transition: .2s ease-in-out;
-moz-transition: .2s ease-in-out;
-ms-transition: .2s ease-in-out;
-o-transition: .2s ease-in-out;
}
```

```
.arrow:hover {
transform : scale(110%);
}
```

```
.watch-later-button {
background : transparent;
color : white;
font-size : 14px;
border : white 1px solid;
padding : 2px;
transition : .3s ease-in-out;
}
```

```
.watch-later-button {
background : transparent;
color : white;
font-size : 14px;
border : white 1px solid;
padding : 2px;
transition : .3s ease-in-out;
}
```

```
.watch-later-button:hover {
background-color : white;
color : black;
curson : grab;
}
```

```
.watch-now {
border : white 1px solid;
padding : 2px;
transition : .3s ease-in-out;
font-size : 14px;
}
```

```
.watch-now:hover {
background-color : white;
color : black;
}
```

```
/*MOVIE STYLES END*/
```

```
/*NO RESULTS PAGE STYLES*/
```

```
.error-container {
background-color : #0c1216;
color : white;
```

```

height : 100vh;
margin : 0 auto;
font-size : 30px;
}

```

```

span {
color : red;
}

```

```

/*NO RESULTS PAGE END*/

```

```

</style>

```

```

</head>

```

```

<body>

```

```

<div class="header">

```

```

<h1>Search Results</h1> <br>

```

```

</div>

```

```

<div class="arrow">

```

```

<a href="http://localhost/CineWise2.0/index.php"> <i class="fa-solid fa-backward"
style="color: #ffffff;"></i> </a>

```

```

</div>

```

```

<div class="container" id="container">

```

```

<?php

```

```

$host = 'localhost';

```

```

$username = 'root';

```

```

$password = "";

```

```

$databse = 'cinewise';

```

```

$conn = new mysqli($host,$username,$password,$databse);

```

```

if($conn ->connect_error)

```

```

{

```

```

    die("Connection Failed!". $conn->connect_error);

```

```

}

```

```

$searchInput = $_POST['searchInput'];

```

```

$lowerCaseSearchInput = strtolower($_POST['searchInput']);

```

```

$query = "SELECT * FROM moviedata WHERE movieName like

```

```

'%"$lowerCaseSearchInput%" OR genre like '%" $lowerCaseSearchInput%" OR releaseYear like

```

```

'%"$lowerCaseSearchInput%"";

```

```

$result = $conn->query($query);

```

```

if ($result->num_rows > 0) {

```

```

    while ($row = $result->fetch_assoc()) {

```

```

        echo '<div class="box-container">';

```

```

        echo '<H3 class="movie-title">'. ucwords($row['movieName']) .' ('. ucwords($row['genre'])

```

```

        .')</H3>';

```

```

        echo '<p class="movie-description">'. ucfirst($row['description']) .'</p>';

```

```

        echo '<nav>';

```

```

        echo '<ul>';

```

```

        echo '<li><a href="'. $row['link'] .'" target="_blank" class="watch-now">Watch

```

```

Trailer!</a></li>;
    echo '<button class="watch-later-button" data-movie-name="" . $row['movieName'] .
">Watch Later!</button>';
    echo '</ul>';
    echo '</nav>';
    echo '<div class="footer">';
    echo ' <p class="rating title">Rating <br>'. ucwords($row['rating']) .'</p>';
    echo '<p class="release title">Release <br>'. ucwords($row['releaseYear']) .'</p>';
    echo ' </div>';
    echo '</div>';

}
}
else {
    echo '<div class="error-container">';
    echo '<div class="error-heading">No <span>Results</span> Found!</div>';
    echo "</div>";
}

$conn->close();
?>
</div>
<script>
    document.addEventListener("DOMContentLoaded", function () {
        const watchLaterButtons = document.querySelectorAll(".watch-later-button");

        watchLaterButtons.forEach(button => {
            button.addEventListener("click", function () {
                const movieName = button.getAttribute("data-movie-name");

                // AJAX REQUEST
                const xhr = new XMLHttpRequest();
                xhr.open("POST", "./watchlater.php", true);
                xhr.setRequestHeader("Content-Type", "application/x-www-form-urlencoded");
                xhr.onreadystatechange = function () {
                    if (xhr.readyState === 4 && xhr.status === 200) {

                        // var outputElement = document.getElementById("container");
                        // outputElement.innerHTML = xhr.responseText;
                        console.log(xhr.responseText);
                        button.disabled = true;
                        button.textContent = "Added!";
                        button.style.backgroundColor = "#0c1216";
                    }
                };
                console.log("Movie Name:", movieName);
            });
        });
    });
    xhr.send(`movieName=${movieName}`);
    });
    });

```

```
</script>
</body>
</html>
```

CREATE ACCOUNT.PHP (php script to add new users to database)

```
?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "cinewise";

$conn = new mysqli($servername, $username, $password, $dbname);

$username = $_POST['userName'];
$password = $_POST['passWord'];
$email = $_POST['email'];

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
} else {
    $stmt = $conn -> prepare("insert into customerdata (username, password, email) values(?, ?, ?)");
    $stmt->bind_param("sss",$username, $password, $email);
    $execval = $stmt->execute();
    echo $execval;
    echo '<script>alert("Account Created Successfully! Go back to homepage and sign in!")</script>';
    $stmt->close();
    $conn->close();
}
?>
```

SIGNIN.PHP (php script to sign users in to website)

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "cinewise";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

$username = $_POST['userName'];
$password = $_POST['passWord'];

$query = "SELECT * FROM customerdata WHERE username = '$username' AND password = '$password'";
$result = $conn->query($query);

if ($result->num_rows == 1) {
    session_start();
    $_SESSION['userName'] = $username;
    session_write_close();
    echo '<script>alert("Login Successfull!")</script>';
    header('Location: http://localhost/CineWise2.0/index.php');
    exit;
} else {

    echo '<script>alert("Invalid Information!")</script>';

}

$conn->close();
```

WATCHLATER.PHP (php script to add movies to watchlater list)

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Search</title>
    <style>
    h3 {
```

```

    text-align : center; margin : auto;
}
span {
    color : red;
}
</style>
</head>
<body>
<?php
session_start();

$movieName = $_POST['movieName'];
// echo "Received Movie Name:", $movieName , "<br>";
if (isset($_SESSION['userName'])) {
    $username = $_SESSION['userName'];
    $host = 'localhost';
    $dbUsername = 'root';
    $dbPassword = '';
    $dbName = 'cinewise';
    $conn = new mysqli($host, $dbUsername, $dbPassword, $dbName);
    if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
    }
    $sqlAddToWatchLater = "INSERT INTO watchlater(username, movieName)
VALUES('$username','$movieName')";
    if ($conn->query($sqlAddToWatchLater) === FALSE) {
        echo "Error: " . $sqlAddToWatchLater . "<br>" . $conn->error;
    }
    $conn->close();
} else {
    echo '<h3>User Is Not <span>Signed In</span> !</h3>';
}
?>

</body>
</html>

```


CHAPTER 6

SYSTEM TESTING

TESTING METHODOLOGIES AND STRATEGIES

Software Testing is the process of executing software in a controlled manner, in order to answer the question - Does the software behave as specified? Software testing is often used in association with the term's verification and validation. Validation is the checking or testing of items, includes software, for conformance and consistency with an associated specification. Software testing is just one kind of verification, which also uses techniques such as reviews, analysis, inspections, and walkthroughs. Validation is the process of checking that what has been specified is what the user actually wanted.

Validation: Are we doing the right job?

Verification: Are we doing the job right?

Software testing should not be confused with debugging. Debugging is the process of analyzing and localizing bugs when software does not behave as expected. Although the identification of some bugs will be obvious from playing with the software, a methodical approach to software testing is a much more thorough means for identifying bugs.

Other activities which are often associated with software testing are static analysis and dynamic analysis. Static analysis investigates the source code of software, looking for problems and gathering metrics without actually executing the code. Dynamic analysis looks at the behavior of software while it is executing, to provide information such as execution traces, timing profiles, and test coverage information.

BLACK BOX TESTING

Black box testing, also called behavioral testing, focuses on the functional requirements of software. This testing approach enables the software engineer to derive the input conditions that will fully exercise all requirements for a program. Black box testing attempts to find the errors like

- Incorrect or missing functions

- Interface errors
- Errors in data structures or external database access
- Behavior or performance errors
- Initialization and termination errors

In Black box testing software is exercised over a full range of inputs and outputs are observed for correctness.

WHITE BOX TESTING

White box testing is also called Glass box testing is a test case design control; structure of the procedural design to derive test cases using White box testing method, the software engineer can derive the test cases that guarantee that all independent paths within the module have been exercised at least once. Exercise all logic decisions on their true or false sides. Execute all loops at their boundaries and within their operational bounds. Exercise internal data structure to ensure their validity.

The first level of test is unit testing. The purpose of unit testing is to ensure that each program is fully tested.

UNIT TESTING

In the unit test case will be testing the separate modules of the software. We will carry out black box testing where each module or component of software is tested individually. We will test the component by passing data through it and we will be monitoring data to find the errors. We will make sure that the component work without any troubles. The test primarily is carried out by the programmer who designed and implemented the module. Lead tester is carried out by the programmer who test the modules to finalize the testing.

INTEGRATION TESTING

In the Integration testing we will combine the different tested modules and we will test the bundle of module. This is to ensure that the entire modules are working correctly in conjunction with the other modules. Data can be lost across any interface; one module can have adverse effect on another. Sub function when combined, may not produce the desired major function. Integration testing is a systematic testing for conducting test to uncover errors associated within the interface. The objective is to take unit tested modules and build a program structure. Here correction is difficult because expense of the entire program complicates the isolation causes.

USER ACCEPTANCE TESTING

System validation checks for equality of the software in both simulated and live environments. First, the software goes through a phase, in which errors and failures based on simulated user requirements are verified and studies. This is called alpha testing.

CHAPTER 7

SYSTEM IMPLEMENTATION

7.1. INTRODUCTION

Implementation is the stage in the project where the theoretical, design I turned into a working system and is giving confidence on the new system for the users, which it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover, an evaluation, of change over methods. Apart from planning major task of preparing the implementation are education and training of users the more complex system being implemented, the more involved will be the system analysis and the design effort required just for implementation.

An implementation co-ordination committee based on policies of individual organization has been appointed. The implementation process begins with preparing a plan for them implementation of the system. According to this plan, the activities are to be carried out, discussions made regarding the equipment and the additional equipment and resources and the addition equipment has to acquire to implement the new system.

Implementation is the final and more important phase. The system can be implemented only after through testing is done and if it found to work according to the specification. This method also offers the greatest security since his old system can take over if the errors are found or inability to handle certain type of transactions while using the new system.

Implementation involves careful planning to avoid any unwelcome consequences. The effort spends on developing any system results in success only when the system implemented properly.

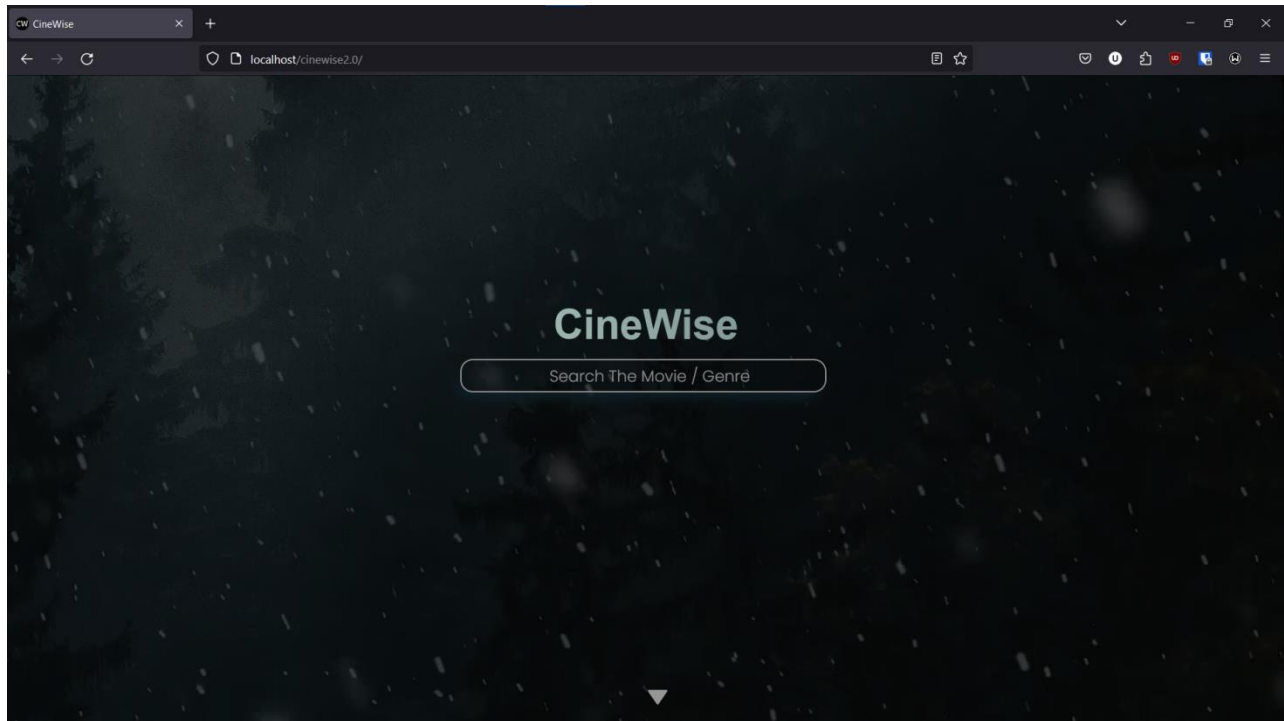
System implementation involves actual installation, evaluation of the installation, organizational impact and finally the equality assurance.

The implementation plan consists of:

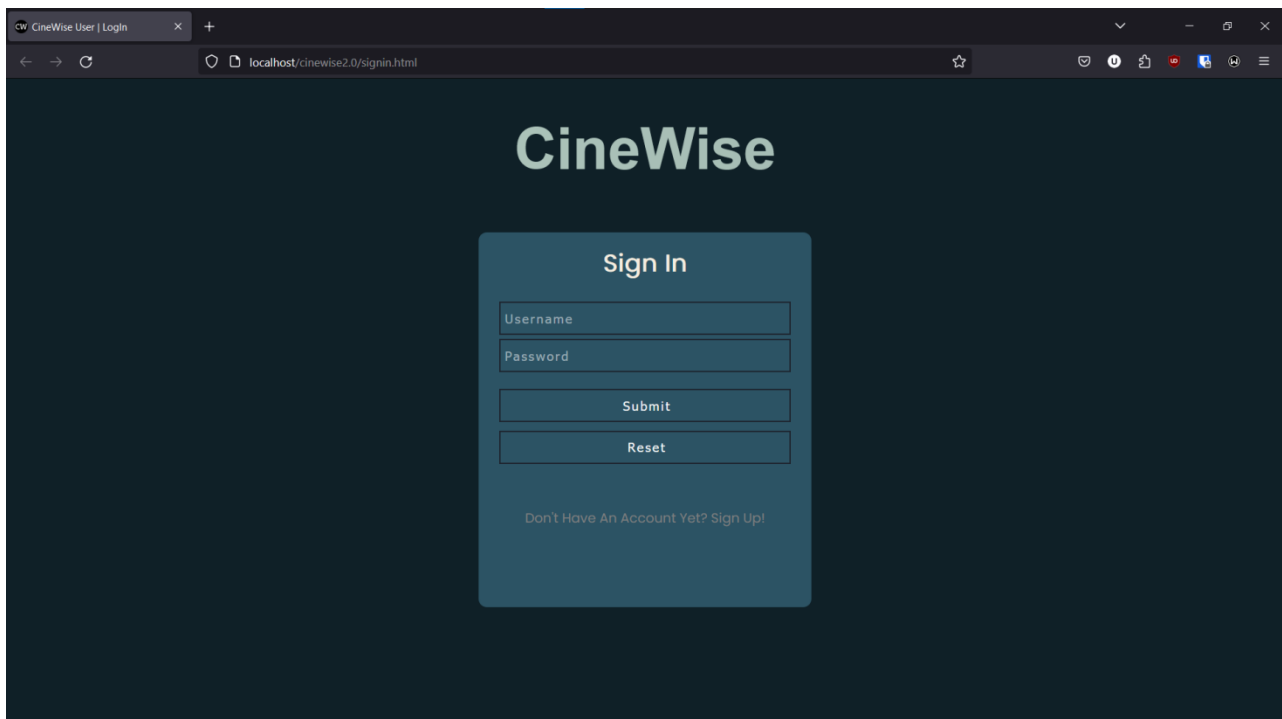
- Testing the developed system with the sample data
- Detection and correction of errors
- Making necessary changes in the system
- Checking it with the existing system

7.2 SCREEN LAYOUTS

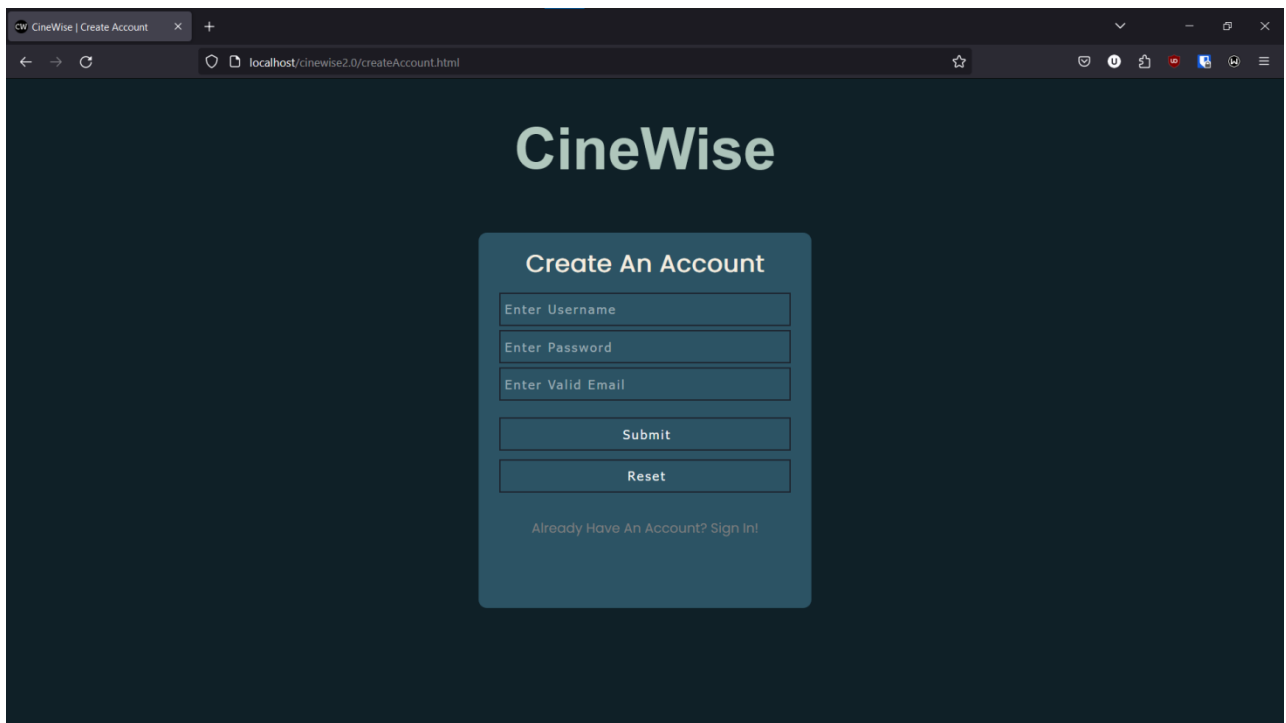
Homepage



Sign In - Users



Create Account – Users



The screenshot shows a web browser window with the title "CineWise | Create Account". The address bar shows "localhost/cinewise2.0/createAccount.html". The page has a dark blue background with the "CineWise" logo at the top. In the center, there is a light blue box titled "Create An Account". Inside this box, there are three input fields labeled "Enter Username", "Enter Password", and "Enter Valid Email". Below these fields are two buttons: "Submit" and "Reset". At the bottom of the box, there is a link that says "Already Have An Account? Sign In!".

CineWise

Create An Account

Enter Username

Enter Password

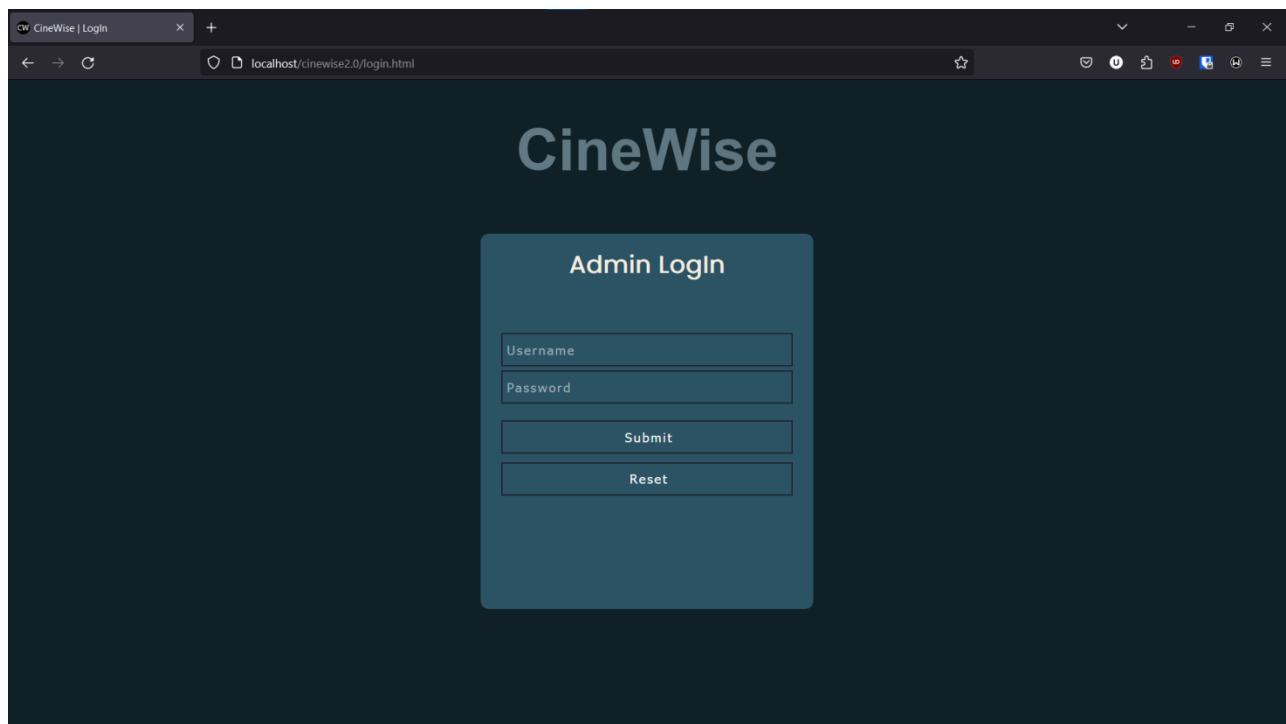
Enter Valid Email

Submit

Reset

[Already Have An Account? Sign In!](#)

Login In – Admin



The screenshot shows a web browser window with the title "CineWise | Login". The address bar shows "localhost/cinewise2.0/login.html". The page has a dark blue background with the "CineWise" logo at the top. In the center, there is a light blue box titled "Admin Login". Inside this box, there are two input fields labeled "Username" and "Password". Below these fields are two buttons: "Submit" and "Reset".

CineWise

Admin Login

Username

Password

Submit

Reset

Admin Panel

The screenshot shows a web browser window with the address bar displaying 'localhost/CineWise2.0/Admin.html'. The page has a dark theme and is titled 'ADMIN | CINEWISE'.

The page is divided into two main sections:

- Add A Movie:** This section contains a form with the following fields:
 - Movie Name
 - Genre
 - Rating
 - Release Year
 - Trailer Link
 - Short DescriptionAt the bottom of this section are two buttons: 'Submit Data' and 'Reset Data'.
- Remove A Movie:** This section contains a single input field for 'Movie Name'. Below this field are two buttons: 'Delete Data' and 'Reset Data'.

Watch Later List : Users

The screenshot shows a web browser window with the address bar displaying 'localhost/CineWise2.0/watch-later.php'. The page has a dark theme and is titled 'Movies Queued'.

The page displays a list of movies queued for watching. The list is currently empty, showing only the headers 'Invasion' and 'Dune'. A 'Clear List' button is located in the top right corner.

Search results once users searches for a movie

Search Results

Search Results

Blue Beetle (Sci-fi)	Rebel Moon (Sci-fi)	Elemental (Sci-fi)	The Flash (Sci-fi)	Asteroid City (Sci-fi)
An alien scarab chooses Jaime Reyes to be its symbiotic host, bestowing the recent college graduate with a suit of armor that's capable of extraordinary powers, forever changing his destiny as he becomes the superhero known as Blue Beetle.	When a peaceful colony on the edge of a galaxy finds itself threatened by the armies of a tyrannical ruling force, a mysterious stranger living amongst its villagers becomes their best hope for survival.	'Elemental' is a visually stunning adventure film where four protagonists harness the power of nature's elements—earth, fire, water, and air—to save their world from a looming catastrophe. Their epic journey tests their bonds and courage.	Barry Allen uses his super speed to change the past, but his attempt to save his family creates a world without super heroes, forcing him to race for his life in order to save the future.	Following a writer on his world famous fictional play about a grieving father who travels with his tech-obsessed family to small rural Asteroid City to compete in a junior stargazing event, only to have his world view disrupted forever.
Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!
Rating: 7 Release: 2023	Rating: 4 Release: 2023	Rating: 7 Release: 2023	Rating: 7 Release: 2023	Rating: 7 Release: 2023

Heart Of Stone (Action)	The Covenant (Action)	Gran Turismo (Action)	Sound Of Freedom (Action)	The Monkey King (Action)
"Heart of Stone" is a suspenseful thriller featuring Gal Gadot as a master jewel thief recruited for a high-stakes heist. As she navigates danger and betrayal, secrets from her past threaten to unravel her carefully laid plans.	"The Covenant" is a supernatural thriller following four young warlocks in New England. As they harness their extraordinary powers, they face a malevolent force that threatens their lives and legacy, forcing them into a perilous battle.	Based on the unbelievable, inspiring true story of a team of underdogs - a struggling, working-class garner, a failed former race car driver, and an idealistic motorsport exec - who risk it all to take on the most elite sport in the world.	The incredible true story of a former government agent turned vigilante who embarks on a dangerous mission to rescue hundreds of children from sex traffickers.	Inspired by an epic Chinese tale, translated into an action-packed comedy, a Monkey and his magical fighting Stick battle demons, dragons, gods and the greatest adversary of all - Monkey's ego.
Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!	Watch Trailer! Watch Later!
Rating: 6 Release: 2023	Rating: 7 Release: 2023	Rating: 7 Release: 2023	Rating: 8 Release: 2023	Rating: 6 Release: 2023

Bullet Train (Action)	Jailer (Action)	The Equalizer 3 (Action)	Retribution (Action)	Fast X (Action)
-----------------------	-----------------	--------------------------	----------------------	-----------------

Introduction Page in Homepage

CineWise

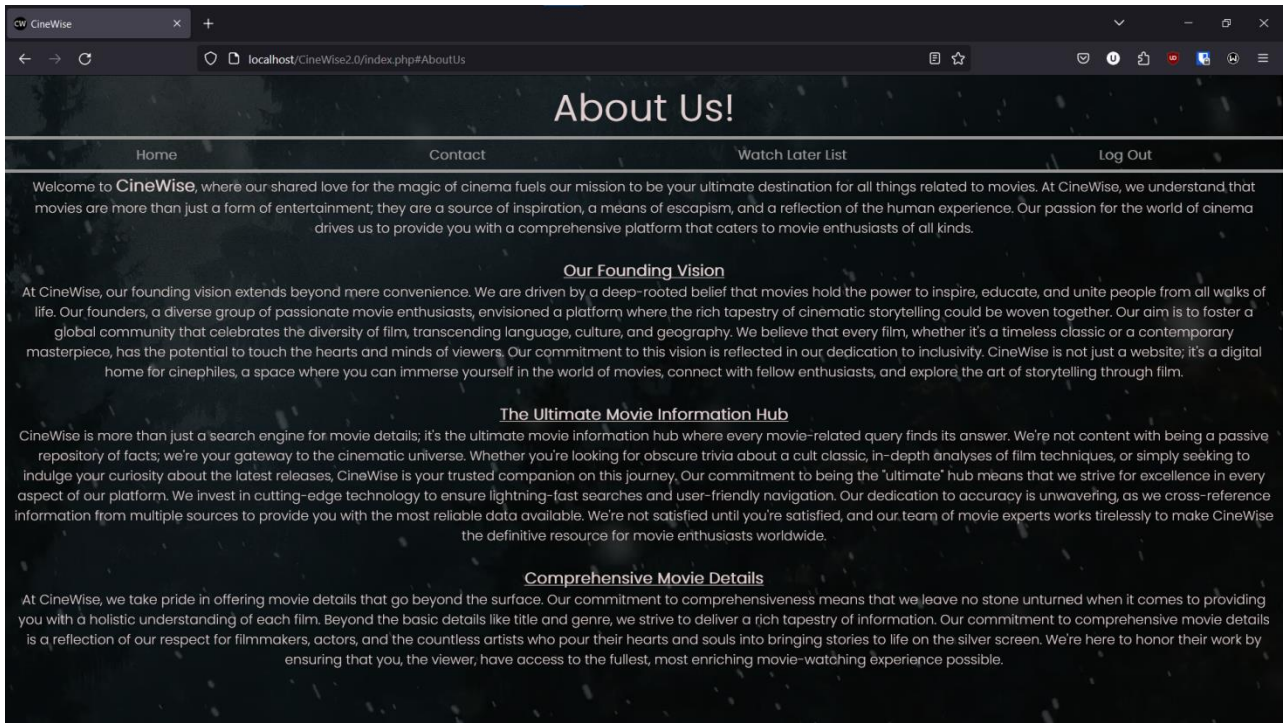
Home About Us Contact Watch Later List Log Out

Welcome to **CineWise**, your go-to destination for all things movies! With CineWise, finding your favorite films is as easy as pie. Whether you have a specific movie in mind or you're in the mood for a certain genre like action, romance, or comedy, we've got you covered. Picture this: You're craving a thrilling adventure movie for your Friday night in. Simply type "adventure" into our search bar, and voilà! You'll be greeted with a curated list of exciting films that match your taste. No more aimless scrolling through endless options CineWise narrows it down for you. But that's not all! We know everyone's different, so CineWise offers personalized recommendations based on your past searches and preferences. It's like having a movie buddy who knows exactly what you love. Plus, our user-friendly interface ensures that you'll have a smooth and enjoyable experience every time you visit. So, whether you're a movie buff or just looking for a fun night in, CineWise is here to make your movie-searching journey a breeze. Start exploring now and let the movie magic unfold!

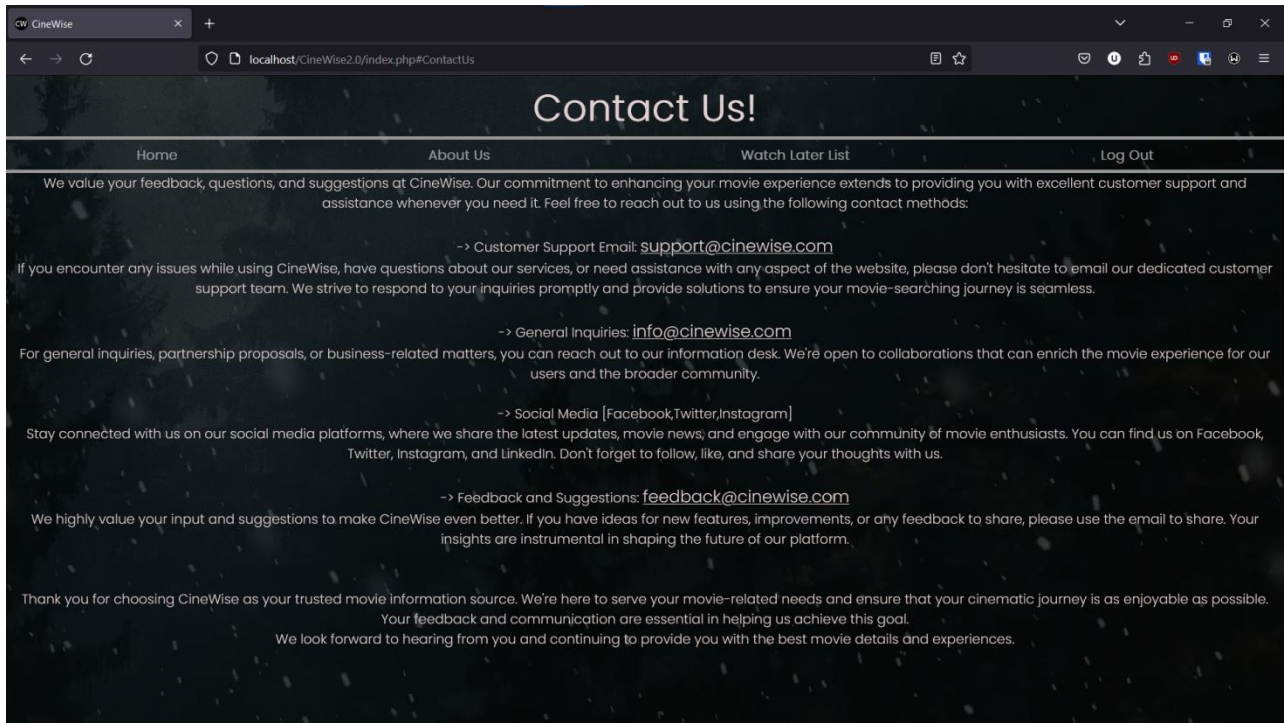
FAQs

<p>Q) How can I search for a specific movie on CineWise?</p> <p>- To search for a specific movie on CineWise, simply enter the movie's title in the search bar at the top of the homepage and hit enter. You can also search for a specific genre or year to narrow down your search result.</p> <p>Q) Can I filter search results by release year or genre?</p> <p>- Yes, you can! When entering your search query, you can use the specified genre or release year to display all the details about the movies in that genre / released in that year.</p>	<p>Q) What movie information is available on CineWise?</p> <p>- Cinewise provides a wealth of movie information, including movie details such as the movie's title, release year, genre, user ratings etc. You can also find trailers for the same.</p> <p>Q) Is it possible to create a watchlist of movies I want to see in the future?</p> <p>- Yes, you can create a watchlist on Cinewise. Simply click on the watch later button on the movie card and you'll be able to save movies to your watchlist, making it easy to keep track of what you want to watch next.</p>
---	--

About Us Page – Homepage



Contact Us Page – Homepage



CHAPTER 8

FUTURE ENHANCEMENT

FUTURE ENHANCEMENT

CINEWISE, a dynamic movie search engine, stands poised to embrace the future with a series of innovative enhancements. By integrating cutting-edge features, the platform aims to revolutionize the user experience and remain at the forefront of the entertainment industry.

Future Advancements:

- **AI-Powered Personalization:** Implementing advanced AI algorithms to deliver personalized movie recommendations based on user behavior and viewing history, enhancing engagement and satisfaction.
- **Social Integration:** Enabling users to share watch-lists, reviews, and favorite movies within their social circles, fostering a community-driven atmosphere and facilitating collaborative watch-lists for group viewings.
- **Enhanced Search Filters:** Expanding search functionality with diverse criteria such as directors, actors, language, or thematic elements, empowering users to refine searches for a more personalized exploration of the movie database.
- **Interactive User Reviews:** Introduce a feature allowing users to rate and review movies, fostering a vibrant community discussion. Users could also interact with each other's reviews, creating a dialogue around movie experiences.
- **Predictive Analytics for Trends:** Use predictive analytics to anticipate upcoming movie trends, enabling CINEWISE to highlight and recommend movies likely to become popular, thereby staying ahead of the curve.
- **Live Watch Parties:** Enable synchronized movie screenings for users in different locations, allowing them to watch the same movie simultaneously and engage in live chats during the viewing.
- **Exclusive Access and Previews:** Partner with movie studios to provide exclusive access to trailers, behind-the-scenes content, or early previews, offering users a sneak peek into upcoming releases.

These forward-looking advancements will not only elevate CINEWISE's standing as a leading movie search engine but also ensure it meets the evolving demands and expectations of movie enthusiasts, setting a new standard for user-centric entertainment platforms.

CHAPTER 9

CONCLUSION

9.1. CONCLUSION

In conclusion, CINEWISE emerges as a pivotal cornerstone for movie aficionados, providing a multifaceted arena for discovery, interaction, and staying abreast of the dynamic landscape of cinema. This envisioned system encompasses an expansive movie repository, intricately tailored recommendations, collaborative social functionalities, and a user-oriented subscription model, among other intricate features. While acknowledging inherent constraints like selective content accessibility and potential technical hurdles, the platform's array of advantages—ranging from convenience and cost-effectiveness to personalized suggestions—undoubtedly positions it as an indispensable resource for users.

Looking ahead, the future trajectory of CINEWISE presents an array of innovative enhancements that promise to elevate the user experience. Concepts like immersive VR experiences, AI-powered personalization, and high-fidelity streaming stand poised to revolutionize user engagement, ensuring the platform's sustained relevance and resonance within the cinematic sphere for the foreseeable future. By carefully crafting a platform that not only serves users but also contributes to the enrichment and fortification of the film industry at large, CINEWISE embodies not just a service but a cultural and supportive bastion within the cinematic landscape. Its evolution promises to not just cater to enthusiasts but to push the boundaries, enhancing the appreciation and accessibility of movies for all.

CHAPTER 10

APPENDIX

LIST OF TABLES

LIST OF TABLES	PAGE NUMBER
customerdata	31
moviedata	31
userdata	32
watchlater	32

LIST OF FIGURE

LIST OF FIGURES	PAGE NUMBER
Level 0	26
Level 1 : User	27
Level 1 : Admin	27

CHAPTER 11

BIBLIOGRAPHY

BOOKS/REFERENCES:

- Gary B. Shelly, Harry J. Rosenblatt, “System Analysis and Design”, 2009.
- Roger S Pressman, “Software Engineering”, 1994.
- Pankaj Jalote, “Software engineering: a precise approach”, 2006.
- IEEE Std 1016 Recommended Practice for Software Design Descriptions.

WEBSITES

- <https://www.javatpoint.com/>
- <https://www.w3schools.com/>
- <https://stackoverflow.com/>
- <https://developer.mozilla.org/en-US/>
- <https://github.com/>
- <https://css-tricks.com/>