



澳門大學

UNIVERSIDADE DE MACAU

UNIVERSITY OF MACAU

UNIVERSITY OF MACAU

FACULTY OF SCIENCE AND TECHNOLOGY

CISC3003: Web Programming

PMacau House Rental Platform

Team 08-Pair02&Pair03&Pair23

DC126711 HUI GUANHAO

DC027495 DENG YIFAN

DC127910 CUI JIANFU

DC126057 HE GUO JHON KOU JING

DC125611 WONG KUOK LEONG

DC127947 MA YINGCHEN

Date of Submission: 06/05/2024

A. Abstract

The Macau House Rental Platform is an innovative digital solution designed to simplify the property rental process in Macau. The platform bridges communication between landlords and tenants by providing a range of services to landlords and tenants, simplifying the transaction process. We specialize in developing rental management platforms that allow users to seamlessly manage rental activities through a web interface. Our platform supports a variety of features, including user authentication, property listings, and account management. Users can log in or register, view rental listings, adjust filters, and manage their profiles. Advanced features include interactive search and user-driven content updates. The backend of our platform is implemented in PHP and SQL, ensuring secure data processing and storage. Front-end development utilizes HTML, CSS, JavaScript, and jQuery to create responsive and intuitive user interfaces. We have relatively completely integrated these technologies to provide comprehensive solutions for rental management.

B. List of Project Services:

1. Tenant/landlord Login/Sign up
2. Rental listing browsing
3. Housing information screening
4. User profile management
5. Order management
6. House information management(landlord)

C. Team tasks:

C-I. Backend development (PHP, SQL):

- User Authentication System: Develop a secure login and registration system. This includes handling user data, password encryption for security, and maintaining user status between pages.
- Database design and management: Use SQL to implement relational databases. Property
- Listing Functionality: Developed backend logic to handle creation, viewing, updating and deletion of properties.

Reservations and Transaction Processing: Create a system to handle property reservations, including date management, transaction processing, and history tracking.

C-II. Front-end development (HTML, CSS, JavaScript):

- Page Layout and Design: Develop responsive web pages using HTML and CSS to provide a seamless user experience across multiple devices.
- Interactive features: Use JavaScript to implement interactive elements, such as windows for login and registration.
- Form processing and validation: Create forms for user registration, property listings, and

reservations. Use JavaScript and jQuery for client-side validation to ensure data integrity before submission to the server.

- **User Feedback and Navigation:** Enhance user interaction with instant feedback mechanisms such as error messages and confirmation messages, use JavaScript to manage dynamic content, and enable smooth navigation without reloading the page.

D. Project achievements:

D-I. Develop responsive web pages (HTML/CSS):

During the project, we successfully developed multiple responsive web pages. These pages are built using HTML and CSS to ensure a good visual experience and user interaction on different devices.

In particular, we use CSS media query technology to ensure that the website can be displayed well on devices with different resolutions such as desktops, tablets, and mobile phones.

D-II. Implement user authentication and session management (PHP):

We implemented a comprehensive user authentication system using PHP scripts on the backend. The system supports user login and registration functions, enhancing convenience.

To ensure the security of user data, we maintain user login status through the PHP session management mechanism to ensure that user information can be safely transferred between different pages.

D-III. Establish a sound database (SQL) for managing user data and property lists:

Using SQL database technology, we designed and implemented a structured database to store user information, property data and transaction records.

The database design takes into account the integrity, security and scalability of data, supports efficient data query, update and management, making the data processing on the backend of the website more efficient and secure.

These achievements have trained our team's practical application of front-end and back-end technologies, as well as their capabilities in database management, providing users with an online rental management platform with comprehensive functions and smooth operation.

E. Installation instructions:

By creating a database called "rentsys" and creating multiple tables in it, These include admin, deal, house, landlord, orders, service, tenant, and wanthouse tables. Each table has corresponding fields and primary keys, and foreign key relationships are established between some tables. In addition, some initial data is inserted into the code for testing and demonstration purposes. By executing this SQL code, we can quickly create a complete database structure of the housing rental management system, which provides the basis for the subsequent development and application.

F. Incomplete aspects:

- The password retrieval/reset function in the login interface is not implemented.
- The search bar directional effect is average.
- The trading module is relatively crude and rudimentary

G. Flow chart:

