PROJECT REPORT ON

Movies Explore

Submitted By

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Project Guide

Krishna Shukla

Acknowledgement

I would like to express my heartfelt gratitude to all those who supported me throughout the development of the "Movies Explore" project.

First and foremost, I would like to thank my project supervisor **Krishna Shukla**, for their invaluable guidance, encouragement, and constructive feedback. Their expertise and insights were instrumental in shaping the direction of this project.

Finally, I am grateful to all the users who participated in testing the application and provided feedback, which helped improve the overall user experience.

Thank you all for your contributions and support.

Prepared By: Vishal and Prakash

Preface

The Movies Explore application is designed to provide an engaging and user-friendly platform for movie enthusiasts to browse, book, and manage their movie experiences. In a world where digital entertainment is increasingly prevalent, this project aims to streamline the process of movie selection and ticket booking, offering users a seamless experience from registration to payment. The primary objective of the Movies Explore application is to create an intuitive interface that allows users to easily navigate through available movies, select their preferred showtimes, and reserve seats, all while ensuring secure transactions and user data protection.

Prepared By: Vishal and Prakash

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Abstract

“Movies Explore”

The Movies Explore website is an innovative digital platform designed to enhance the Movie Ticket Booking experience by offering a comprehensive array of resources for Movies.

The "Movies Explore" project is a web-based application designed to streamline the process of movie ticket booking, providing users with a convenient and efficient platform to discover and purchase tickets for their favourite films. In an era where digital solutions are increasingly becoming the norm

The application is built using Python and leverages modern web technologies to ensure a responsive and engaging user experience.

"Movies Explore" include a comprehensive movie database, real-time showtime updates, and a secure booking system that allows users to select their preferred seats and make payments seamlessly.

Project Introduction

"Movies Explore" is an innovative web application designed to enhance the movie-going experience by allowing users to effortlessly browse through a wide array of films, check showtimes, and book tickets

The primary objectives of "Movies Explore" are to simplify the ticket booking process, provide real-time information about movie showings, and create an engaging user experience.

- ## Features

1. **Movie Database:** A comprehensive collection of movies, including details such as titles, genres, release dates, ratings, and synopses, allowing users to explore a wide variety of films.
2. **Seat Selection:** An interactive seating chart that allows users to choose their preferred seats when booking tickets, enhancing the overall experience.
3. **Secure Payment Gateway:** Integration with secure payment options to facilitate safe and easy transactions, ensuring user data is protected.
4. **Admin Panel:** A backend interface for administrators to manage movie listings, Day of Movie, and Show user accounts, ensuring the platform remains up-to-date.

Software and Hardware Requirement

Hardware

Component:	Minimum Requirement:
1. – Processor	AMD Athlon Silver 3050U with Radeon Graphics
2. – Memory	8.00 GB
3. – Hardisk	512 GB

Software

Component:	Minimum Requirement:
1. – Operating System	Window 11
2. – MySQL	Database
3. – Xampp	Database Connectivity
4. - Python	Version: 3.6 or higher Libraries: tkinter, PIL, requests, bcrypt, mysql-connector-python

Tools and Technology used

1 - Programming Languages

- **Frontend**: Tkinter (for desktop application).
- **Backend**: Python (using Tkinter for the GUI).

2 - Database

- MySQL storing user data, Added Movies, and Ticket Bookings.

3 - Frameworks and Libraries

- **Tkinter**: Tkinter is the standard GUI (Graphical User Interface) toolkit for Python.

- **Pillow (PIL)**: A Python Imaging Library that adds image processing capabilities to your application.

- **Requests**: A simple HTTP library for Python, used for making HTTP requests.

- **MySQL Connector**: A library that allows Python to connect to a MySQL database.

- **bcrypt**: A library for hashing passwords.

System analysis and design

System Analysis

User Registration and Authentication: Allow users to create accounts, log in, and log out securely.

Movie Listings: Display a list of movies available for booking, including details such as title, genre, showtimes, and posters.

Booking System: Enable users to select movies, choose showtimes, and book seats.

Payment Processing: Integrate a secure payment gateway for processing ticket payments.

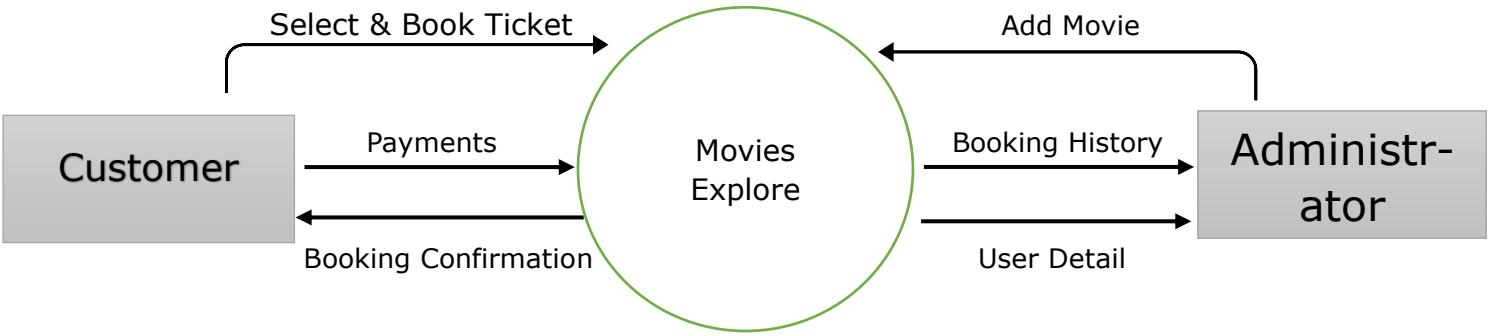
Admin Panel: Provide administrative functionalities for managing movies, viewing booking history, and View user Details.

DFD Diagram

DFD stands for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself.

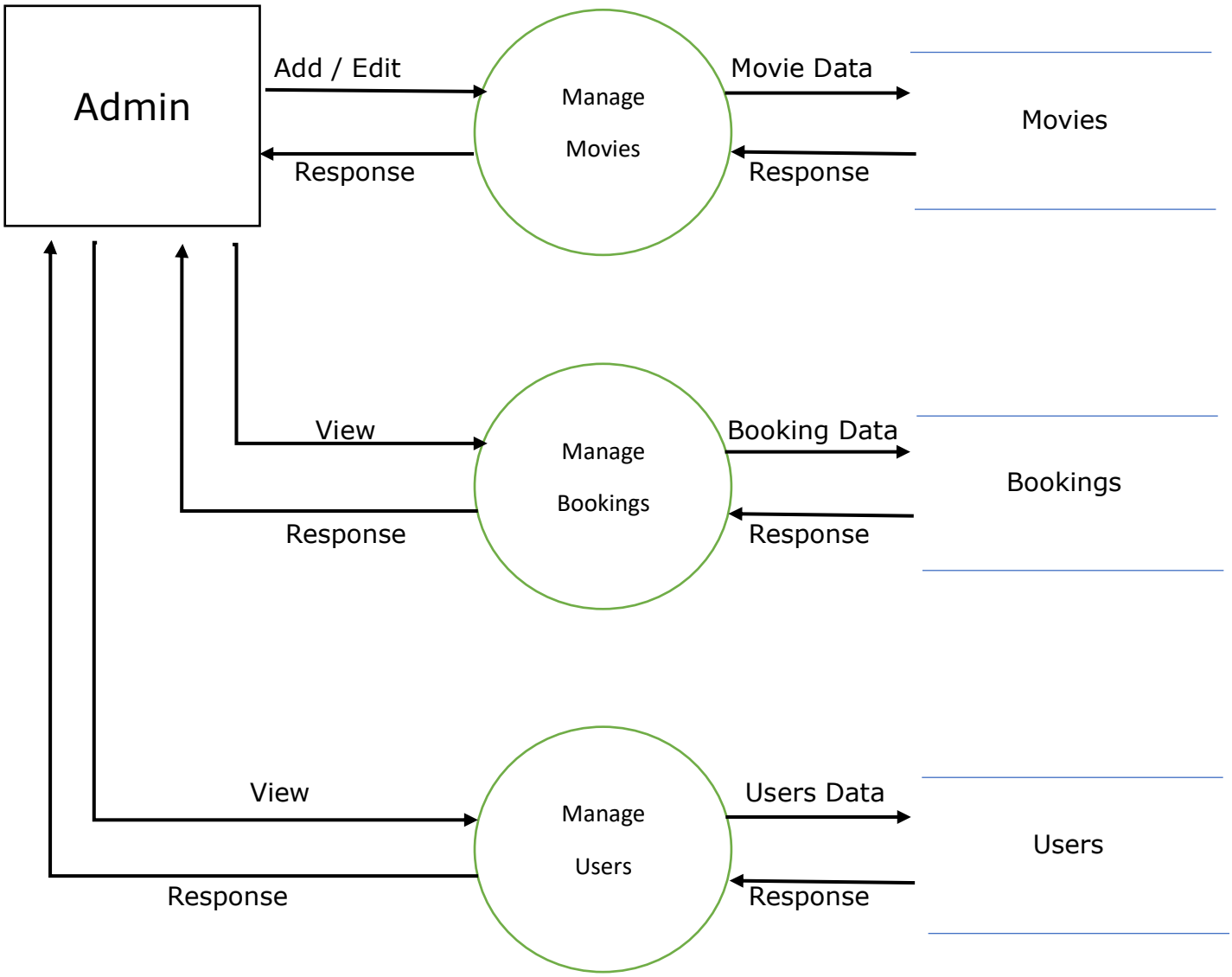
DFD does not have control flow and no loops or decision rules are present. Specific operations depending on the type of data can be explained by a flowchart.

0 Level: DATA FLOW DIAGRAM

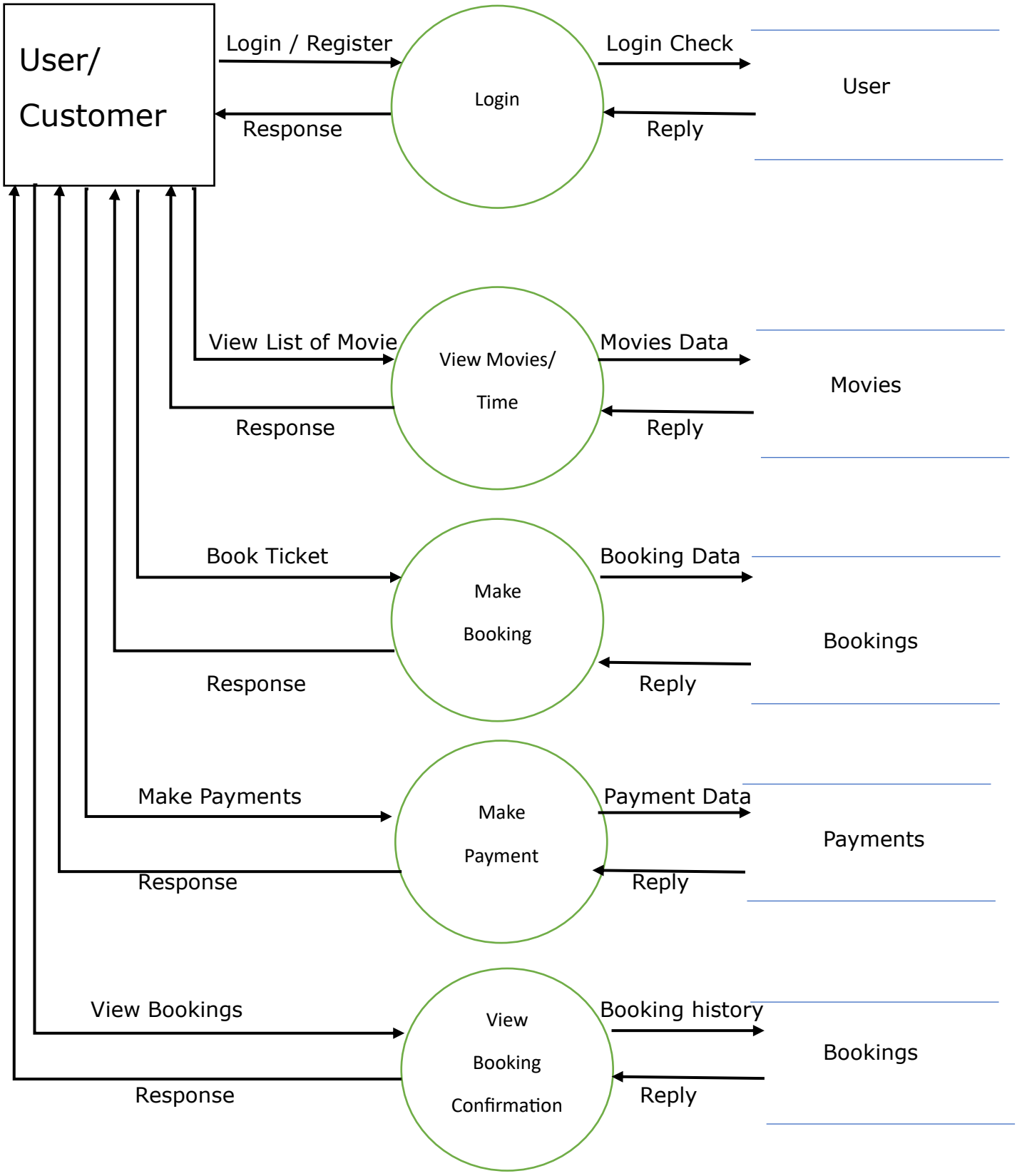


1 Level: DATA FLOW DIAGRAM

Admin



Client - Side


User/
Customer
Login / Register
Response
Login
Login Check
Reply
User
View List of Movie
Response
View Movies/
Time
Movies Data
Reply
Movies
Book Ticket
Response
Make
Booking
Booking Data
Reply
Bookings
Make Payments
Response
Make
Payment
Payment Data
Reply
Payments
View Bookings
Response
View
Booking
Confirmation
Booking history
Reply
Bookings

Data Dictionary

A Data Dictionary is a collection of names, definitions, and attributes about data elements that are being used or captured in a database, information system, or part of a research project. It describes the meanings and purposes of data elements within the context of a project, and provides guidance on interpretation, accepted meanings and representation.

A Data Dictionary also provides metadata about data elements. The metadata included in a Data Dictionary can assist in defining the scope and characteristics of data elements, as well the rules for their usage and application.

List of Tables in our Software

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	booking_history	Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐	movies	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	payments	Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐	users	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	32.0 KiB	-
	4 tables	Sum	21	InnoDB	utf8mb4_general_ci	112.0 KiB	0 B

Users

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
☐	1	user_id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
☐	2	email	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
☐	3	password	varchar(60)	utf8mb4_general_ci		No	None			Change Drop More

Payments

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	payment_id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	movie	varchar(55)	utf8mb4_general_ci		No	None			Change Drop More
3	seats	varchar(55)	utf8mb4_general_ci		No	None			Change Drop More
4	total_price	decimal(10,2)			No	None			Change Drop More
5	card_number	varchar(16)	utf8mb4_general_ci		No	None			Change Drop More
6	expiration_date	date			No	None			Change Drop More
7	cvv	varchar(3)	utf8mb4_general_ci		No	None			Change Drop More
8	user_id	int(11)			No	None			Change Drop More

Movie

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	movie_id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	title	varchar(55)	utf8mb4_general_ci		No	None			Change Drop More
3	genre	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
4	day	varchar(20)	utf8mb4_general_ci		No	None			Change Drop More

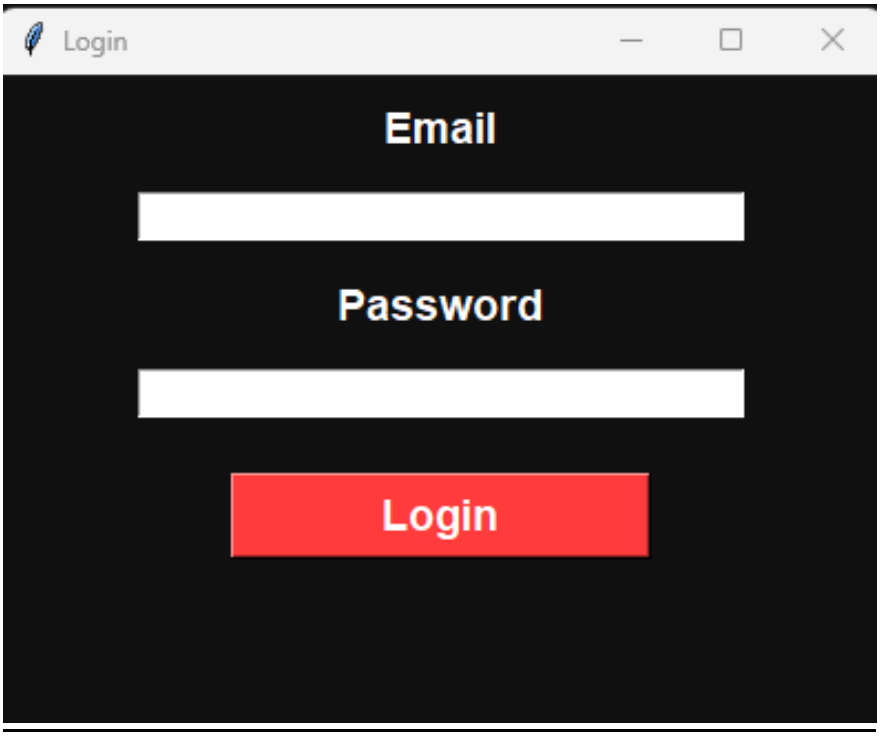
Bookings

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	user_id	int(11)			No	None			Change Drop More
3	movie	varchar(55)	utf8mb4_general_ci		No	None			Change Drop More
4	seats	varchar(55)	utf8mb4_general_ci		No	None			Change Drop More
5	total_price	decimal(10,2)			No	None			Change Drop More

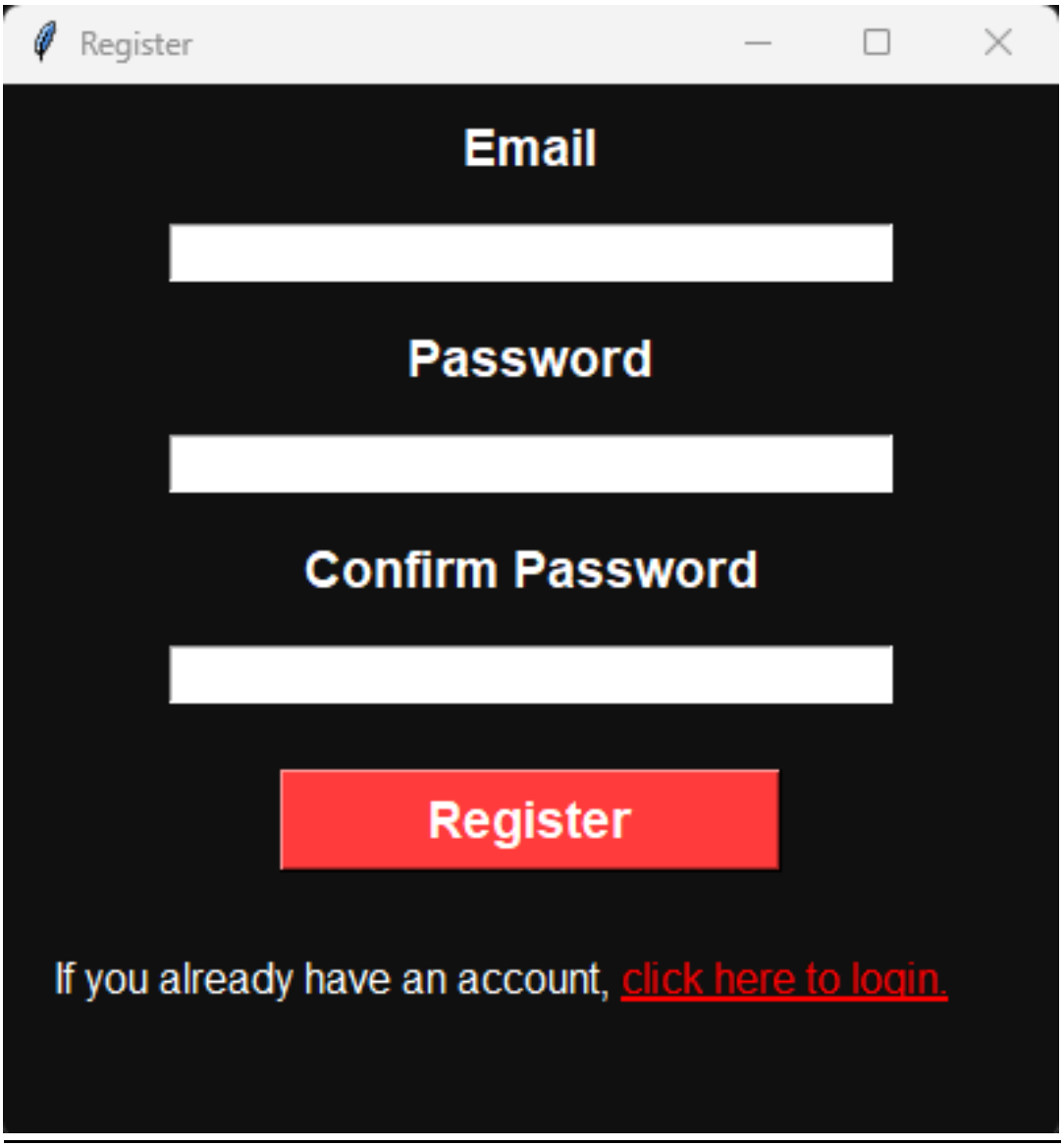
Project implementation

Screenshot : -

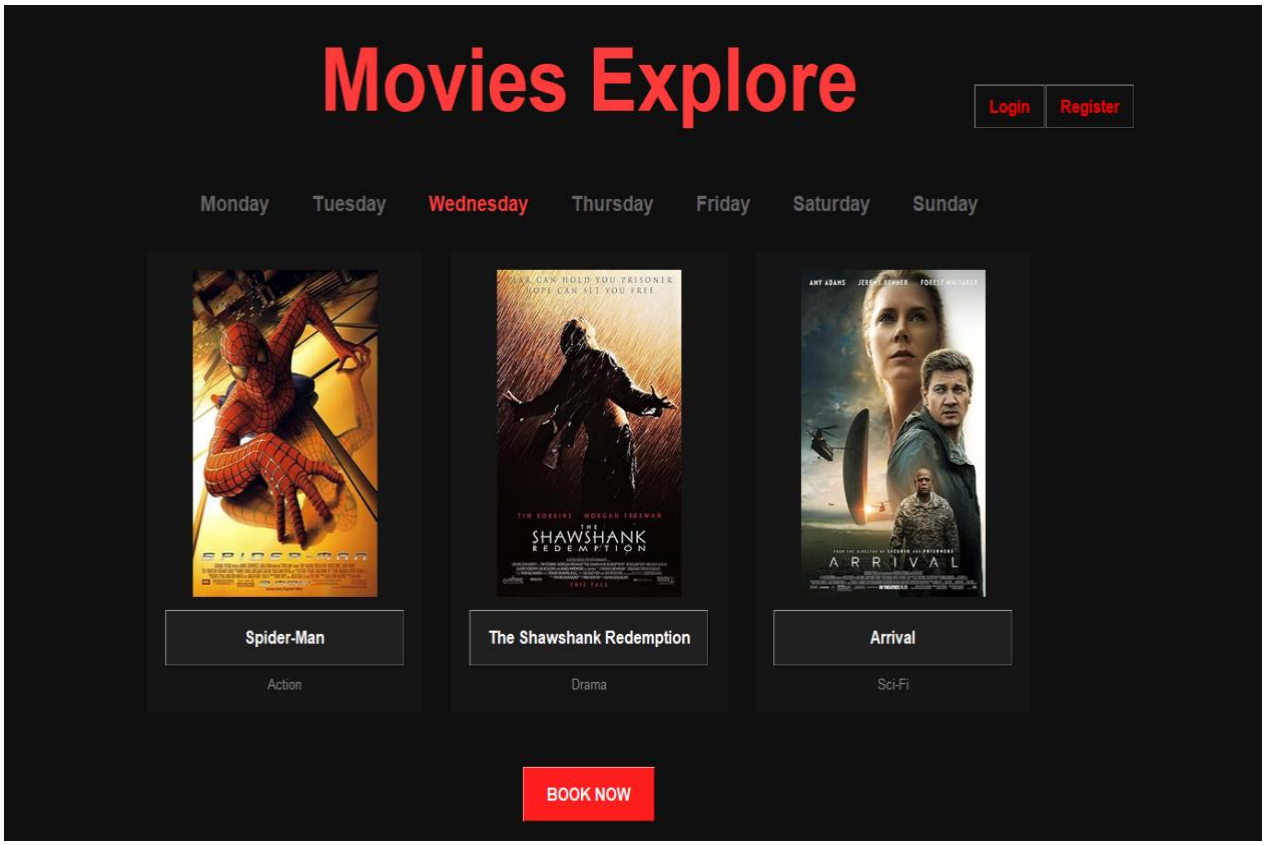
Login Form



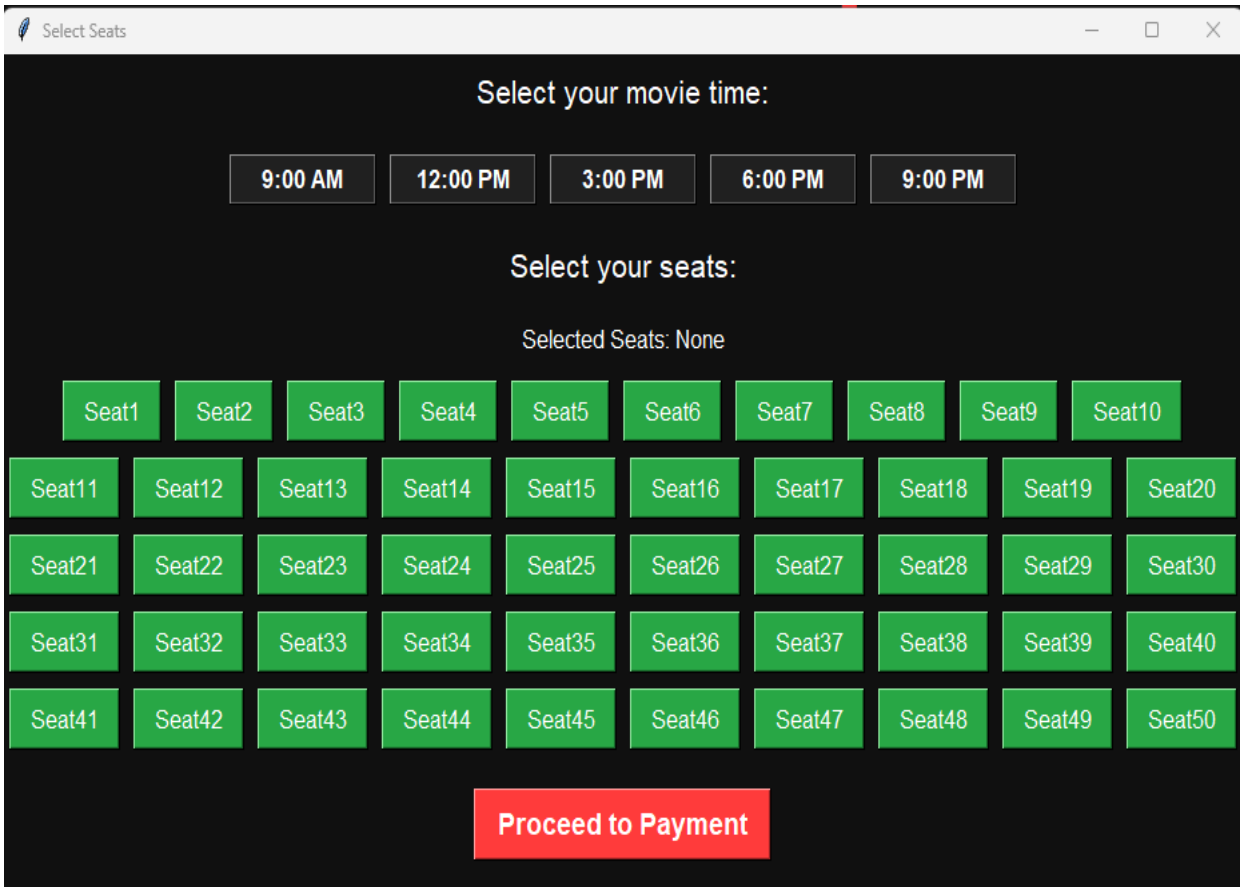
Register Form



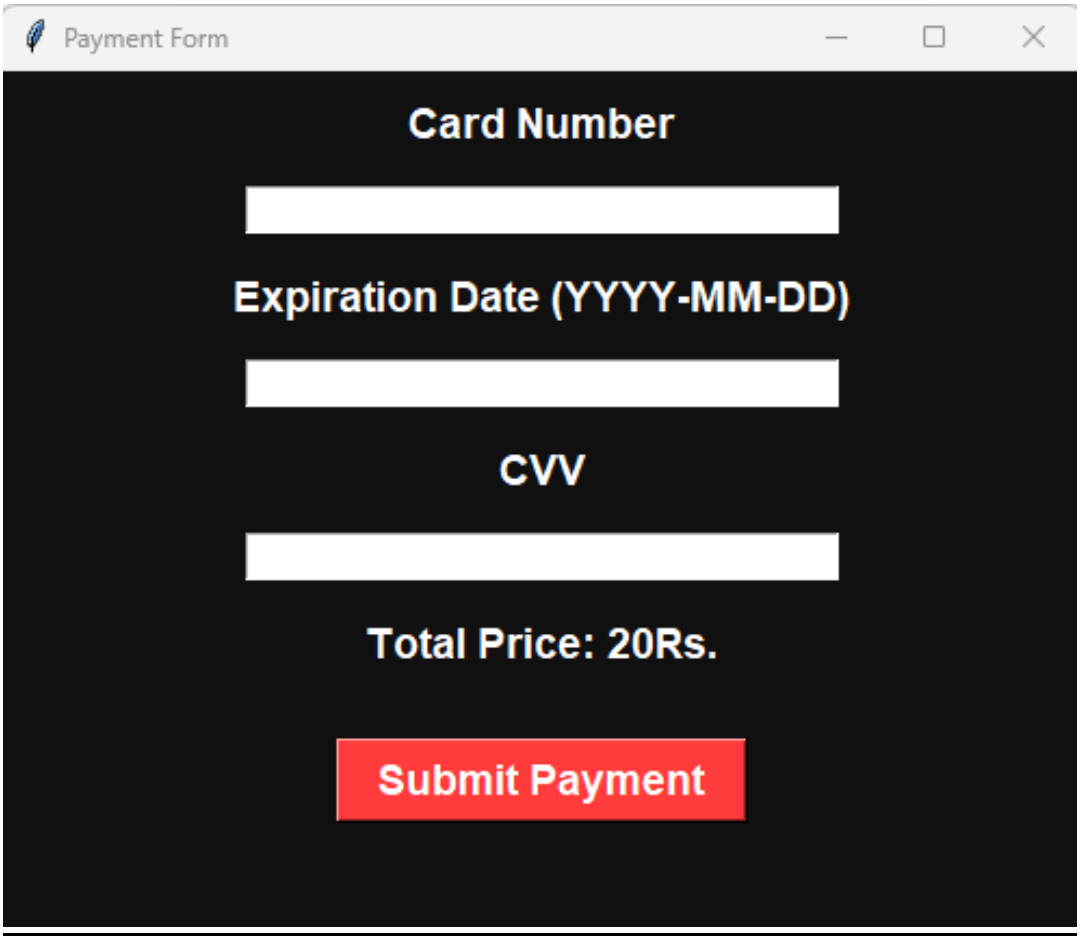
Home Page


Movies Explore
Login
Register
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Spider-Man
Action
The Shawshank Redemption
Drama
Arrival
Sci-Fi
BOOK NOW

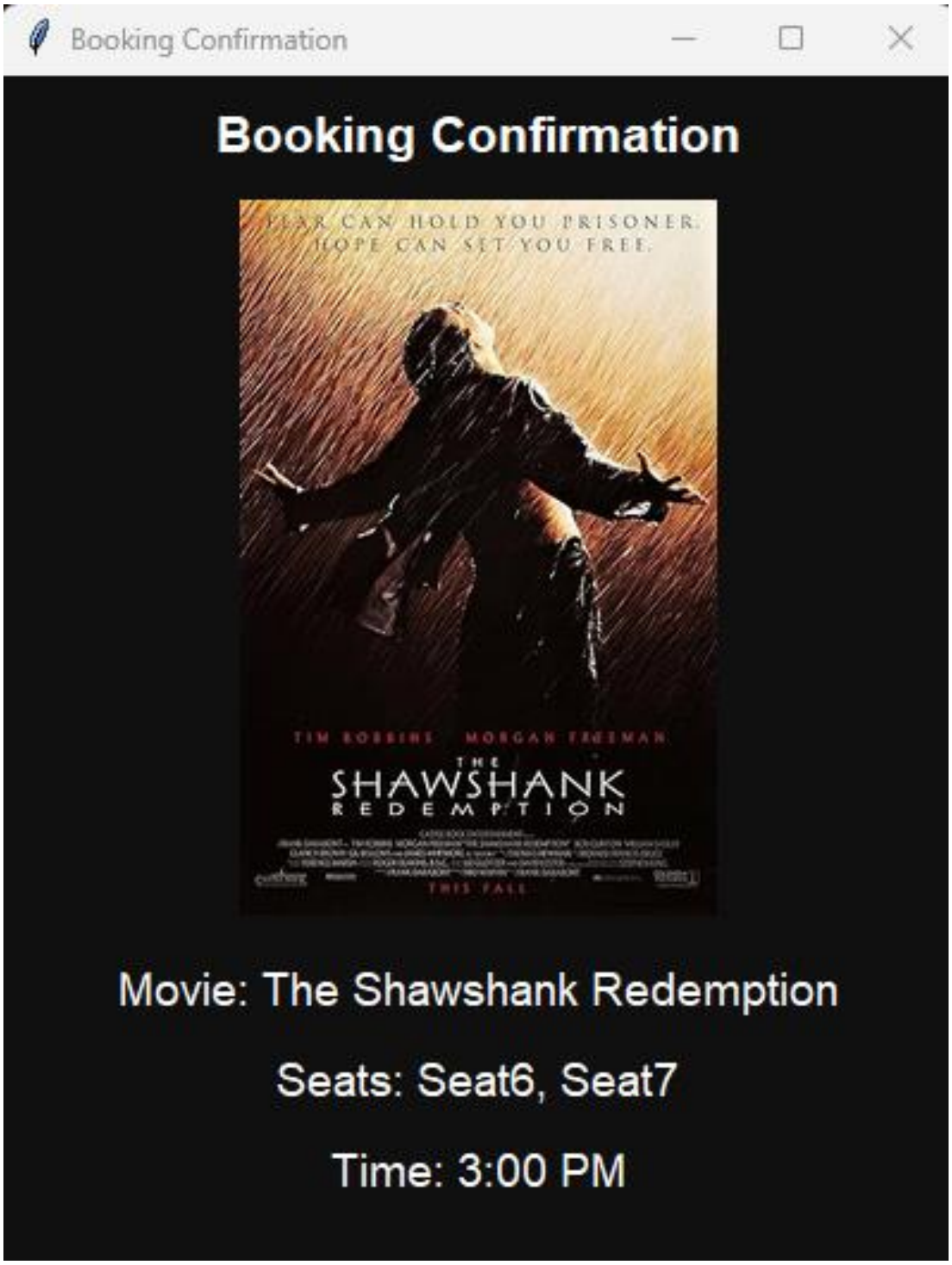
Time/Seat Select



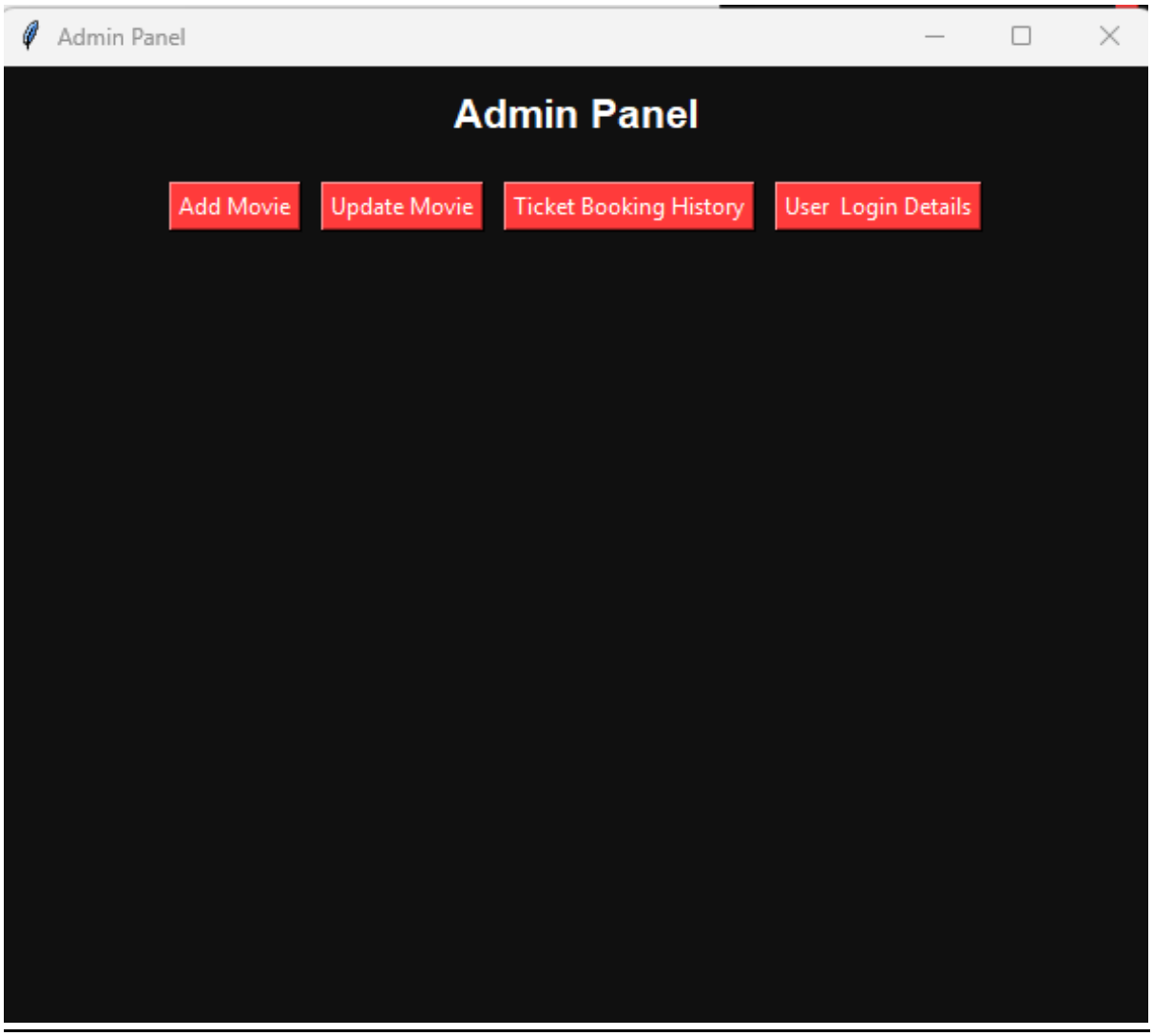
Payment Form



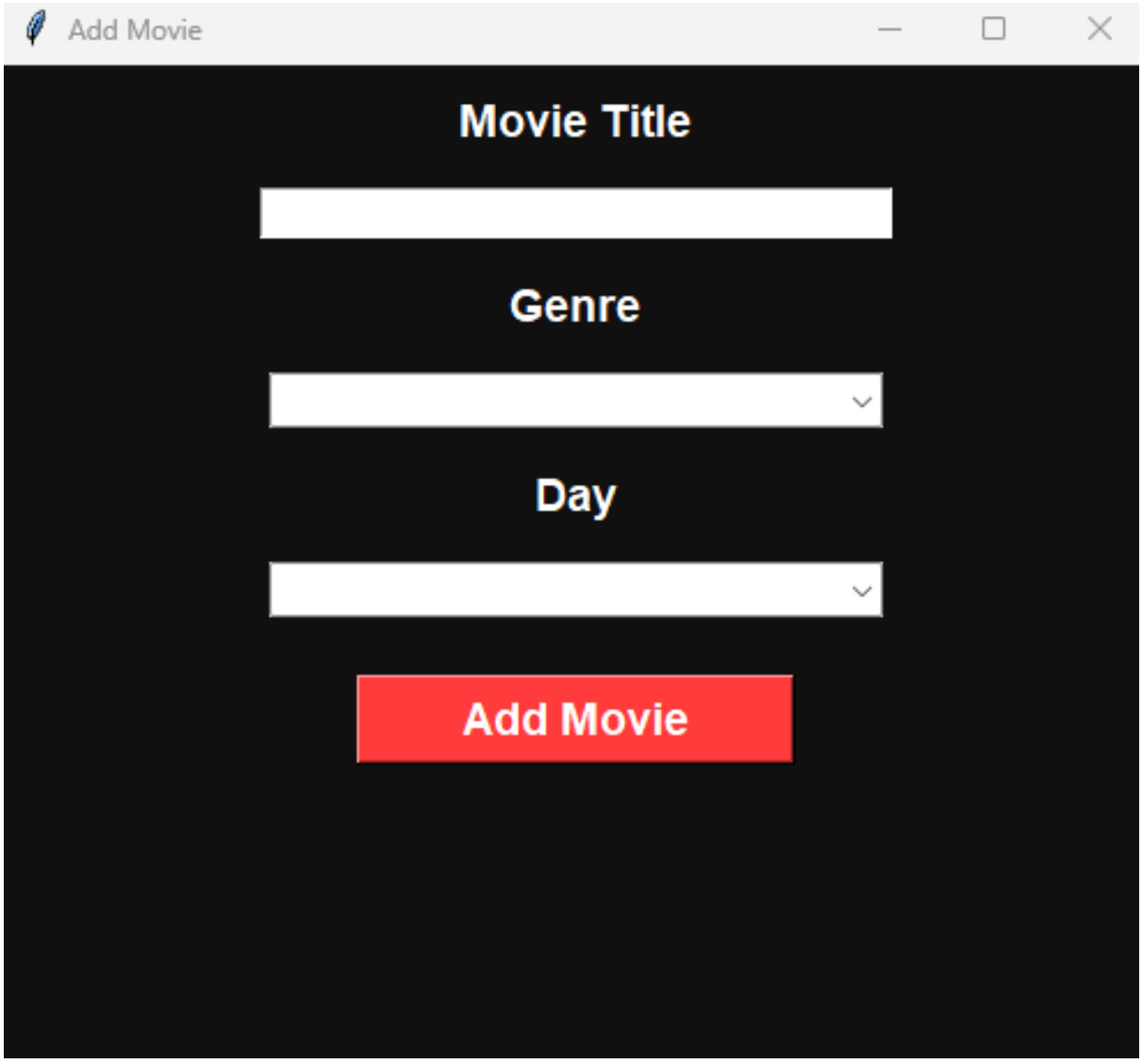
Booking Confirmation



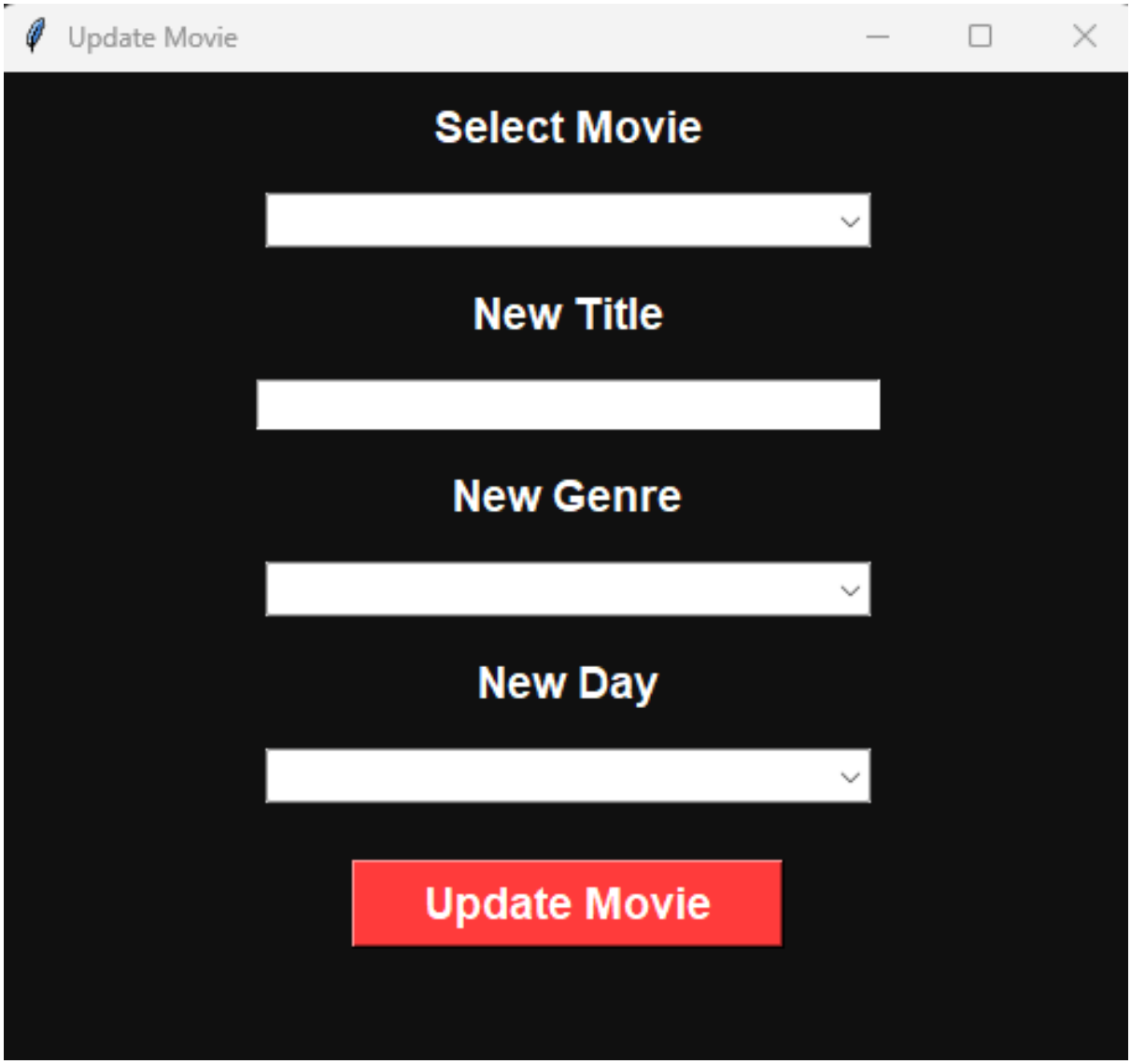
Admin Panel


Admin Panel
Admin Panel
Add Movie
Update Movie
Ticket Booking History
User Login Details

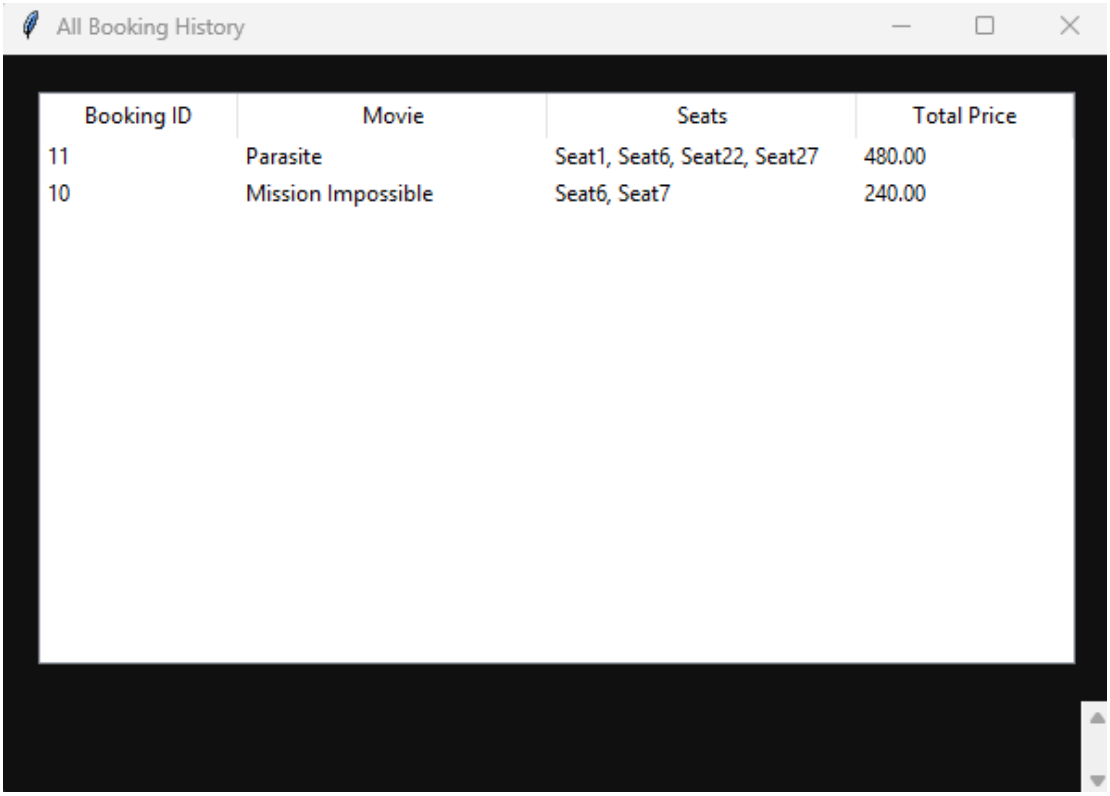
Add Movies



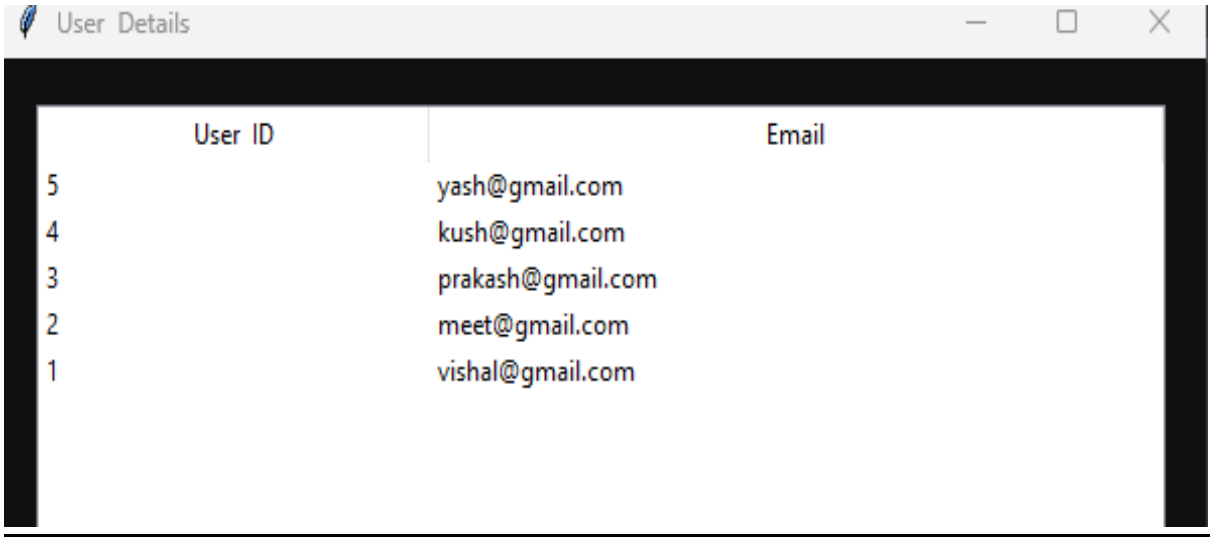
Update Movies



Booking History



User Details



Testing

1. Black Box Testing

Black box testing focuses on testing the functionality of the application without knowing the internal code structure. Testers evaluate the software from an external perspective.

- **Functional Testing**:
  - Searching for movies by title and genre.
  - User registration and login processes
- **Performance Testing**:
  - Load testing to see how many users it can handle simultaneously
  - Stress testing to determine the breaking point of the application

2. White Box Testing

White box testing involves testing the internal structures or workings of an application. Testers need knowledge of the code and architecture.

- **Code Coverage Analysis**:
  - Unit tests for individual functions or methods.
  - Integration tests to check how different modules work together
- **Logic Testing**:
  - Search algorithms for retrieving movie data.
  - Sorting algorithms for displaying lists of movies. `

3. Gray Box Testing

Gray box testing is a combination of black box and white box testing. Testers have partial knowledge of the internal workings of the application while still testing from an external perspective.

- **Integration Testing:**
  - Test how different components of the application interact with each other, using knowledge of the internal structure to create more effective tests.
- **Database Testing:**
  - Checking data integrity and consistency.
  - Ensuring that queries return the expected results.
- **Security Testing:**
  - Conduct tests that require knowledge of the application's architecture, such as testing for vulnerabilities in APIs or data storage.

Test Steps & Expected Results

Step No.	Test Scenario	Input Data	Expected Result	Status
1.	**Positive Scenario:** Login with valid credentials	Username: admin Password: admin	Admin successfully logs in and is redirected to the dashboard	✅ Pass
2.	**Negative Scenario:** Login with invalid credentials	Username: admin Password: wrongpass	Error message: **"Invalid username or password"** should be displayed, and login should fail	✅ Pass

Limitation and Future Enhancement

Limitations

Scalability:

Current Issue: As traffic increases, the website may experience slow loading times or crashes if not properly optimized.

Impact: A poor user experience can lead to higher bounce rates.

Content Management:

Current Issue: Limited content update capabilities may hinder the timely addition of new Bollywood Movies.

Impact: Users may find Best Bollywood Movies for Watch.

SEO Limitations:

Current Issue: Basic SEO practices may not be fully implemented.

Future Scope of Enhancement

Implement cloud hosting solutions or a Content Delivery Network (CDN) to handle increased traffic more efficiently.

Invest in a more robust CMS or custom backend system to allow for easier content updates and management.

Add Bollywood Movie for increase traffic.

Bibliography

- https://w3school.com
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