Cinema Hall Management System

BY

MD.RAKIBUL HASAN
ID: 152-15-5591

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Md.Swakshar Mahmud
Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

Md. Saiful Islam
Lecturer
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APPROVAL

This Project titled **"Cinema hall management system"**, submitted by **Md. Rakibul Hasan,** ID No: **152-15-5591** to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on **4th may 2019.**

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain — **Chairman**
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Md. Ismail Jabiullah — **Internal Examiner**
Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Sheak Rashed Haider Noori — **Internal Examiner**
Associate Professor & Associate Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Dewan Md. Farid — **External Examiner**
Associate Professor
Department of Computer Science and Engineering
United International University

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md.Swakshar Mahmud**,**Lecturer, Department of Computer Science and Engineering, Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

Supervised by:

05.5.19

Md. Swakshar Mahmud
Lecturer
Department of CSE
Daffodil International University

Co- Supervised by:

Saiful Islam
Senior Lecturer
Department of CSE
Daffodil International University

Submitted by:

Rakib

Md. Rakibul Hasan
ID: 152-15-5591
Department of Computer Science and Engineering
Daffodil International University

ACKNOWLEDGEMENT

First I express my heartiest thanks and gratefulness to almighty God for His divine blessing makes me possible to complete the final year project/internship successfully.

I am really grateful and wish our profound our indebtedness to **Md.Swakshar Mahmud**, **Senior Lecturer, Department of Computer Science and Engineering, Daffodil International University**. Deep Knowledge & keen interest of my supervisor in the field of **"web Engineering"** to carry out this project. His endless patience ,scholarly guidance ,continual encouragement, constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to the Almighty Allah and Head**,** Department of Computer Science and Engineering, for his kind help to finish my project and also to other faculty member and the staff of Computer Science and Engineering department of Daffodil International University.

I would like to thank my entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

ABSTRACT

Cinema hall management system is a online web based system. Now a day's people are very much dependent on internet. They like to do every day to day life chores or necessities in online because it is more easier and hassle free. If people want to watch any movie they will book the ticket in online. They don't need to go to theatre to buy or there is no hassle that they will get the ticket or not. So thus it will be tension free. There will be no hassle that they will get the desired ticket or not. So it is more convenient for people. Every person want to get their work done easily and without any hassle.online movie ticket booking is very much significant thing in our day to day life. Without this online thing you have to go through all the hassle and end of the time you are not sure that you will get the ticket or not. So in recreation or entertainment time you have to worry where by this online system you don't have to be worried. You just need to visit website see movie and hall details and book the ticket online even by sitting at your home or office or from anywhere. So this system will make your recreation time smoother.

TABLE OF CONTENTS

LIST OF FIGURES

FIGURES **PAGE NO**

CHAPTER 1

INTRODUCTION

1.1 Introduction

The recent boom in the era of internet has ensured that all type of services , sales and products to be made online. Business has become more efficient for both the business person and the customers. It is now fast, accessible from anywhere and anytime and avoids the hefty physical transactions. Now, my project aims to provide online ticket rental server that maintains the information about the customer details. Cinema hall details, movie schedules , movie ratings , trailers of movies , will track down nearby cinema halls by google map , purchase details and transaction details of the customer.Basically what we are trying to do is to make cinema halls more famous and active all over the country By providing facilities to the users that will make ticket purchasing very easy for them. Actually not only ticket purchasing but also people can get vast amount of facilities like mentioned above which will help them to choose the perfect cinema hall and perfect movie for better entertainment and enjoyment [1].

1.2 Motivation

My motivation is to develop a movie ticket rental system for customers so that the customers are able to enter my website for finding and purchasing a ticket for their desired movie easily through the Internet and it can be accessed from anywhere anytime in the world. Basically through this website a customer can see the schedule of any cinema hall in Bangladesh and also there is a section where the customer can click on a movie among many others and can see in which cinema halls that movie is going on .Though there are websites like that in India and abroad but this will be the first time in our country . I am trying to develop more customer friendly, faster, secure and flexible web-based system, then it will be a more effective matter.

1.3 Objective

- The system helps the administration to maintain all the Cinema hall details, movie schedules , movie ratings ,trailers of movies, purchase details.
- Customers are able to view the latest and updated movies and the schedules.
- Customer can share his or her opinion through the comment section of our website.
- To transform the manual process of ticket buying for movie to a computerized system customer friendly web-based system.
- The system should provide up to date accurate information at any time.
- Increase processing speed and avoid error.

1.4 Expected Outcome

My project aims to provide online ticket rental server that maintains the information about the customer details. Cinema hall details, movie schedules , movie ratings , trailers of movies , will track down near by cinema halls by google map , purchase details and transaction details of the customer.I am trying to do is to make cinema halls more famous and active all over the country By providing facilities to the users that will make ticket purchasing very easy for them. Not only ticket purchasing but also people can get vast amount of facilities for better entertainment and enjoyment.

1.5 Report Layout

The purpose of this project report is to provide a detailed description along with logical Diagram ,Flow chart .The format of this report is simple. The remainder of the document will be written using the standard font, Times New Roman with font 12. The remainder of this report as follows. Chapter 2 describes the background belonging literature work, the scope of the problem, summary, and challenges we face. Chapter 3 represents the requirement Specification of the project. Chapter 4 discusses the design. Chapter 5 discusses the result. And chapter 6 represent the report with a conclusion and future work. In Appendices, External information added if needed.

CHAPTER 2

Background

2.1 Introduction

This system provides you the ultimate easy solution of booking ticket through online. It will improve the traditional process of ticketing. Not only improve it will change the whole era of movie ticket system. It will show the new release movie information. You will get to know all the details about the movie. You will know about the theatres.you will know about the available show time of the movie. It will also save your purchase history so thus it will track that how many movies you have been watched. After selecting the desired movie you just have to buy the ticket then print the ticket then you have to take it to the theatres and then they will confirm the ticket. Then it's done[2].

2.2 Related Work

I did not find any similar cinema hall web based system like us except there is one in India. https://in.bookmyshow.com/movies/ this is the web site that provides the similar type of facilities such as the server we are developing. So the idea I am trying to develop is previously used in this website in India but there is no such website in Bangladesh. So I am trying to develop a web based system like that with more additional features for only my Editor: I used sublime text 3 and PhpStorm for source code edit.

Platform: I work only in windows OS.

2.3 Scope of the Problems

My research focused on reducing manual process of hiring movie tickets. In this system customers can get different facilities such as the customer has to do registration,if the customer had already registered himself then he can continue purchasing in his own account by giving his email and password, the customer can amend details or update his details.The main output are whether the purchase is confirmed or not and regular information's service to the customers of the site.

2.4 Challenges

There are no good search mechanism.I am not capable of showing the exact seat plan to the customer in my website. The Website is not accessible to everyone.It can be deployed on a web server so that everybody who is connected to the Internet can use it. GPS tracking is not available. I won't be able to ful-fill my online payment procedure.

CHAPTER 3

Requirement Specification

3.1 Requirement Collection and Analysis

In collateral with stating the data requirements, it is useful to specify the known functional requirements of the application.These composed of user defined operations that will be applied to the database.The functional requirements are used as a origin of application software design. Requirements analysis is tender in order to comprehend the problem, which is to be resolved. That is very important act for the development of database system. The data requirements are used as a origin of database design. These requirements should be explained in as full and complete configuration as feasible.

The Data-requirements are given as follows:-

3.1.1 User Module

User Registration

- User Register with Name, A Username, Password, E-mail address.

User Login

- User Can Book the Ticket After Log in.
- User Login with User Name and Password.

Check Availability

- After Login, User, Can See Current Running Movie
- If Ticket is Available User Can Book Ticket

Book Ticket

- Book ticket by specifying username.
- Then click the buy ticket button.
- Then it will add on the ticket purchase history. Then click the print button to print the ticket. Then it is done.

3.1.2 Admin Control

Admin User Login

- Admin can Login with Admin User Name and Password.

Show Manage

- Admin Can Add Show Name and Show Time.

Movie Manage

- Admin Can Add New Movie.
- Admin Can Delete Movie.

3.1.3 Functional requirements

These are statements of services the system should provide, how the system should react to particular inputs, and how the system should behave in particular situations. It species the system functionality that the developers must build into the product to enable customers to accomplish their tasks.

3.1.4 Non-Functional Requirement

Non-functional requirements, such as performance,security,or availability,usually specify or constrain characteristics of the system as a whole.

Usability: The system provides a contact menu in interfaces for the customer to interact with the system.

Security: The system provides customer name and password to prevent the system from unauthorized access.

Performance: The system response time for every instruction conducted by the customer must not exceed more than a minimum of 10 seconds.

Availability: The system should always be available for access at 24 hours, 7 days a week.

3.2 Use Case Modeling and Description
3.2.1 use case diagram

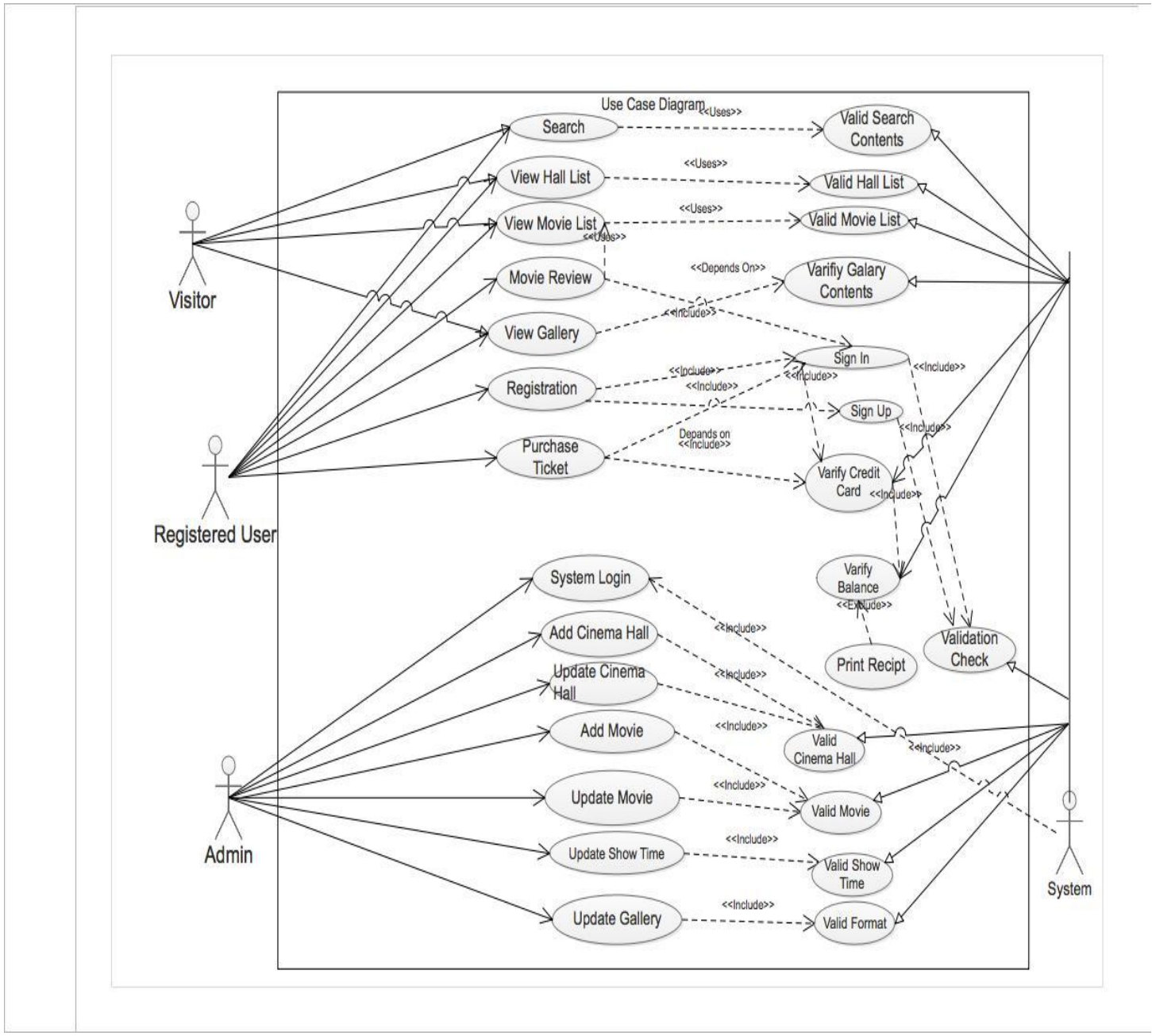

Figure 3.2.1: Online Cinema Hall use case diagram

3.2.2 Browse Catalog

Filter by cinema hall and movie

Purpose: Customer can filter cinema hall and movie and can choose their watching cinema plan.

Actor: Customer.

Input: All cinema hall and movie name from database are horizontally arranged in details page and customer can filter by checking the cinema hall and movie.

Output: The website will show all cinema hall and movie in a different page.

3.2.3 Maintain Customer Account

Quick purchase

Purpose: Quick purchasing for registered customers.

Actor: Customers

Input: Customer have to choose hall, movie, show time from some predefine option, name, phone number.

Output: A purchase request send to administrator.

Sign Up

Purpose: If customers are new and do not have an account it will asked them for register.

Actor: Customer

Input: customer name, email, phone, password and address. All the field except address are required field in register form and customers must fill up all the information to go next step.

Output: If all the information is valid as per form requirement. System show a success message and customers are ready for login.

Login

Purpose: To get all customer access, features and functionalities he/she must have to login.

Actor: customer

Input: email and password will need to be login.

Output: After successful login Customer are directed to buy ticket page. If customers are not purchasing before, the cart table will be empty and if customers purchase ticket before purchasing details shown here until they remove cache.

Logout

Purpose: To end customer current session he/she must have to logout.

Actor: customer

Input: have to check logout button.

Output: End customers current session and redirect to login page.

3.2.4 Admin

Login

Purpose: To maintain the whole website he/she must have to login first.

Actor: Admin.

Input: Admin customer name and password.

Output: After successfully login he/she directed to the admin panel dashboard and ready to maintain the system.

Manage Movie

Purpose: If new movie is need to be added admin can add new movie even edit and also can change the publication status.

Actor: Admin

Input: For insert movie he/she have to write the movie descriptions,genre, youtube trailer,movie cover and for edit or delete have to check particular action key. Output: The new movie name will be shown in details.

Manage Cinema Hall

Purpose: Admin can add cinema hall, and also can edit show time and movies running in those cinema hall and also delete those.

Actor: Admin

Input: For adding new cinema hall admin have to set hall environment, location, description, image, total seats, ticket price and other related data for the hall.

Output: Those hall are automatically displayed in hall list page for the customers.

Manage Genre

Purpose: Admin can add genre and also manage genre.

Actor: Admin

Input: Admin have to set genre title and publication status.

Output: Genre title is added to the movie page.

Logout

Purpose: To end the current session logout is required.

Actor: Admin

Input: The admin will check the logout button.

Output: Admin will directed to home page and maintain this website again he/she should login.

3.3 Logical Data Model

This flowchart show my working steps the steps are:

There are two different side in my site. Admin and customer side, admin can direct login and customer can do registration with valid information before login.

3.3.1 Flowchart

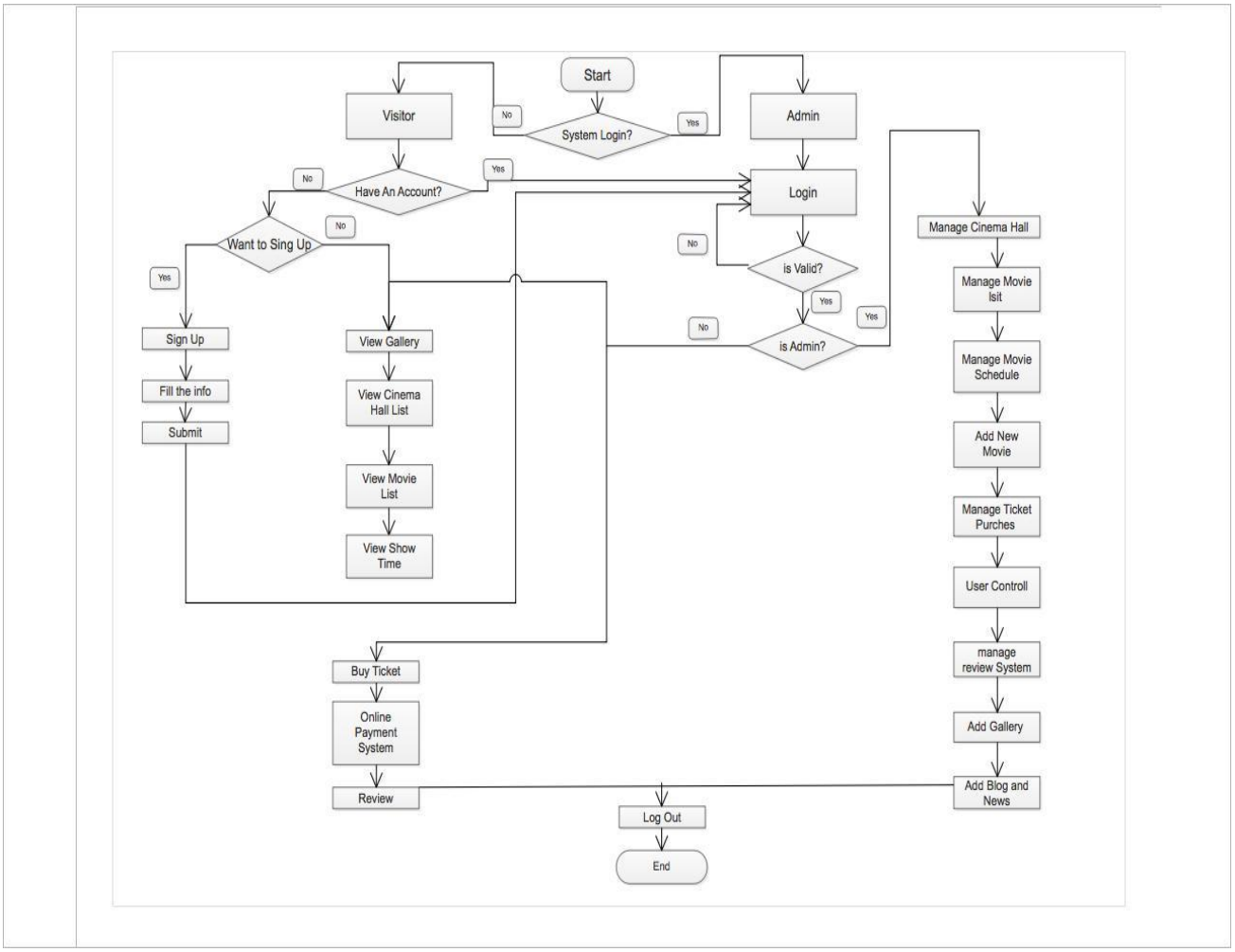

Figure 3.3.1: Online Cinema Hall system Flow Chart

3.4 Design Requirements

- System will be used by three types of user, normal user, registered user and Admin.
- Admin will be able to add movie and hall and time of the show.
- Admin will be able to contact the registered user if admin wants.
- System admin will setup basic settings of the system.
- Admin will be able to delete the movie and hall and current time of the movie.
- Admin will able to add movie description.
- Any user will have the permission to submit their problems by giving some valid information.
- User will see his profile.
- Registered will login to this applications by using username and password.
- User will be able to contact with Admin and user can see the available hall location through google map.

CHAPTER 4

Design Specification

4.1 Front-end Design

- In this system I have the customer user and system admin.
- To login into the system, a user need to log in using my user-friendly login form, which contains the Email and password.
- To get the ticket the user must need to complete the registration form query.
- After successfully complete the registration then anyone can get the ticket.

4.2 Back-end Design

- Admin will manage this application**.**
- System Admin can manage movie and hall.
- User will receive a pdf when book ticket.
- Registered user will be able to see his/her profile and booking report.
- Admin can change the movie status.
- Admin can remove movie and hall.

4.3 Interaction Design and UX

Interaction design is one of the most important parts of a system. It's the way to interact with the user and system. For creating a user-friendly system need to use some dimension of representation (like as Button, Icons, Typography, language etc.) so that user can easily understand the system. The main achievement of a system is user-friendly for all kinds of the user of this system.

4.4 Implementation Requirements

To develop our application we used some languages. The required languages description is given below

HTML: Hyper Text Markup Language developed by Tim Berners-Lee in 1990.HTML is widely used markup language for creating a website or web application. It provide the basic structure of a page.

CSS: CSS stands for Cascading Style Sheets which is a style sheet language used to describe the presentation semantics of documenting writing in markup language. To control the style of a web document CSS is an easy way.

JavaScript: JavaScript is a dynamic, high level programming language which makes a web page more interactive and user friendly.

PHP: PHP (hypertext processor) is an object oriented programing language which basically server side scripting language using for web development.

MySQL: MySQL is an open source social database administration framework (RDBMS) in light of Structured Query Language (SQL). MySQL keeps running on for all intents and purposes all stages, including Linux, UNIX, and Windows.

Framework Requirements: Laravel is a free, open-source **PHP** web **framework**, created by Taylor Otwell and intended for the development of web applications following the model–view–controller (MVC) architectural pattern and based on Symfony.

CHAPTER 5

Implementation and Testing

5.1 Database

Database design is the process of producing a detailed model of a database. This model contains all the necessary needed to manage the system. A database is designed by firstly, creating the ERD model, which contains the design of the whole website structure. A fully attribute data model contains detailed attributes for each entity. Then the necessary checked are observed.

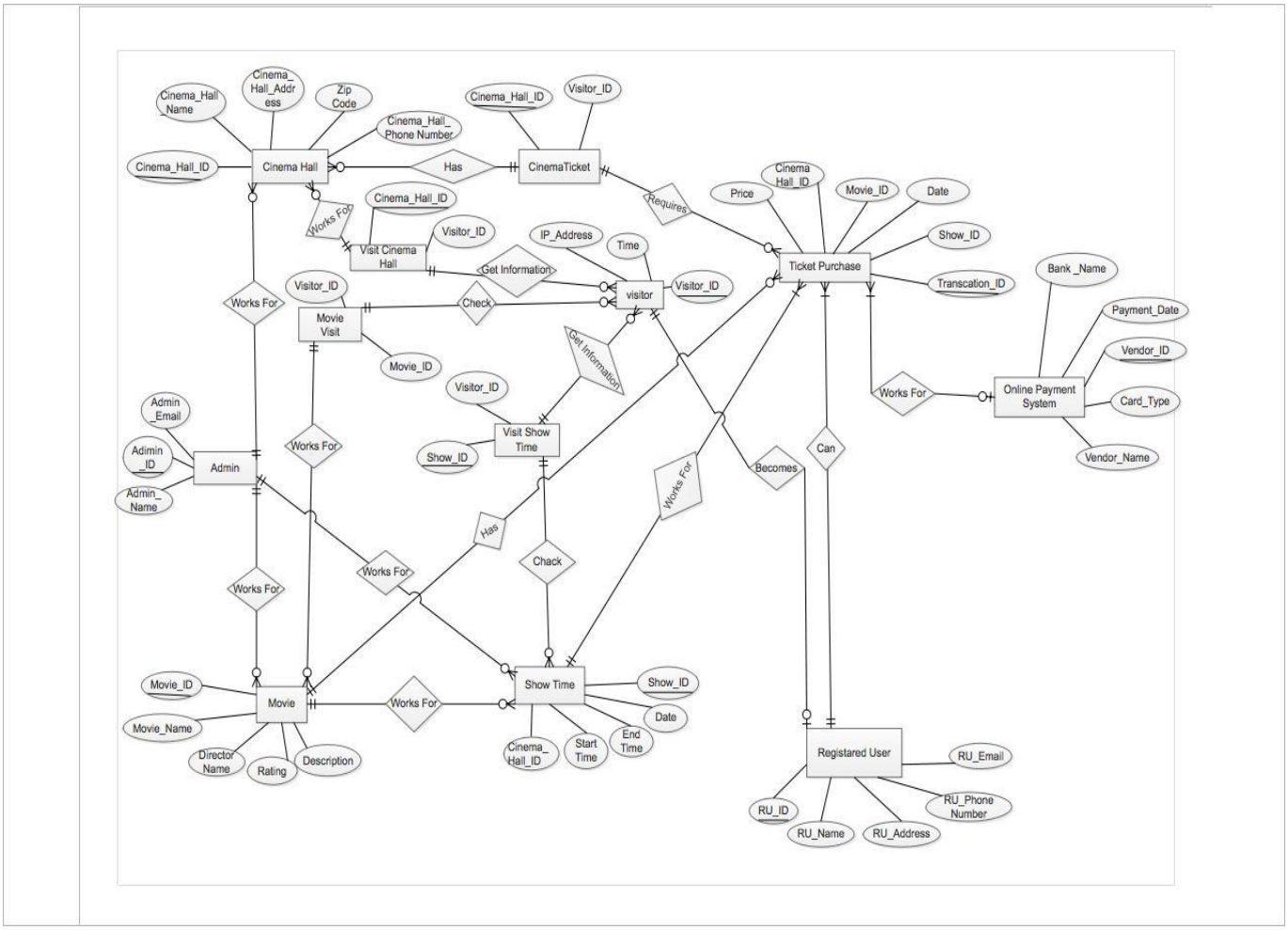

Figure 5.1.1: Online Cinema Hall system ERD

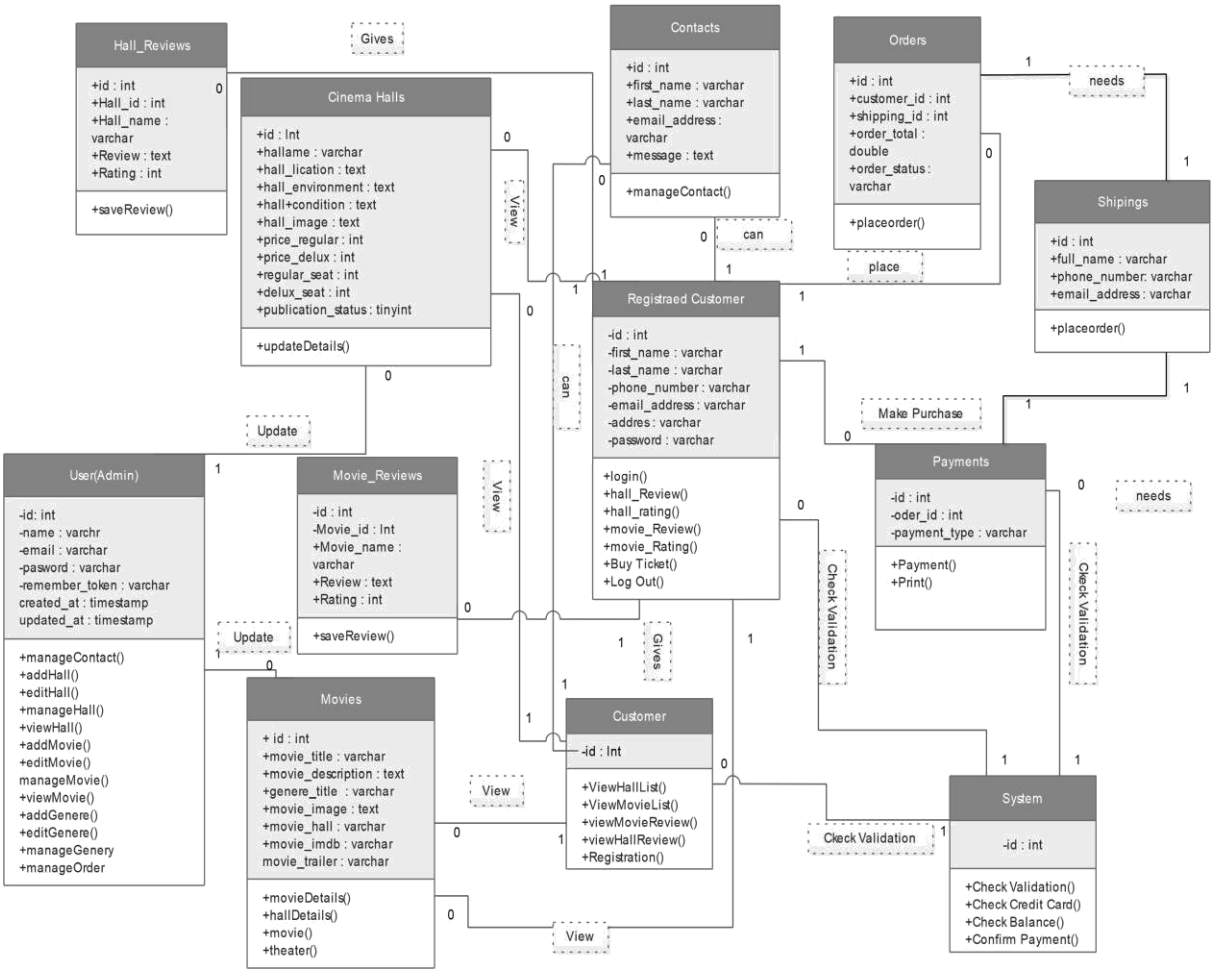

Figure 5.1.2: Online Cinema Hall system Class Diagram

5.2 Front-end Design

Since web is a huge area so the design should be defined shortly including key component of the system. It's very challenging to develop a gorgeous front-end design. Because, for developing a design for a search engine, all the time u have to consider the user friendly front end, it's very tough to balance the design with relative Job Search engine.

For interactive design we always try to be simple in UI design and I try some material design for make the application beautiful. But the most challenging portion is, to make my application, device independent, because there are many type of Smartphone that support android, among them some device has very week headwear component, in small pressure those devices behave like weird. Beyond different device can be different in version. So I have to design a system which can support all the devices and I have to ensure that, the system that support most of the android version from newer to older and doesn't create any extra pressure on the devices.I attached our application front-end implemented design below

5.3 Interactions

My first concern to make this application user friendly so that any user can understand my system very easily. In some case, I have used icon rather than a text link.I created smooth booking system and registration form. After login user, I have created the simple user interface. The user can find his/her details can check booking status.I also created a simple dashboard for Admin and counter admin. Admin can manage all the movie and hall system.My application is successfully implemented and the interaction of my application with the users is quiet impressive.

5.4 Results

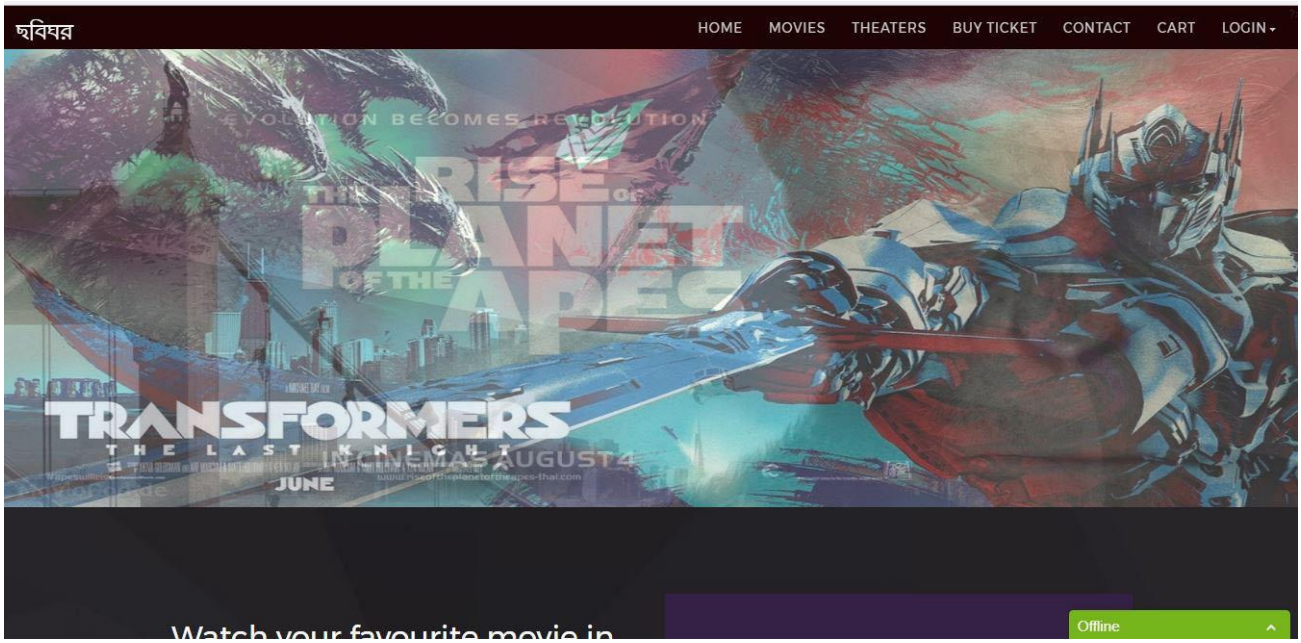

Figure 5.4.1: Home Page

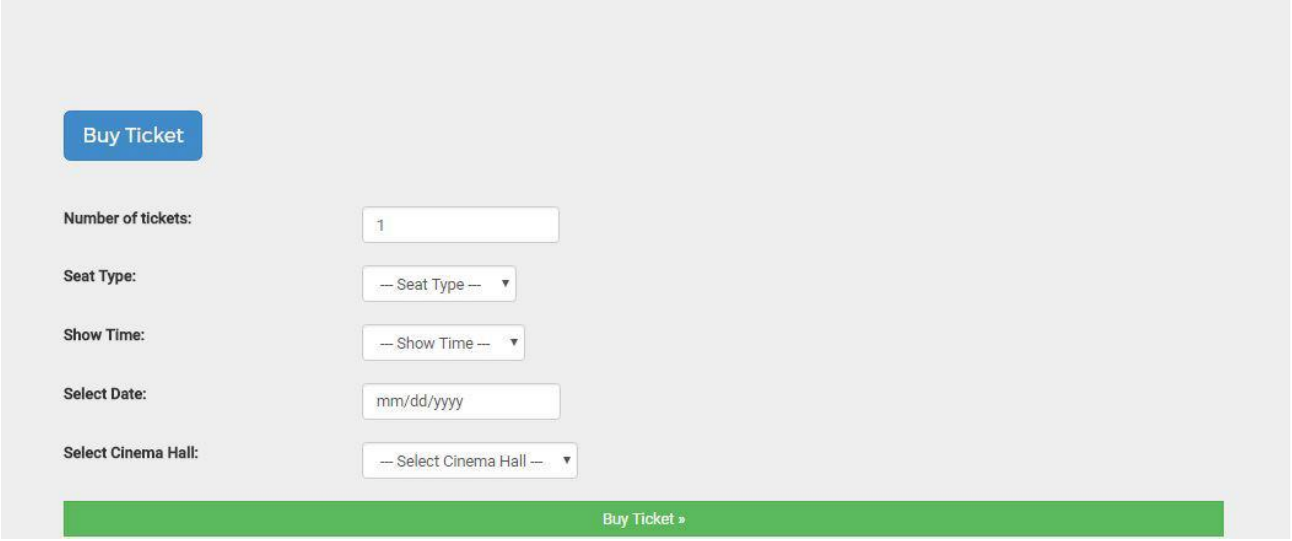

Figure 5.4.2: Buy Ticket

Figure 5.4.3: Customer Login

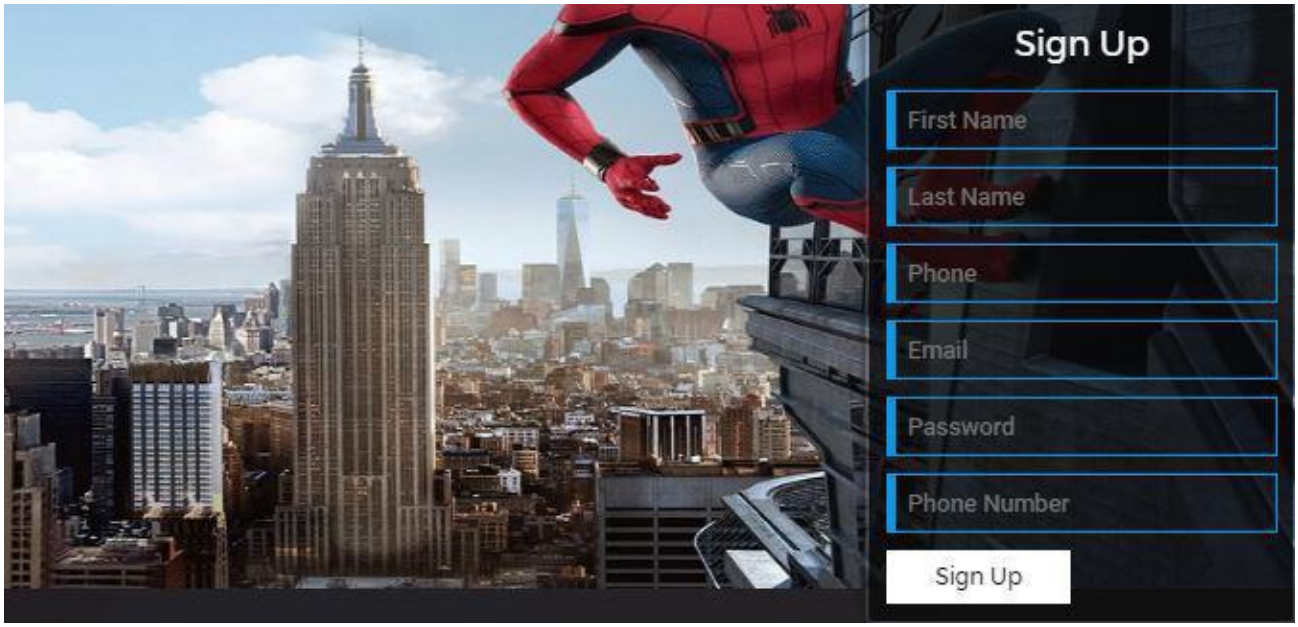

Figure 5.4.4: customer registration

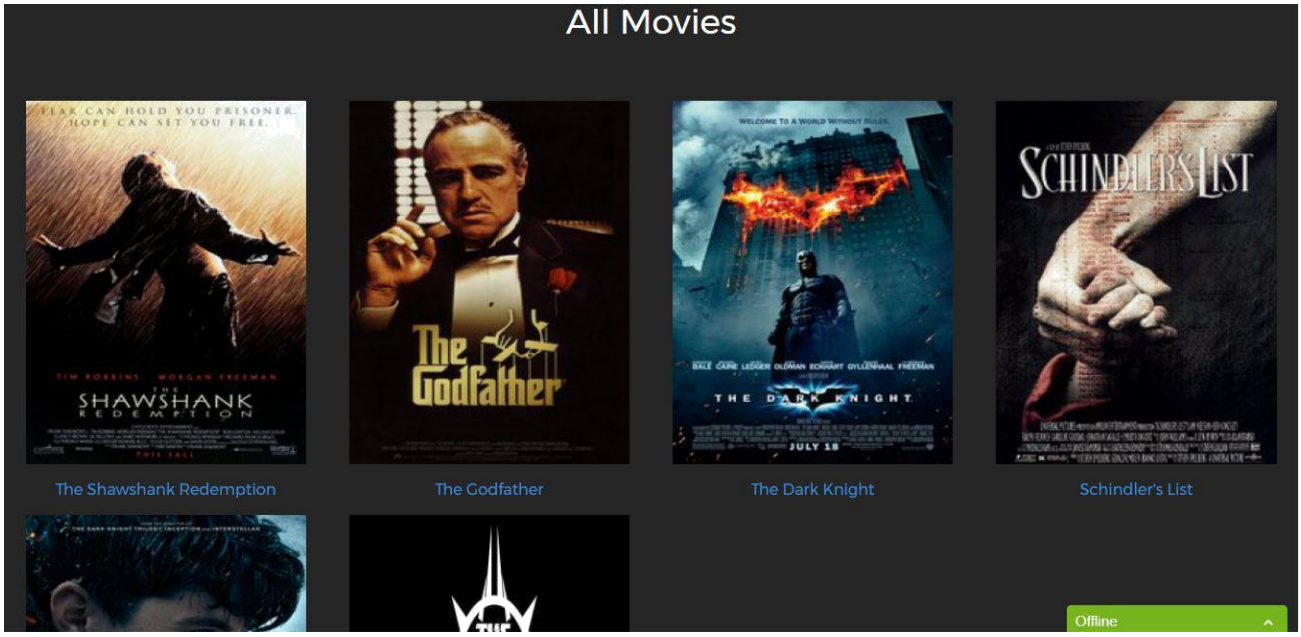

Figure 5.4.5: Movie details

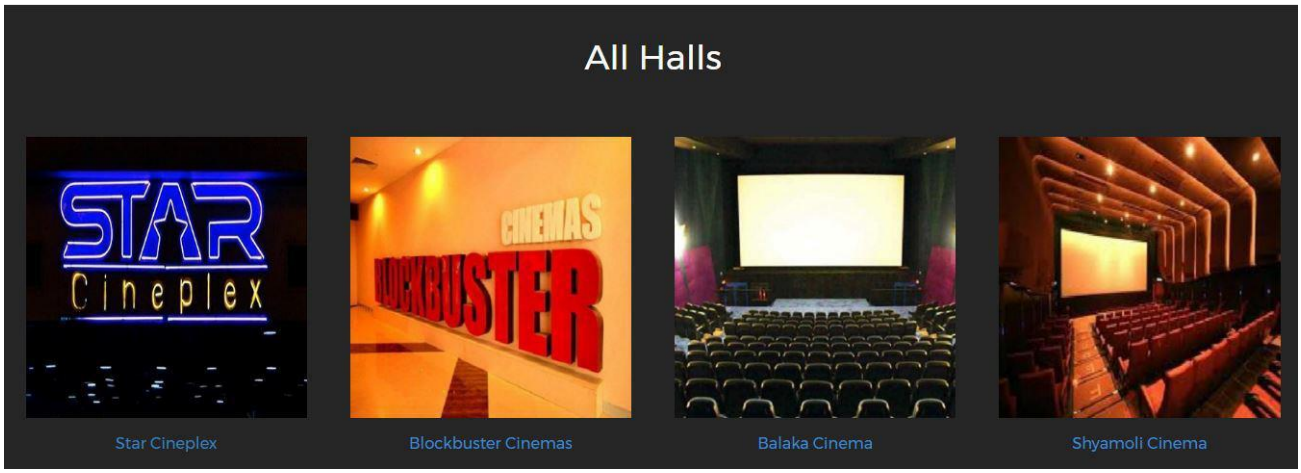

Figure 5.4.6: Cinema Hall Details

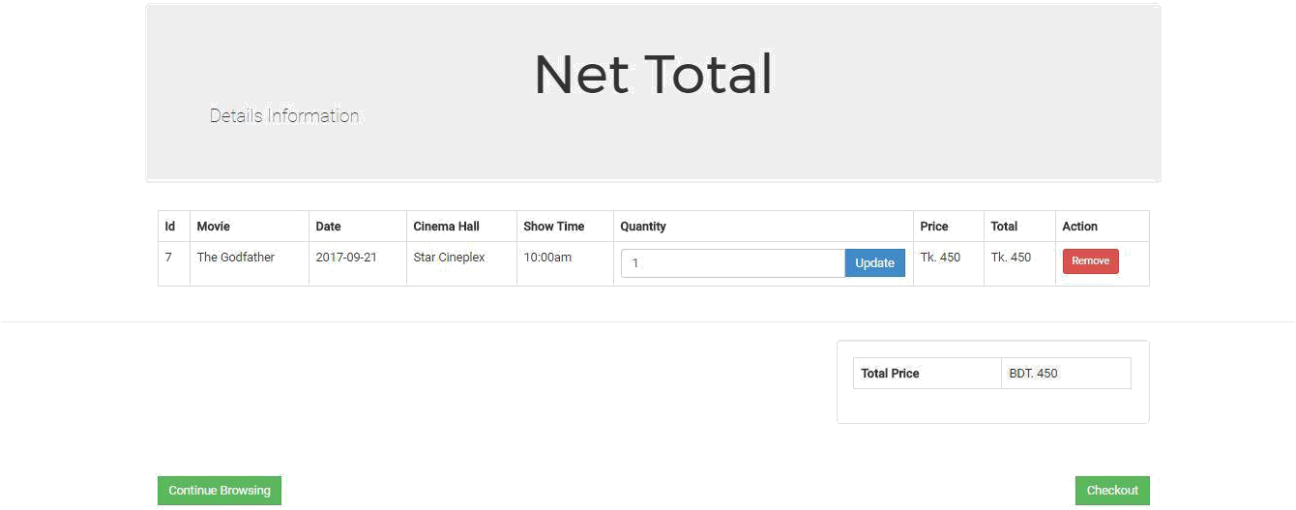

Figure 5.4.7: Purchase Tickets

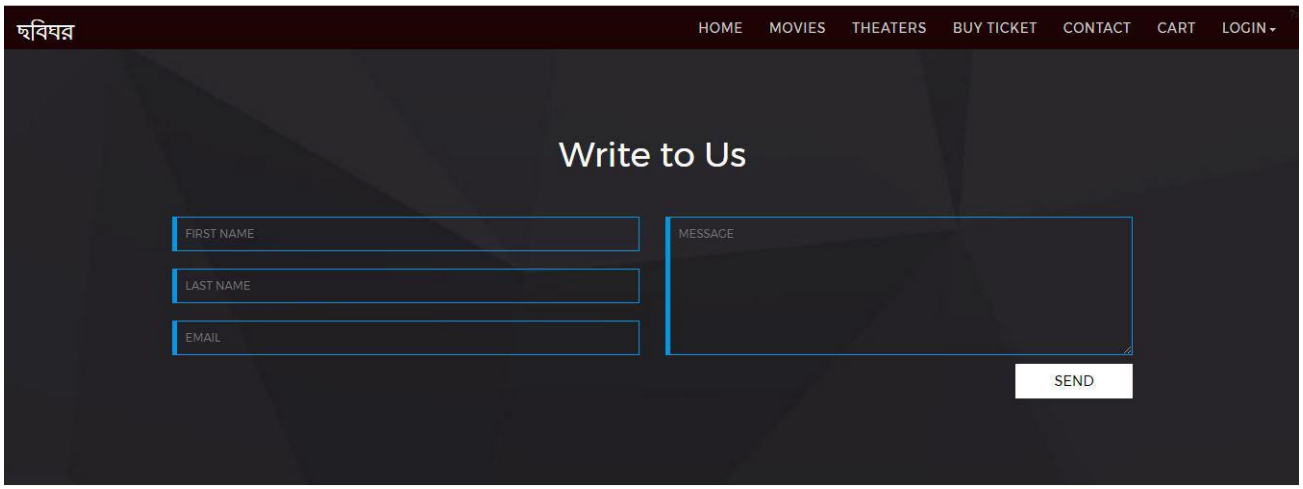

Figure 5.4.8: Contact

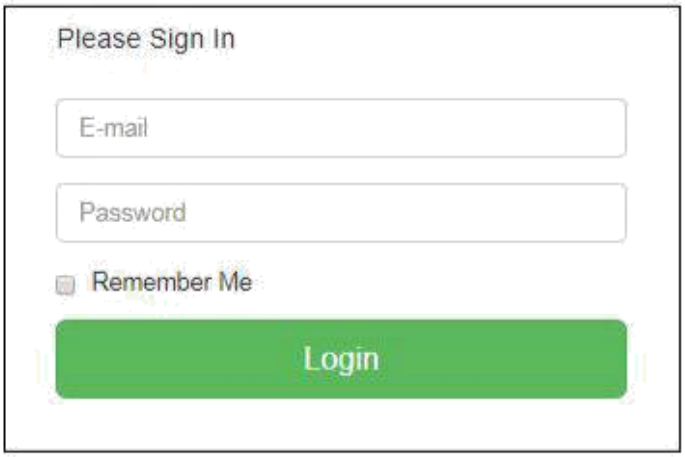

Figure 5.4.9: Admin login page

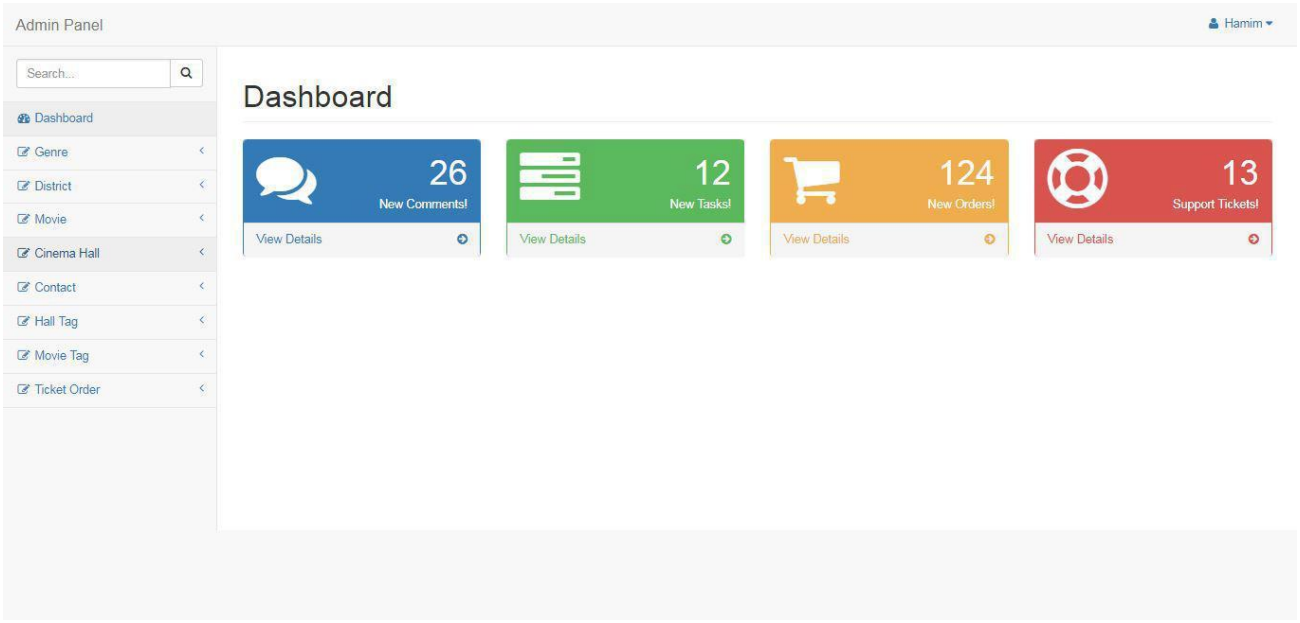

Figure 5.4.10: Admin home page

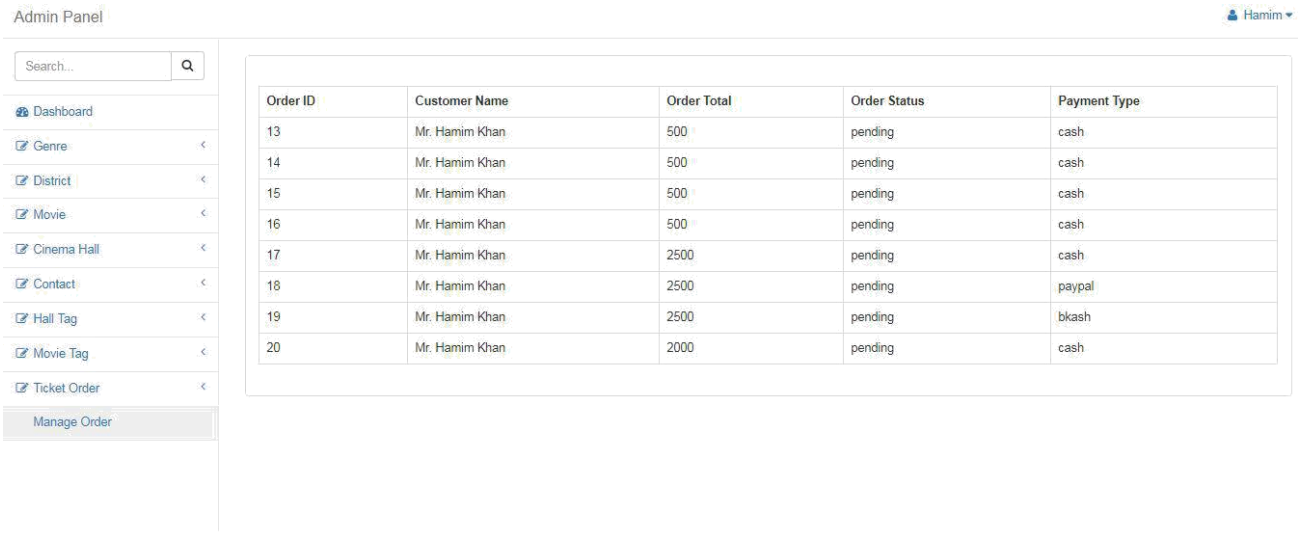

Figure 5.4.11: Ticket purchase message

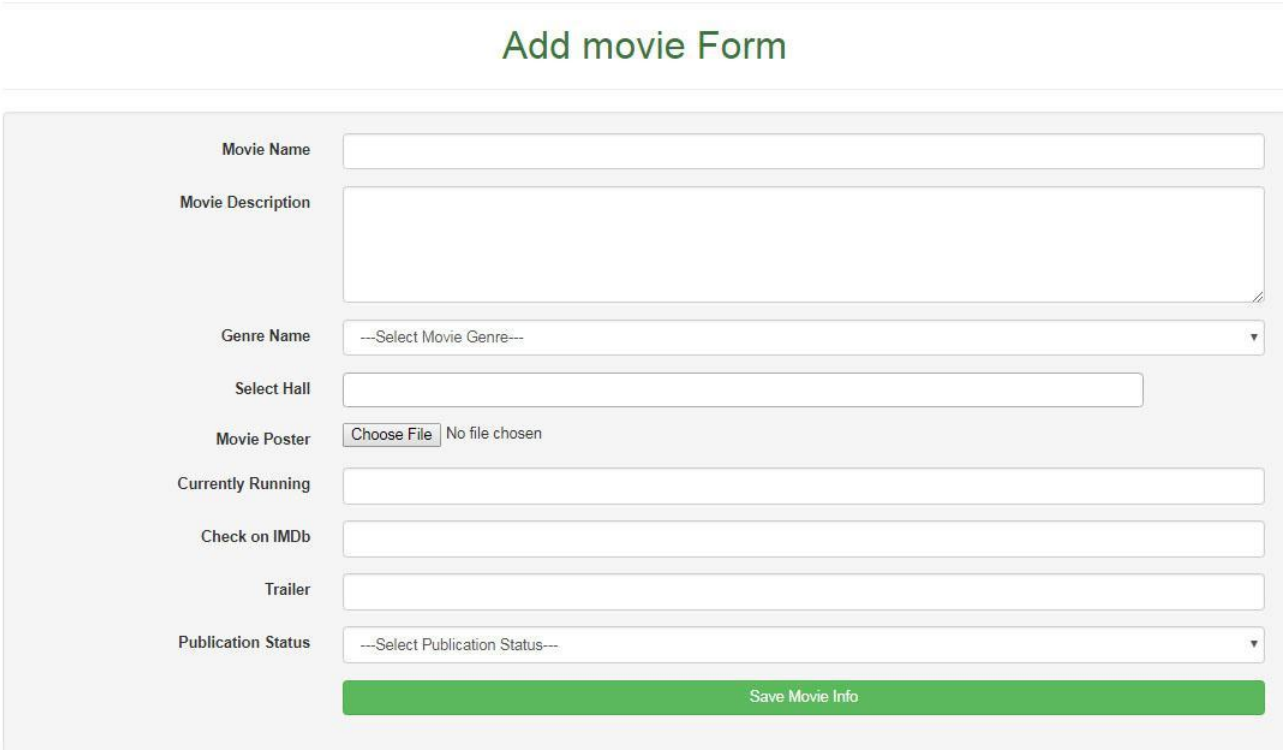

Figure 5.4.12: Add movie

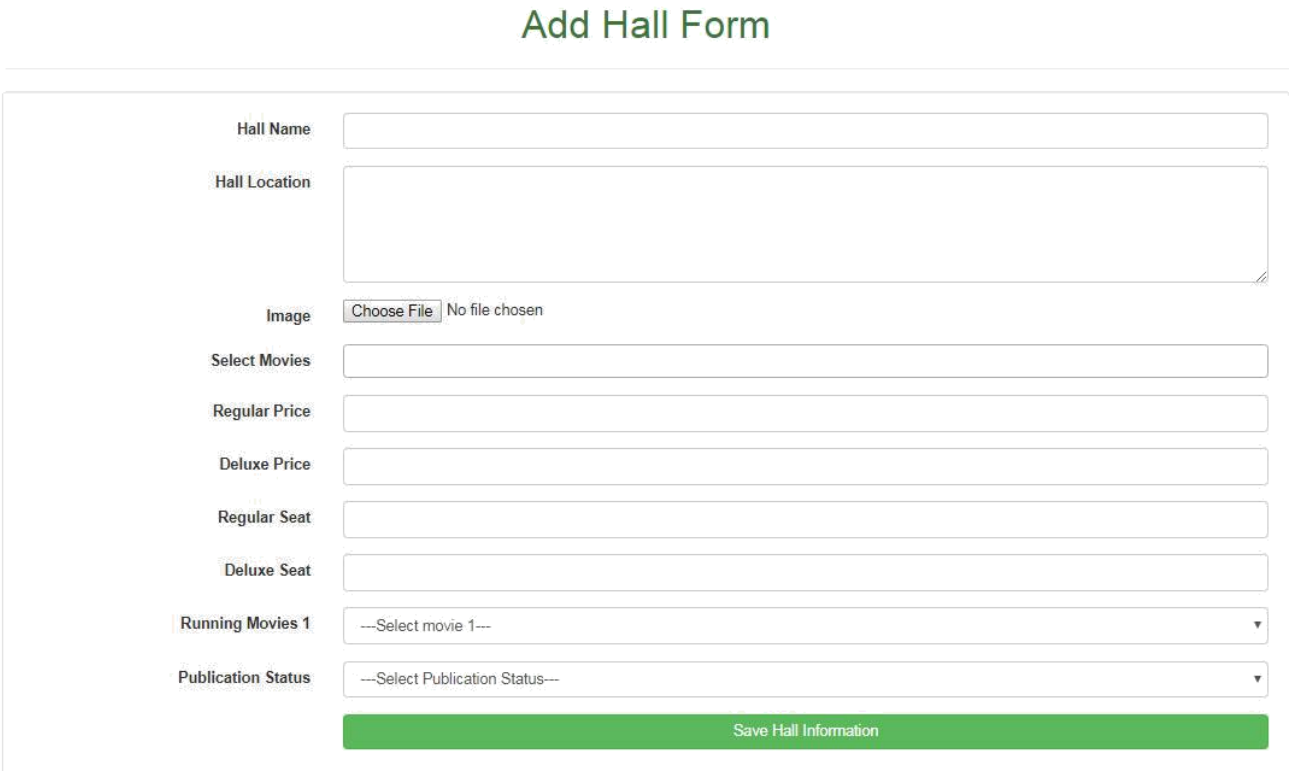

Figure 5.4.13: Add hall

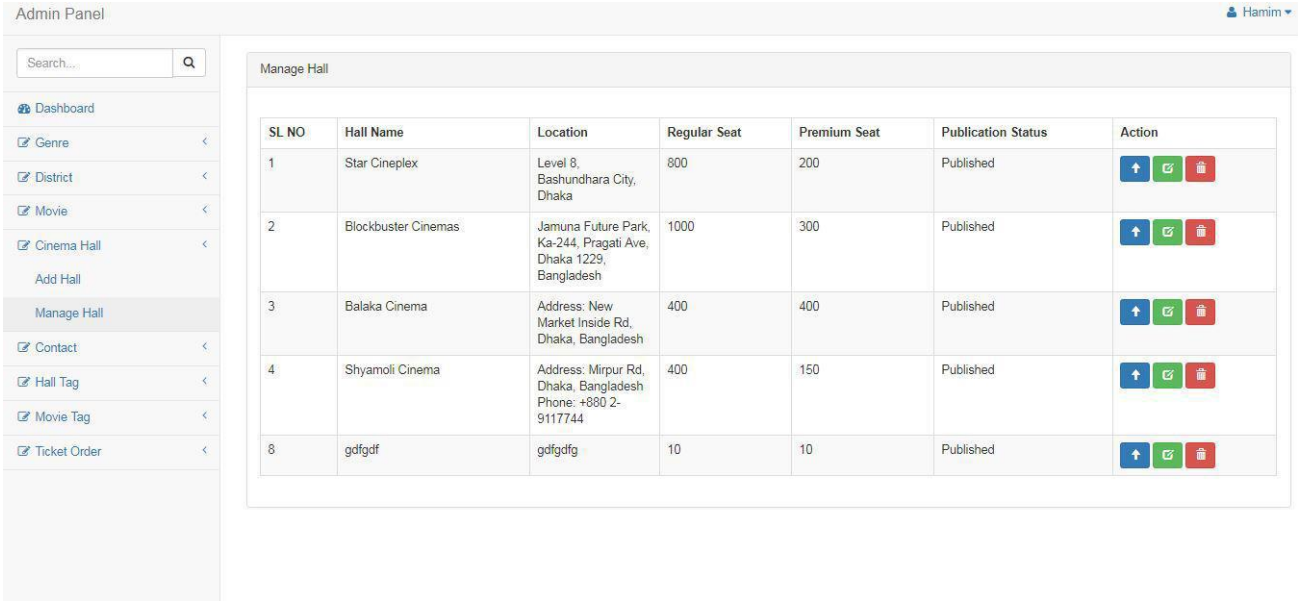

Figure 5.4.14: Manage hall List

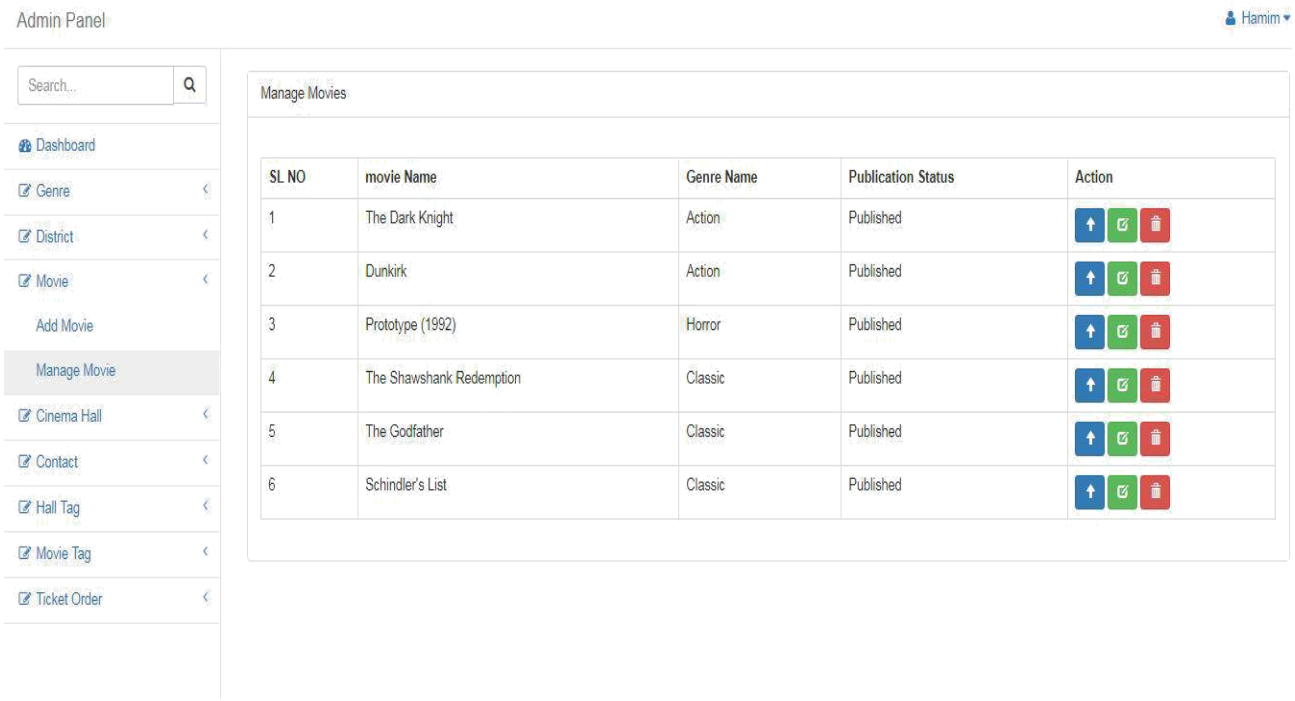

Figure 5.4.15: Manage Movie List

CHAPTER 6

Conclusion and Future Scope

6.1 Conclusion

The customers are able to view the latest and updated information about movies and cinema halls and also customer can share his or her opinion through the review and rating section of my website Therefore, the system will be providing a greater value to the customers for either purchasing or surfing the system through my website[5].

6.2 Scope for Further Developments

The work presented in this research provides vast possibilities for further work.The main goal of my future work is basically from of my limitation which I mention in my limitation part. My aim is to create the website that will provide finest quality customer satisfaction. In details I will work on GPS tracking system so that customer can find near by cinema hall,I will provide good search mechanism and customer will able to get particular seat in the cinema hall from my website. I will also ful-fill my online payment procedure and other limitation assign properly.

References

[1] Meuter, M. L., Ostrom, A. L., Roundtree, R. I., & Bitner, M. J. (2000). Self-service technologies: understanding customer satisfaction with technology-based service encounters. *Journal of marketing*, *64*(3), 50-64.

[2] Corrad, A., Montanari, R., & Tibaldi, D. (2004, August). Context-based access control management in ubiquitous environments. In *Third IEEE International Symposium on Network Computing and Applications, 2004.(NCA 2004). Proceedings.* (pp. 253-260). IEEE.

[3] Reddy, V. A., Mittal, P., & Gupta, I. (2008, June). Fair k mutual exclusion algorithm for peer to peer systems. In *2008 The 28th International Conference on Distributed Computing Systems* (pp. 655-662). IEEE.

[4] Tomaselli, K. (2013). *The cinema of apartheid: race and class in South African film*. Routledge.

[5] Talluri, K. (2001). *U.S. Patent No. 6,263,315*. Washington, DC: U.S. Patent and Trademark Office.

[6] Hang, B. (2011, July). Design and Implementation of Cinema Online Booking System. In *2011 International Symposium on Computer Science and Society* (pp. 196-199). IEEE.

[7] Wirtz, J., Kimes, S. E., Theng, J. H. P., & Patterson, P. (2003). Revenue management: resolving potential customer conflicts. *Journal of Revenue and Pricing Management*, *2*(3), 216-226.

[8] Davis, M. (2004, October). Mobile media metadata: metadata creation system for mobile images. In *Proceedings of the 12th annual ACM international conference on Multimedia* (pp. 936-937). ACM.

[9] Hoek, L. (2010). Unstable celluloid: Film projection and the cinema audience in Bangladesh. *BioScope: South Asian Screen Studies*, *1*(1), 49-66.

[10] Madruga, E. L., & Tarouco, L. M. R. (1994). Fault management tools for a cooperative and decentralized network operations environment. *IEEE Journal on selected areas in communications*, *12*(6), 1121-1130.

Cinema Hall Management System

ORIGINALITY REPORT

26%	20%	2%	24%
SIMILARIT Y INDEX	INT ERNET SOURCES	PUBLICAT IONS	ST UDENT PAPERS

PRIMARY SOURCES

1	Submitted to Daffodil International University Student Paper	8%
2	cnnb.daffodilvarsity.edu.bd Internet Source	2%
3	ignousupport.blogspot.com Internet Source	2%
4	Submitted to University of Lincoln Student Paper	2%
5	Submitted to Arab Open University Student Paper	2%
6	www.scribd.com Internet Source	1%
7	Submitted to Thames Valley University Student Paper	1%
8	Submitted to University of Sheffield Student Paper	1%
9	Submitted to Study Group Australia Student Paper	1%

10	rupaknepali.com.np Int ernet Source	1%
11	Submitted to University of Wolverhampton St udent Paper	1%
12	Submitted to University of Greenwich St udent Paper	1%
13	www.slideshare.net Int ernet Source	<1%
14	Submitted to Leyton Sixth Form College, London St udent Paper	<1%
15	Submitted to London Metropolitan University St udent Paper	<1%
16	Submitted to Majan College St udent Paper	<1%
17	scholar.uwindsor.ca Int ernet Source	<1%
18	Submitted to Chester College of Higher Education St udent Paper	<1%
19	Submitted to University of Essex St udent Paper	<1%
20	Submitted to Higher Education Commission Pakistan St udent Paper	<1%

21	www.officetutes.com Int ernet Source	<1%
22	ethesis.nitrkl.ac.in Int ernet Source	<1%
23	www.ltnt.ethz.ch Int ernet Source	<1%