TỔNG LIÊN ĐOÀN LAO ĐỘNG VIỆT NAM TRƯỜNG ĐẠI HỌC TÔN ĐỨC THẮNG KHOA CỔNG NGHỆ THÔNG TIN



WEB AND APPLICATION PROGRAMMING FINAL PROJECT

Online movie booking website

Người hướng dẫn: ThS PHẠM THÁI KỲ TRUNG

Người thực hiện: BÙI HỮU LỘC - 521H0504

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Lớp : 21H50301

Khoá : 25

THÀNH PHỐ HỒ CHÍ MINH, NĂM 2023

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LÒI CẨM ƠN

We would like to express our sincere gratitude to Professor Pham Thai Ky Trung for his guidance and support throughout the course. His lectures have been instrumental in helping us complete this project successfully. We would also like to extend our thanks to the Faculty of Information Technology at Ton Duc Thang University for providing us with the resources and opportunities to learn and grow.

ĐỒ ÁN ĐƯỢC HOÀN THÀNH TẠI TRƯỜNG ĐẠI HỌC TÔN ĐỨC THẮNG

Tôi xin cam đoan đây là sản phẩm đồ án của riêng chúng tôi và được sự hướng dẫn của ThS Phạm Thái Kỳ Trung. Các nội dung nghiên cứu, kết quả trong đề tài này là trung thực và chưa công bố dưới bất kỳ hình thức nào trước đây. Những số liệu trong các bảng biểu phục vụ cho việc phân tích, nhận xét, đánh giá được chính tác giả thu thập từ các nguồn khác nhau có ghi rõ trong phần tài liệu tham khảo.

Ngoài ra, trong đồ án còn sử dụng một số nhận xét, đánh giá cũng như số liệu của các tác giả khác, cơ quan tổ chức khác đều có trích dẫn và chú thích nguồn gốc.

Nếu phát hiện có bất kỳ sự gian lận nào tôi xin hoàn toàn chịu trách nhiệm về nội dung đồ án của mình. Trường đại học Tôn Đức Thắng không liên quan đến những vi phạm tác quyền, bản quyền do tôi gây ra trong quá trình thực hiện (nếu có).

TP. Hồ Chí Minh, ngày 29 tháng 4 năm 2023 Tác giả

(ký tên và ghi rõ họ tên)

Bùi Hữu Lộc

Trần Hữu Nhân

Vũ Quốc Nhật Tân

PHẦN XÁC NHẬN VÀ ĐÁNH GIÁ CỦA GIẢNG VIÊN Phần xác nhận của GV hướng dẫn	
	Tp. Hồ Chí Minh, ngày tháng năm (kí và ghi họ tên)
Phần đánh giá của GV chất	m bài

Tp. Hồ Chí Minh, ngày tháng năm (kí và ghi họ tên)

TÓM TẮT

In this project we design UI interface and build a website for movie studio. Our website has full function as required in report topic. User can visit and booking movie ticket, register, login, and management tools for admin of movie theater. Your will get more information when continue read our essay.

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CHAPTER 1: TOPIC OVERVIEW

1.1 Introduction

The movie ticket-selling website offers users a fast and convenient way to purchase movie tickets, while helping theaters manage revenue effectively. Users can view a list of movies currently playing in the theater, select seats, book tickets, make online payments, manage their profiles, view movie information, and learn about the theater's details. The website also includes an intuitive and easy-to-use calendar interface for the theater to manage tasks such as adding, editing, and deleting movies, as well as providing revenue statistics.

The website's interface is designed to be responsive and compatible with all devices, including desktops, tablets, and mobile devices, for a user-friendly experience. The theater offers services such as 2D, 3D, and 4D quality movies, snack combos, seat reservations, and whole theater rentals to ensure privacy and comfort for users. The website's secure and fast payment feature is made possible using e-wallet scan QR codes.

To enhance performance and scalability in the future, we have utilized technologies such as PHP, JavaScript, MySQL, and MVC in building this system.

1.2 System description

The online ticket-selling system is designed to provide customers with a fast and convenient way to purchase movie tickets, while also helping theaters manage sales efficiently. The website features a comprehensive list of movies currently playing in the theater, along with showtimes and ticket availability.

Users can search and filter movies based on their preferences, select seats, and book tickets online. The website offers a user-friendly interface that is compatible with all devices, providing a seamless experience for customers.

Registered users have the full function of unregistered users. Addition manages their profile information, view their order history.

Administrators have full control over the system, including managing users, managing schedule and ticket and viewing system statistics. Overall, the ticket-selling system provides a valuable service to movie-goers and theaters, streamlining the ticket-buying process and improving overall efficiency.

1.3 Purpose and Scope

1.3.1 Limitations on object and function Limitations on objects:

- The system is designed for a single movie theater only.
- The system does not support multiple languages (just English).
- The system does not have a mobile app version. This may limit the
 accessibility of the website for users who prefer to use mobile apps over web
 browsers.
- The system does not support customer reviews or ratings of movies. This may limit the amount of feedback available for both theaters and customers to improve the movie experience.
- The system does not provide social media integration or sharing features. This may limit the website's reach and visibility on social media platforms.

Limitations on functions:

- The system does not support multiple payment gateways or international currencies. This may limit the accessibility of the website for users who prefer to use other payment methods or currencies.
- The system does not provide advanced analytics or reporting features beyond basic sales data. This may limit the ability of theaters to gather insights and make informed decisions.
- The system does not offer a loyalty or rewards program for customers. This
 may limit the incentive for customers to use the website for repeat purchases.

1.3.2 Limitations on technology

Limitations on technology depend on the functional requirements and objects of the website. The following are the limitations on technology used in the movie ticketselling website:

- Programming language: PHP, which increases flexibility and allows for easy extension. However, this may limit the website's scalability and performance for larger audiences.
- Database: MySQL, which is used to store information about products, orders, customers, and more. However, this may limit the website's ability to handle large amounts of data.
- Model: MVC, which is used to reduce development time and provide a better approach to code and database management. However, this may limit the website's ability to integrate with other frameworks or technologies.
- User Interface: HTML, CSS, Bootstrap, and JavaScript are commonly used to design the website and provide the best user experience. However, this may limit the website's ability to provide a unique and personalized experience for users.

1.4 Practical significance

The movie ticket-selling website provides a practical and convenient platform for customers to purchase movie tickets. With the ability to view movie information, select seats, and make payments online, customers can save time and avoid long lines at the theater. In addition, the website offers features such as 2D, 3D, and 4D quality movies, snack combos, seat reservations, and whole theater rentals to ensure privacy and comfort for users.

For theaters, the website offers a streamlined way to manage revenue and inventory, as well as promotional programs. With the ability to approve orders and

manage supplier relationships, theaters can ensure accurate and timely information for customers.

Building a complete database and utilizing technologies such as PHP, JavaScript, MySQL, and MVC in the design and implementation process helps to enhance the website's competitiveness in the market. By continuously updating and improving the website based on customer feedback and industry trends, the website can continue to improve the overall booking experience for customers and increase the business efficiency of theaters.

CHAPTER 2: SYSTEM ANALYSIS AND DESIGN

2.1 Functional Requirement

The functional requirements of the movie ticket-selling website include the following:

- Displaying a list of movies currently playing in the theater, along with showtimes and ticket availability
- Allowing users to search and filter movies.
- Allowing users to view detail information of movie as description, trailer.
- Allowing users to select seats and book tickets online.
- Allowing registered users to manage their profile information, view their order history.
- Admin can managing movie and users: add, edit, remove movie and manage users information.
- Admin tools to scheduling movie: admins can add movie showtimes to the timetable.
- Using QR to check valid tickets: can use QR Scan to check movie tickets.

2.2 Non-functional Requirement

The non-functional requirements of the movie ticket-selling website include the following:

- Usability: The website should be user-friendly, responsive, and compatible with all devices.
- Performance: The website should be fast and efficient, with minimal loading times.
- Security: The website should be secure, with measures in place to protect user data and prevent unauthorized access.
- Scalability: The website should be able to handle a large number of users and transactions without any issues.
- Availability: The website should be available 24/7 without any downtime or disruptions.
- Maintainability: The website should be easy to maintain and update, with minimal downtime or disruption to users.
- Compatibility: The website should be compatible with all major browsers and operating systems.
- Accessibility: The website should be accessible to users with disabilities, with features such as screen readers and keyboard navigation.

2.3 Use-Case Diagram

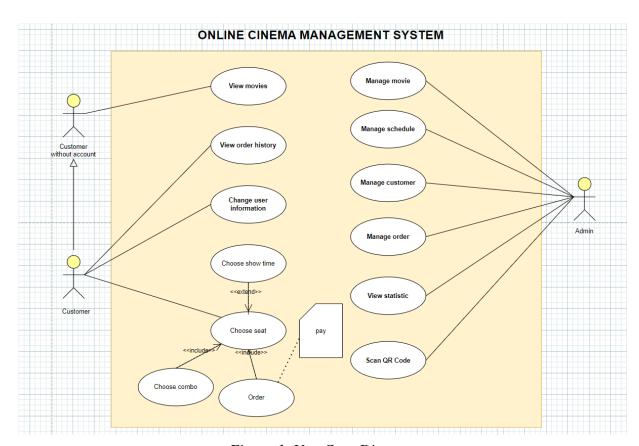


Figure 1. Use-Case Diagram

2.4 Database Design

2.4.1 Entity Relationship Diagram

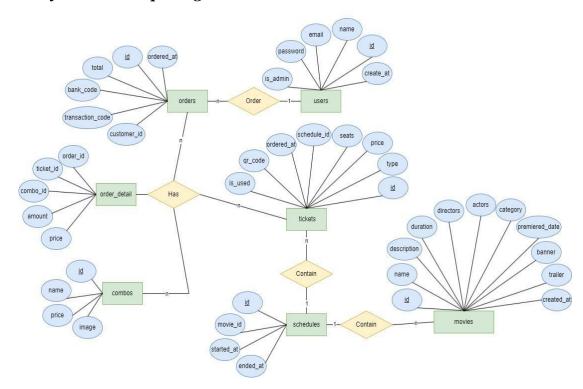


Figure 2. Entity Relationship Diagram

In this diagram, we have 6 entities:

- The "users" entity has 6 attributes (id, name, email, password, is_admin, create_at). There is a 1-n relationship between users and "orders" entity, meaning that a user can place one or many orders.
- The "orders" entity has 6 attributes (id, customer_id, bank_code, transaction_code, ordered_at, total). It has a n-n relationship with "combos" entity, which means that an order can have one or many combos. It also has a n-n relationship with "tickets" entity, which means that an order can have one or many tickets.

- The "combos" entity has 4 attributes (id, name, price, image). It has an n-n relationship with "orders" entity, meaning that a combo belongs to one or many orders, an order can have many combos.
- The "tickets" entity has 8 attributes (id, type, price, seats, schedule_id, ordered_at, qr_code, is_used). It has an n-1 relationship with "orders" entity, which means that a ticket belongs to one order, but an order can have many tickets. It also has an n-n relationship with the "schedules" entity, meaning that a ticket belongs to one or many schedules, a schedule can have many tickets.
- The "schedules" entity has 4 attributes (id, movie_id, started_at, ended_at). It has a 1-n relationship with the "tickets" entity, which means that a schedule can have one or many tickets. It also has a 1-n relationship with the "movies" entity, meaning that a schedule can have one or many movies.
- The "movies" entity has 11 attributes (id, name, description, duration, directors, actors, category, premiered_date, banner, trailer, created_at). It has an n-1 relationship with the "schedules" entity, meaning that a movie can have one or many schedules.

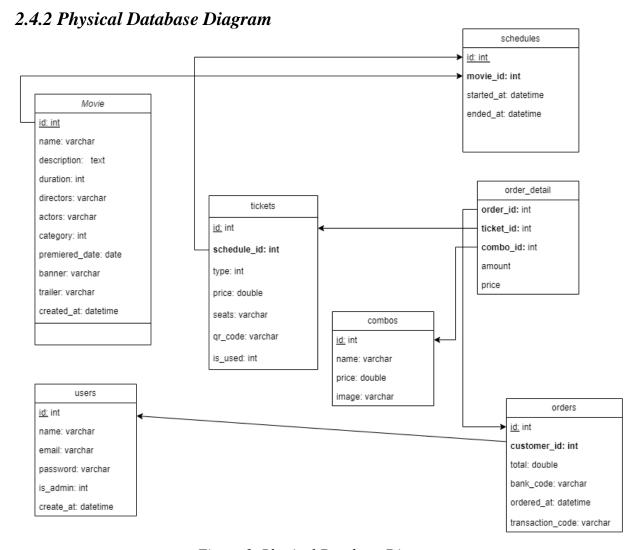


Figure 3. Physical Database Diagram

Base on Entity Relationship Diagram we create Physical Diagram for database ticket selling system. There have 7 tables include:

- Movie: contain information of movie with id of movie is primary key.
- Tickets: contain information of ticket with ticket id is primary key, schedule_id is foreign key.
- Users: stored information of user with user id is primary key.
- Order: stored information of order with order id is primary key and customer_id is foreign key (reference user id).

- Combos: contain combo food-drink-seat with combo id is primary key.
- Order_detail: store information of order with order_id, ticket_id and combo_id are foreign key.
- Schedules: save content of schedule with schedule id is primary key and movie id is foreign key (reference movie id).

CHAPTER 3: INTERFACE DESIGN

Using Figma to design UI in Desktop devices and mobile devices. Here is our link to figma design. Then, we explain interface above.

3.1 User interface

3.1.1 *Index*

- User can see some trending movies on slide.
- Users can see a few upcoming movies and choose to see details about that movie.
- User can see some facts of the cinema.

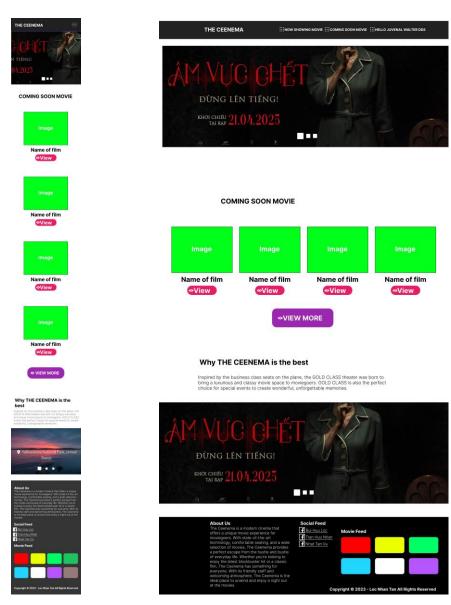


Figure 4 Mobile and Desktop UI Index page

3.1.2 Now Showing Movie

Users can see a few now showing movies and choose to see details about that movie

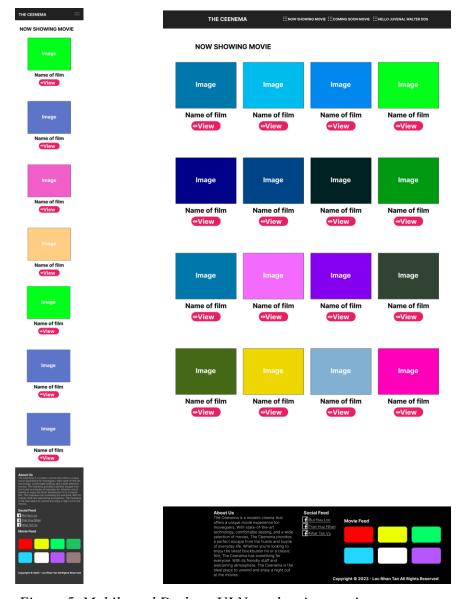


Figure 5. Mobile and Desktop UI Now showing movie page

3.1.3 Coming Soon movie

Users can see more coming soon movies and choose to see details about that movie

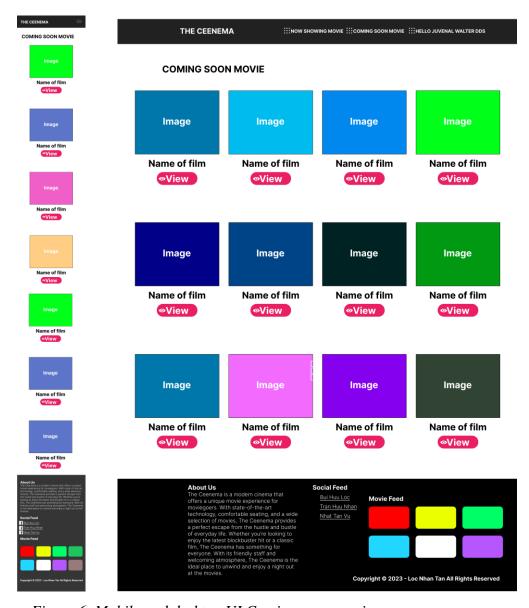


Figure 6. Mobile and desktop UI Coming soon movie page

3.1.4 Login page

- User can login account here before order.
- User can choose to reset password if o-forgot it.
- User can choose to register account if does not have account.

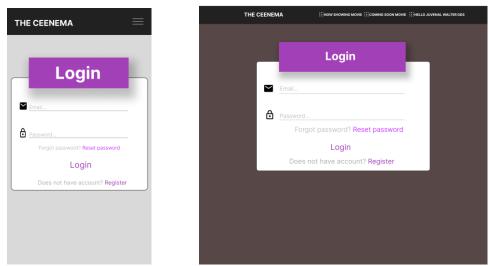


Figure 7. Mobile and desktop UI Login Page

3.1.5 Register page

- User creates account here with Name, Email, Password.
- User can choose to reset password if o-forgot it.

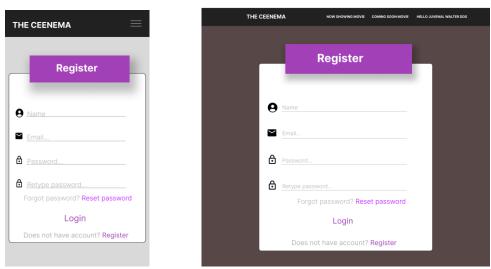


Figure 8. Mobile and desktop UI register page

3.1.6 View Profile

- User can view they profile.
- User can choose to change password in this page.

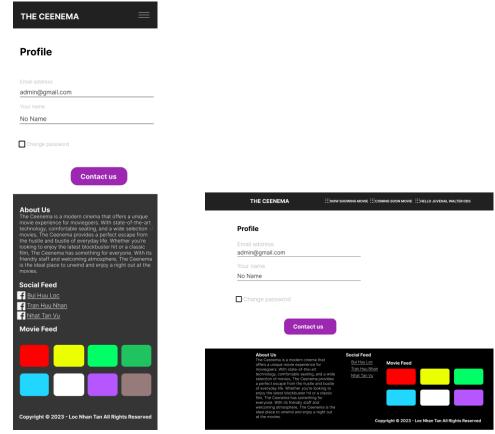


Figure 9. Mobile and desktop UI View Profile page

3.1.7 Film detail

- User can view detail of the film which they chose.
- User can choose to watch film trailer.
- User can book the ticket for the film.

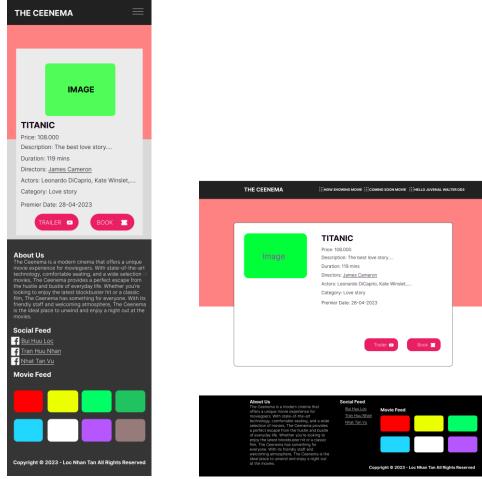
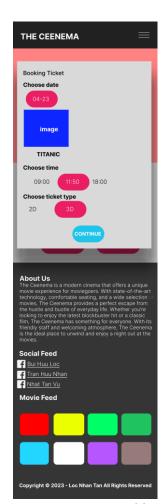


Figure 10. Mobile and desktop UI: film detail page

3.1.8 Booking film

- User book tickets on this page.
- User select date, time, type of film (2D or 3D).



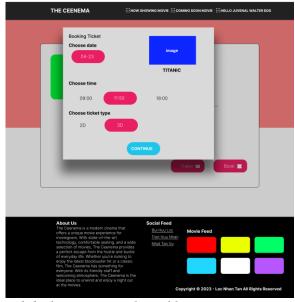


Figure 11. Mobile and desktop UI: Booking film page

3.1.9 Choose seats

- User can choose seats.
- User can view the information and see the price after choose seats.

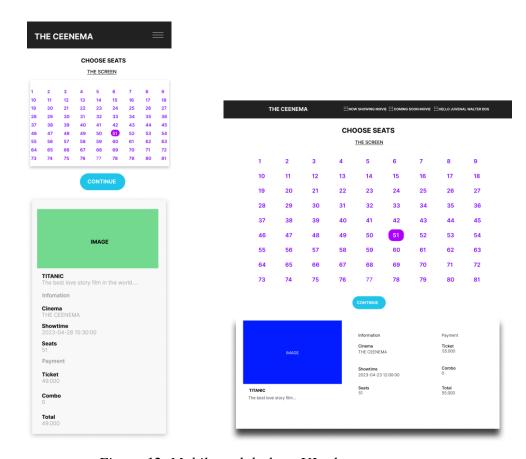


Figure 12. Mobile and desktop UI: choose seats page

3.1.10 Choose combos.

- User can choose combos.
- User can view the information and see the price after choose combos.

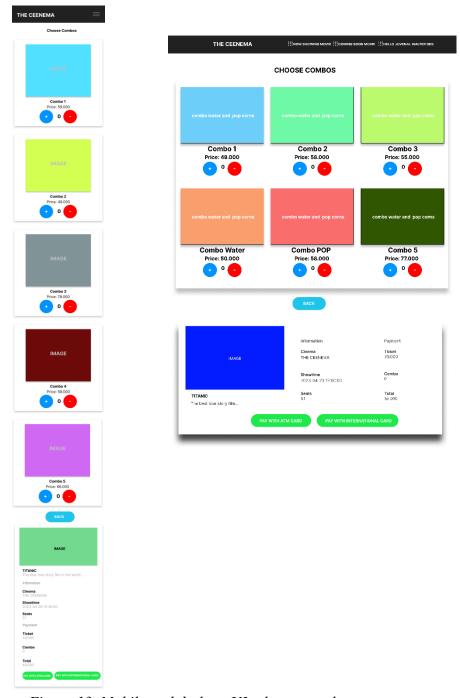


Figure 13. Mobile and desktop UI: choose combo page

3.1.11 View History

- User can see the booking history.
- User can choose to view more details of booking history





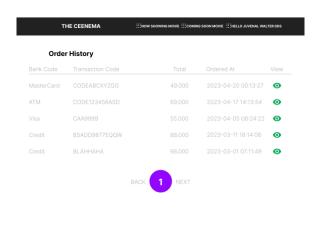


Figure 14. Mobile and desktop UI: View Booking history

3.2 Admin Interface

3.2.1 Manage movie Index

- Admin can see movies that have been created
- Admin can choose to add, delete or edit.

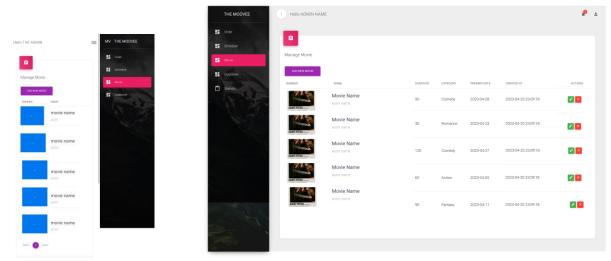


Figure 15. Mobile and desktop UI ADMIN: Manage movie index page

3.2.2 Add movies

- Admin can add movie in this page.
- Admin add information (name, description, duration, select category, actors, directors, premiere date, add trailer and banner image).

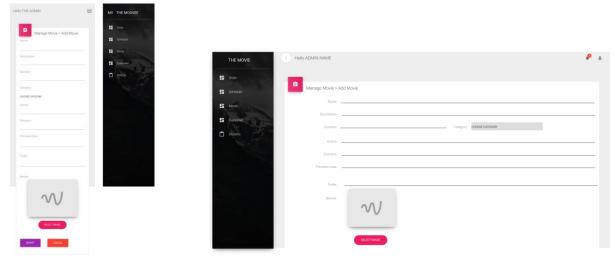


Figure 16. Mobile and desktop UI ADMIN: add movie

3.2.3 Edit movies

- Admin edit information of movies in this page.
- Admin edit information (name, description, duration, select category, actors, directors, premiere date, add trailer and banner image).

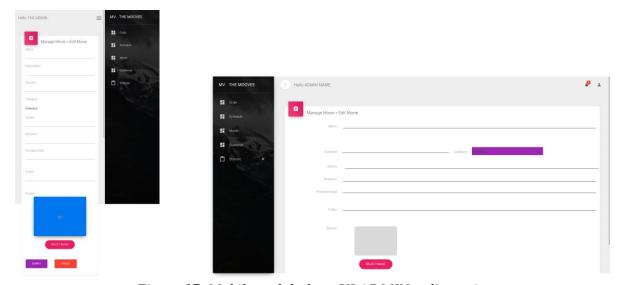


Figure 17. Mobile and desktop UI ADMIN: edit movies

3.2.4 Manage customers

- Admin can see informations of customers.

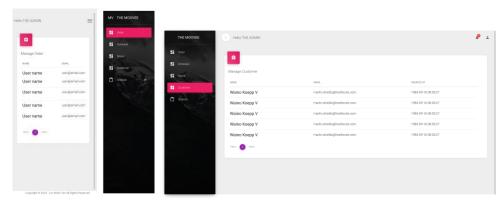


Figure 18. Mobile and desktop UI ADMIN: manage customers

3.2.5 Manage order

- Admin can see informations of ordered.

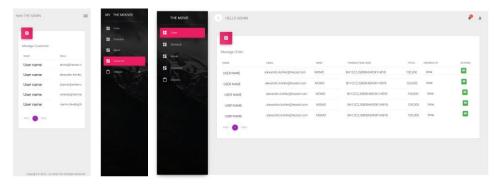


Figure 19. Mobile and desktop UI ADMIN: manage order

3.2.6 Manage schedule

- Admin can view schedule of movies.
- Admin can choose to edit schedule.

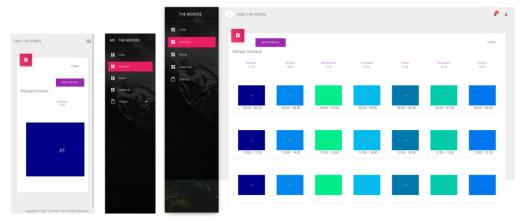


Figure 20. Mobile and desktop UI ADMIN: manage schedule

CHAPTER 4: DEMO SYSTEM

4.1 User interface

4.1.1 Index

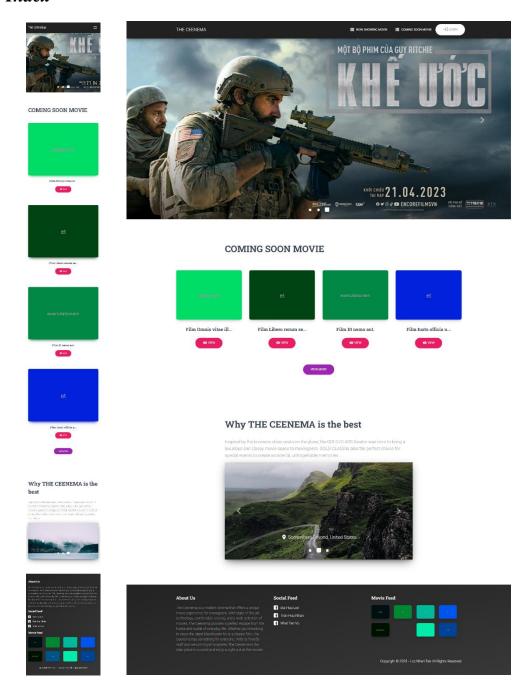


Figure 21 Real Mobile and Desktop Index page

4.1.2 Now Showing Movie

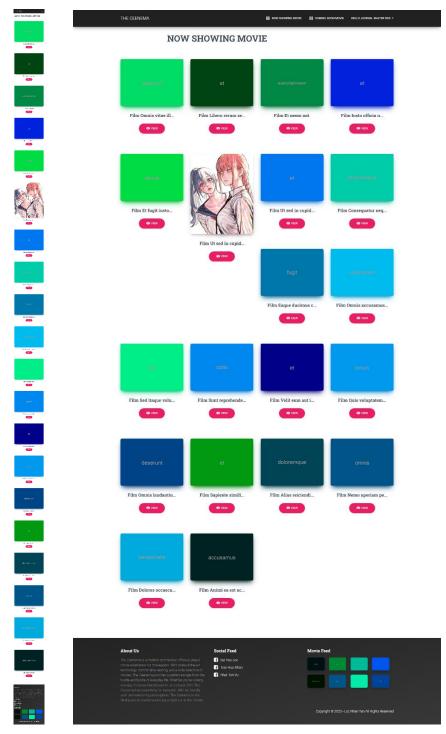


Figure 22. Real mobile and desktop screen: now showing movie

4.1.3 Coming Soon movie

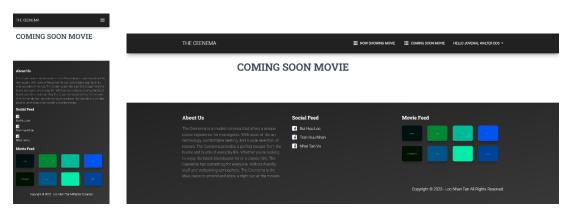


Figure 23real mobile and desktop screen: coming soon movie

4.1.4 Login page

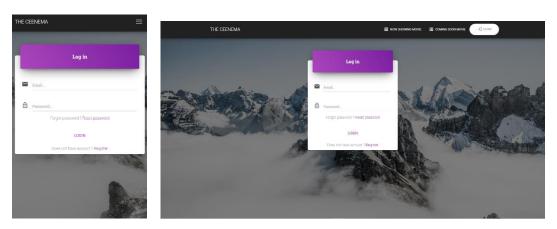


Figure 24. real mobile and desktop screen: login page

4.1.5 Register page



Figure 25. real mobile and desktop screen register page

4.1.6 View Profile

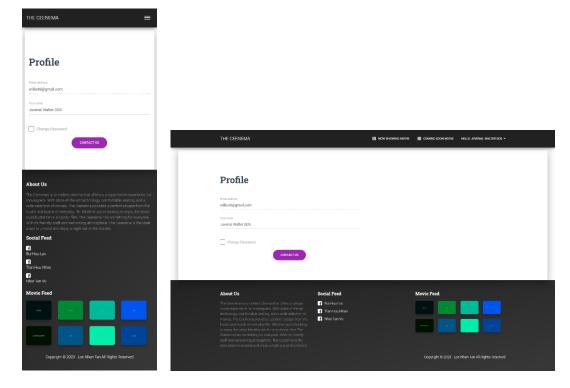


Figure 26. real mobile and desktop screen view profile

4.1.7 Film detail

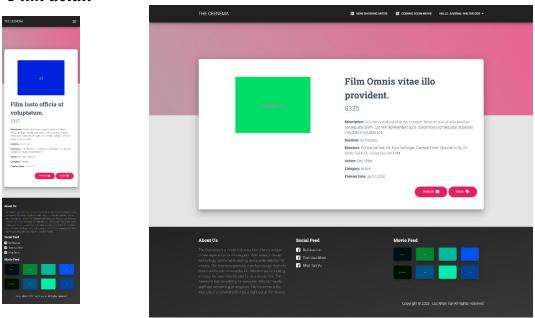


Figure 27. real mobile and desktop screen: film detail page

4.1.8 Booking film



Figure 28. real mobile and desktop screen: booking film page

4.1.9 Choose seats

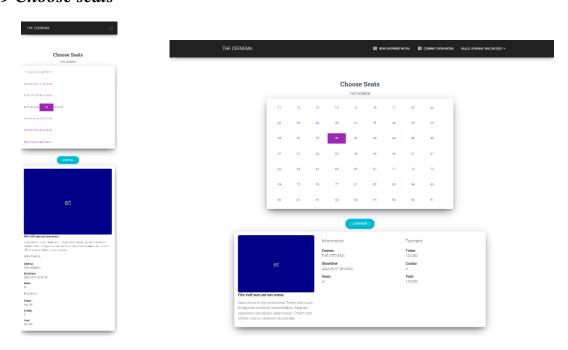
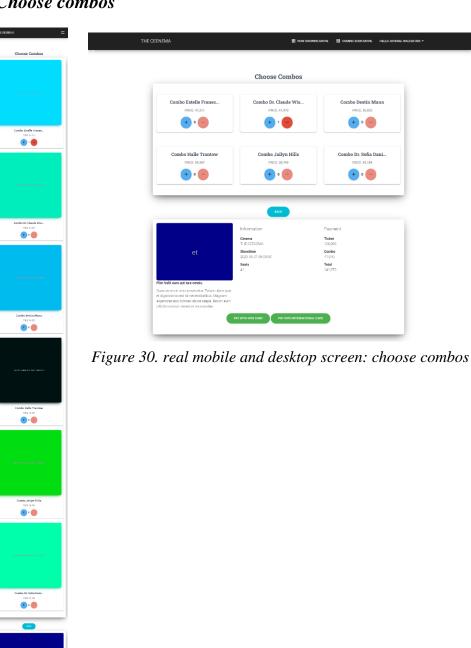


Figure 29. real mobile and desktop screen choose seats

4.1.10 Choose combos



4.1.11 View History

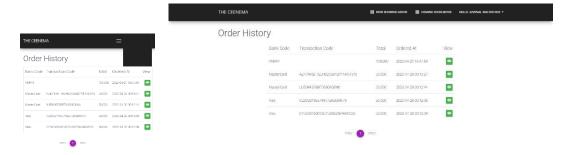


Figure 31. real mobile and desktop screen: view history page

4.2 Admin Interface

4.2.1 Manage movie Index

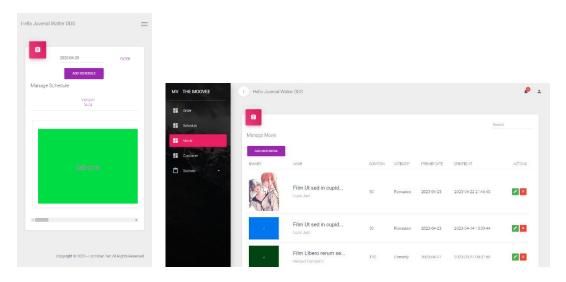


Figure 32. real mobile and desktop screen: admin manage movie index

4.2.2 Add movies

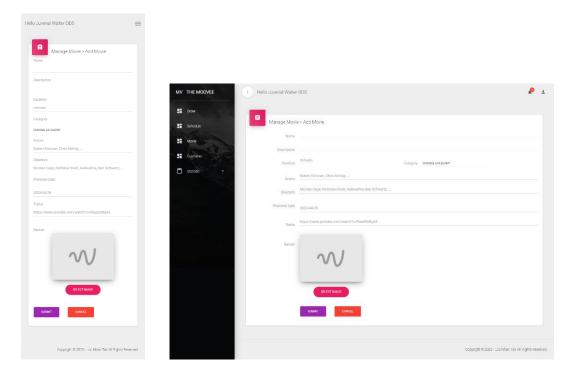


Figure 33. real mobile and desktop screen: add movie page

4.2.3 Edit movies

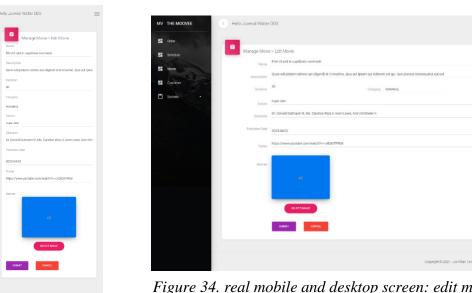


Figure 34. real mobile and desktop screen: edit movies page

4.2.4 Manage customers

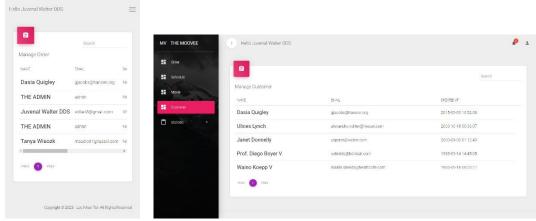


Figure 35. real mobile and desktop screen: manage customers

4.2.5 Manage order

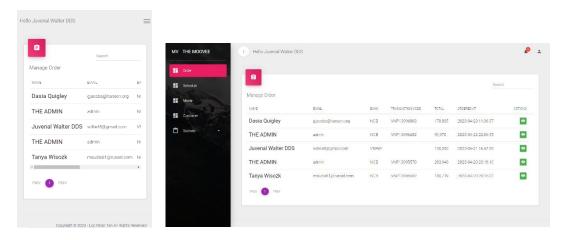


Figure 36. real mobile and desktop screen: manage order

4.2.6 Manage schedule

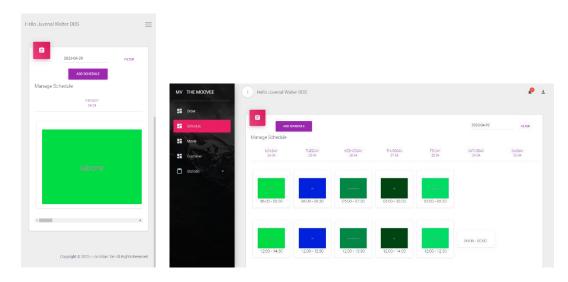


Figure 37. real mobile and desktop screen: manage schedule