MINI PROJECT

(2020-22)

'Heavens Movie'

Project Report



Institute of Engineering & Technology

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Declaration

I hereby declare that the work is being presented in the Bachelor of technology. Project 'Heavens Movie', in partial fulfilment of the requirements for the award of the Bachelor of Technology in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of my/our own work carried under the Mentorship of Mr. Bhanu Kapoor, Mentor, Dept. of CEA, GLA University.

The contents of this project report, in full or in parts, have not been submitted to any other Institute or University for the award of any degree.

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Certificate

This is to certify that the project entitled 'Heavens Movie', carried out in Mini Project - I Lab, is a Bonafede work by Deepanjali, Nandini Sharma, Sunishka Sharma, Tanmay Goyal, Vaibhav Jain and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

Signature of Mentor:

Name of Mentor: Mr. Bhanu Kapoor

Date:

<u>Department of Computer</u> <u>Engineering and Applications</u>

ACKNOWLEDGEMENT

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us the mentor Mr.Bhanu Kapoor, our Mentor.

He has been helping us since Day 1 of this project. He provided us with the roadmap, and the basic guidelines explaining how to work on the project. He has been conducting regular meetings to check the progress of the project and providing us with the resources related to the project. Without his help, we wouldn't have been able to complete this project.

And last but not least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped us find resources during the training.

Thanking You	
Sign:	
Name of Candidate:	
University Roll No.:	

ABSTRACT

The purpose of Heavens Movie is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy access and manipulation of the same. The required software and hardware are easily available and easy to work with.

The aim is to automate its existing system of retrieving data by making it more feasible through a single page. It will let users browse easily over the range of movies within a webpage and get filtered information. The project describes how to manage for good performance and better services for the client.

INDEX

CONTENTS	PAGE NUMBERS	SIGNATURES
Cover page	1	
Declaration	2	
Certificate	3	
Acknowledgment	4	
Abstract	5	
Index	6	
Chapter 1:Introduction	7-8	
Chapter 2:Software Requirement Analysis	9-13	
Chapter 3:Software Design	14-15	
Chapter 4:Language, Technology and Tools used	16-18	
Chapter 5:Implementation and Interface	19	
Chapter 6:Testing	20-23	
Chapter 7: Conclusion	24	
References	25	

INTRODUCTION

1.1 CONTEXT

This Website 'Heavens Movie' has been submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura mentored by Mr. Bhanu Kapoor. This project has been completed in approximately two months and has been executed in modules, meetings have been organized to check the progress of the work and for instructions and guidelines.

1.2 MOTIVATION

With social media and streaming services easily accessible, we may have a great online presence already.

This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to carry out operations smoothly and effectively.

1.3 OBJECTIVE

Every organization, whether big or small, has challenges to overcome and manage the information of Trending movies, Genre, Rating and Trailer.

Every Online Movie Portal has different Movie needs, therefore we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the

right level of information and details for your future goals

1.4 SOURCES

The source of our project (including all the project work, documentation, and presentations) will is available at the following link

https://github.com/sunishka-30/HeavensMovie/tree/master

SOFTWARE REQUIREMENT ANALYSIS

2.1 IMPACT OF MOVIES ON DAILY LIFE

Movies are watched by everyone. We all enjoy them. From thrillers to adventures, comedy to horror movies is part of everyday life and the industry is growing every single day. Learn how they affect our society

Audio visual input and output devices are in abundance these days and so are movies and films. Everyone watches videos be it on TV, social media, or cinemas. The film industry is arguably one of the most impactful sectors in modern society. Sitcoms and comedy shows make us laugh, psychological thrillers help us see the world from an improved perspective, and historical films help us understand where we've come from as a people. Every video and every film reflects society and transforms opinions.

2.2 PROBLEM STATEMENT

The demand for movie streaming services has grown significantly since the start of the pandemic. In the second quarter of 2021, worldwide streaming subscriptions grew by a healthy rate.

Movie watching has been to the cinema to see the latest movie. Then the film viewers will watch the movie at their residences on a TV set. Years later, you can enjoy a movie on your computer, then a laptop, and then an android tablet. And nowadays you can enjoy a movie from either a computer, a tablet, an iPad, a laptop, a smartphone, or a laptop, not because it is the only one available, but because it is the leading system. Other than being free, movie streaming platforms give you multi-device exposure, so that you can need any of those devices to make your movie enjoying activity a matter of individual choice, pleasure, and comfort.

Live streams are faster to broadcast, as you don't have to spend much time in pre-production

Live streams are cheaper, as you don't need video editors for your videos

Since videos can be live-streamed from mobile devices, they don't require expensive equipment to be set up, thus minimizing the required investment

Users prefer live streams over pre-recorded videos. Forbes states that Facebook live videos are watched three times more than pre-recorded.

2.3 HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirement

Processor: Intel

Operating System: Any Operating System

RAM: 8 GB (or higher)

Hard disk: 256GB

Software Requirement

Software used: Visual Studio

Language used: HTML, CSS, JS

Database: PHP, MySQL

User Interface Design: None

2.4 MODULES AND FUNCTIONALITIES

Modules

- Track Module: Used for managing the Track informations.
- Login Module: Used for managing the login details.
- Users Module: Used for managing the users of the system.
- Search Module: Used to search movies of our choices.
- Movie Detail Module: Used to fetch all the details of particular movie.
- Watch Movie Module: Used to watch the trailer of that particular movie.

Functionalities

It tracks all the information of Movie, Shows, User, etc.

Provides the searching facilities based on various factors. Such as Movie type.

We can get the whole information about that particular movie or show by just hovering the cursor onto it.

We can get the idea of movies or shows whether they are worth watching or not by getting the IMDB ratings.

We can watch out the trailer of the movie or show on youtube.com by just clicking on the movie icon.

We can search movies or shows of our choices.

Movie streaming websites are bringing users closer to cinema – enabling them to watch anything, anywhere and anytime.

This websites is offering personalized recommendations – encouraging users to watch more similar movies.

2.5 The Movie Database (TMDB) API

WEBSITE

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

At the end it is concluded that we have made effort on following points-

A description of the background and context of the project and its relation to work already done in the area.

Made statement of the aims and objectives of the project.

The description of Purpose, Scope, and applicability.

We define the problem on which we are working in the project.

We describe the requirement Specifications of the system and the actions that can be done on these things.

We understand the problem domain and produce a model of the system, which

describes operations that can be performed on the system.

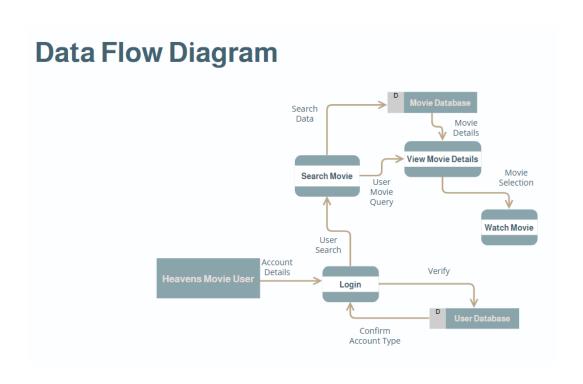
We included features and operations in detail, including screen layouts.

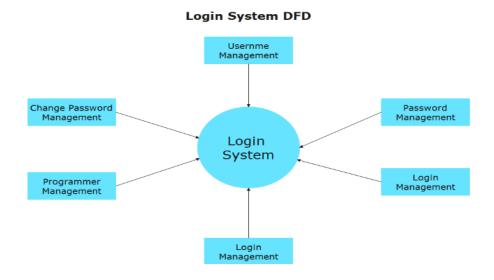
We designed user interface and security issues related to system.

Finally, the system is implemented and tested according to test cases.

Data Flow Diagram:-

Data flow diagram is the starting point of the design phase that functionally decomposes the requirements specification. A DFD consists of a series of bubbles joined by lines. The bubbles represent data transformation and the lines represent data flows in the system. A DFD describes what data flow rather than how they are processed, so it does not hardware, software and data structure.





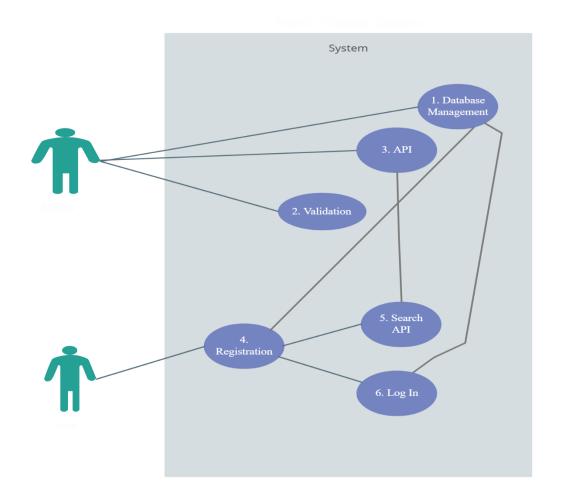
SOFTWARE DESIGN

3.1 USE-CASE DIAGRAM:

This Use Case Diagram is a graphic depiction of the interactions among the elements of Online Movie searching System. It represents the methodology used in system analysis to identify, clarify, and organize system requirements of Online Music Portal System. The main actors of Online Music Portal System in this Use Case Diagram are: Super Admin, System User, Anonymous Users, Users, who perform the different type of use cases such as Manage Performer, Manage Track, Manage Music Library, Manage Singer, Manage Music, Manage Album, Manage Album Type, Manage Users and Full Online Music Portal System Operations. Major elements of the UML use case diagram of Online Music Portal System are shown on the picture below.

The relationships between and among the actors and the use cases of Online Music Portal System:

- Super Admin Entity: Use cases of Super Admin are Manage Performer, Manage Track, Manage Music Library, Manage Singer, Manage Music, Manage Album, Manage Album Type, Manage Users and Full Online Music Portal System Operations
- System User Entity: Use cases of System User are Manage Performer, Manage Track, Manage Music Library, Manage Singer, Manage Music, Manage Album, Manage Album Type
- Anonymous Users Entity: Use cases of Anonymous Users are View Information, Fill Contact Us, Search Content
- Users Entity: Use cases of Users are Search Tracks, Create Own Album, Add Tracks to Album, Play Music, Download Music



LANGUAGES, TECHNOLOGY AND TOOLS USED

4.1 HTML

HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.

Hyper Text: HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. HyperText is a way to link two or more web pages (HTML documents) with each other.

Markup language: A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

Web Page: A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. **With the help of HTML only, we can create static web pages**.

4.2 CSS

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any kind of XML documents including plain XML, SVG and XUL.

CSS is used along with HTML and JavaScript in most websites to create user interfaces for web applications and user interfaces for many mobile applications.

4.3 JAVASCRIPT

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages. It is an interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document. It was introduced in the year 1995 for adding programs to the webpages in the Netscape Navigator browser. Since then, it has been adopted by all other graphical web browsers. With JavaScript, users can build modern web applications to interact directly without reloading the page every

time. The traditional website uses js to provide several forms of interactivity and simplicity.

4.4 PHP

The term PHP is an acronym for *PHP: Hypertext Preprocessor*. PHP is a server-side scripting language designed specifically for web development. It is open-source which means it is free to download and use. It is very simple to learn and use. The files have the extension ".php".

PHP can actually do anything related to server-side scripting or more popularly known as the backend of a website. For example, PHP can receive data from forms, generate dynamic page content, can work with databases, create sessions, send and receive cookies, send emails, etc. There are also many hash functions available in PHP to encrypt users' data which makes PHP secure and reliable to be used as a server-side scripting language. So these are some of PHP's abilities that make it suitable to be used as a server-side scripting language.

4.5 MySQL

MySQL is an open-source relational database management system (RDBMS). It is the most popular database system used with PHP. MySQL is developed, distributed, and supported by Oracle Corporation.

The data in a MySQL database are stored in tables which consists of columns and rows.

MySQL is a database system that runs on a server.

MySQL is ideal for both small and large applications.

MySQL is very fast, reliable, and easy to use database system.It uses standard SQL

MySQL compiles on a number of platforms.

4.6 API

API is the abbreviation of the term *Application Programming Interface.* It is the software responsible for the connection for the communication and information exchange between two apps. API connects two devices or programs in order to facilitate the exchange of information between them. It is the interface that serves the other parts of the software. The API specifications are the standards or documents designed to describe the creation of such connections. If a computer system meets these standards, then it is said to expose an API. The specification or implementation both are known as the API.

4.7 GITHUB

GitHub is an immense platform for code hosting. It supports version controlling and collaboration and allows developers to work together on projects. It offers both distributed version control and source code management (SCM) functionality of Git. It also facilitates collaboration features such as bug tracking, feature requests, task management for every project.

Essential components of the GitHub are:

- Repositories
- Branches
- Commits
- Pull Requests
- Git (the version control tool GitHub is built on)

4.8 VSCode

Visual Studio Code (famously known as **VS Code**) is a free open source text editor by Microsoft. VS Code is available for Windows, Linux, and macOS. Although the editor is relatively lightweight, it includes some powerful features that have made VS Code one of the most popular development environment tools in recent times.

VS Code supports a wide array of programming languages from Java, C++, and Python to CSS, Go, and Dockerfile. Moreover, VS Code allows you to add on and even creating new extensions including code linters, debuggers, and cloud and web development support.

IMPLEMENTATION AND INTERFACE

5.1 IMPLEMENTATION

Javascript is a scripting language used to enhance the functionality of the browser. Java script is integrated with HTML and navigator 2.02. JavaScript facilitates the developer with properties related to document windows, frames, loaded documents, and links.

5.2 USER INTERFACE DESIGN

User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.

The following steps are various quidelines for User Interface Design:

- 1. The system user should always be aware of what to do next.
- 2. The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.
- 3. Message, instructions or information should be displayed long enough to allow the system user to read them.
- 4. Use display attributes sparingly.
- 5. Default values for fields and answers to be entered by the user should be specified.
- 6. A user should not be allowed to proceed without correcting an error.
- 7. The system user should never get an operating system message or fatal error.

TESTING

Implementation and Software Specification Testing

Detailed Design of Implementation

This phase of the systems development life cycle refines hardware and software specifications, establishes programming plans, trains users and implements extensive testing procedures, to evaluate design and operating specifications and/or provide the basis for further modification.

Technical Design

This activity builds upon specifications produced during new system design, adding detailed technical specifications and documentation.

Test Specifications and Planning

This activity prepares detailed test specifications for individual modules and programs, job streams, subsystems, and for the system as a whole.

Programming and Testing

This activity encompasses actual development, writing, and testing of program units or modules.

User Training

This activity encompasses writing user procedure manuals, preparation of user training materials, conducting training programs, and testing procedures.

Acceptance Test

A final procedural review to demonstrate a system and secure user approval before a system becomes operational.

Installation Phase

In this phase the new Computerized system is installed, the conversion to new procedures is fully implemented, and the potential of the new system is explored.

System Installation

The process of starting the actual use of a system and training user personnel in its operation.

Review Phase

This phase evaluates the successes and failures during a systems development project, and to measure the results of a new Computerized transystem in terms of benefits and savings projected at the start of the project.

Development Recap

A review of a project immediately after completion to find successes and potential problems in future work.

Post-Implementation Review

A review, conducted after a new system has been in operation for some time, to evaluate actual system performance against original expectations and projections for cost-benefit improvements. Also identifies maintenance projects to enhance or improve the system.

THE STEPS IN THE SOFTWARE TESTING

The steps involved during Unit testing are as follows:

- a. Preparation of the test cases.
- b. Preparation of the possible test data with all the validation checks.
- c. Complete code review of the module.
- d. Actual testing done manually.
- e. Modifications done for the errors found during testing.
- f. Prepared the test result scripts.

The unit testing done included the testing of the following items:

- 1. Functionality of the entire module/forms.
- 2. Validations for user input.
- 3. Checking of the Coding standards to be maintained during coding.
- 4. Testing the module with all the possible test data.
- 5. Testing of the functionality involving all type of calculations etc.
- 6. Commenting standard in the source files. After completing the Unit testing of all the modules, the whole system is integrated with all its dependencies in that module. While System Integration, We integrated the modules one by one and tested the system at each step. This helped in reduction of errors at the time of the system testing.

The steps involved during System testing are as follows:

- Integration of all the modules/forms in the system.
- Preparation of the test cases.
- Preparation of the possible test data with all the validation checks.
- Actual testing done manually.
- Recording of all the reproduced errors. Modifications done for the errors found during testing.
- Prepared the test result scripts after rectification of the errors.

The System Testing done included the testing of the following items:

- 1. Functionality of the entire system as a whole.
- 2. User Interface of the system.
- 3. Testing the dependent modules together with all the possible test data scripts.
- 4. Verification and Validation testing.
- 5. Testing the reports with all its functionality.

After the completion of system testing, the next following phase was the Acceptance Testing. Clients at their end did this and accepted the system with application. Thus, we reached the final phase of the project.

There are other six tests, which fall under special category. They are described below:

- Peak Load Test: it determines whether the system will handle the volume of handles of activities that occur when the system is at the peak of its processing demand. For example, test the system by activating all terminals at the same time.
- Storage Testing: It determines the capacity of the system to store transaction data on a disk or in other files.
- Performance Time Testing: it determines the length of time system used by the system to process transaction data. This test is conducted prior to implementation to determine how long it takes to get a response to an inquiry, make a backup copy of a file, or send a transmission and get a response.
- Recovery Testing: This testing determines the ability of user to recover data or re-start system after failure. For example, load backup copy of data and resume processing without data or integrity loss.
- Procedure Testing: It determines the clarity of documentation on operation and uses of system by having users do exactly what manuals request. For example, powering down system at the end of week or responding to paper-out light on printer. Human Factors
- Testing: It determines how users will use the system when processing data or preparing reports.

CONCLUSION

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

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- We included features and operations in detail, including screen layouts.
- · We designed user interface and security issues related to system.
- Finally the system is implemented and tested according to test cases.

REFERENCES

Project Link: https://github.com/sunishka-30/HeavensMovie/tree/master

- MDN Web Docs : https://developer.mozilla.org/en-US/

W3School : https://www.w3schools.com/