

Hotel professional information system

Project Ideas

Overview

Compared with the current traditional way of hotel reservation, this project is a hotel reservation system used online. Customers can browse the hotel room information in advance through our project, and customers can also use their own information to book hotel rooms and other operations. Compared with the traditional way, it is more convenient and fast, allowing users to complete the booking operation at any place.

At present, most hotels in Australia still use the traditional reservation system. Customers book hotel rooms through advertisements, flyers, the hotel's corporate web page, and then call the hotel's phone number and talk to the staff. And the staff who receive the customer request, then through the manual way, the record book on the reservation way to carry out the operation. While manual systems work well, they are also cheap to run, especially when there are fewer customers. However, with the gradual development of the tourism industry, the disadvantages of the traditional room reservation system have gradually become obvious. This requires the hotel reservation staff to follow the correct procedures as far as possible to carry out this work, if the customer's information is accidentally mixed up, handwritten reservation error or the customer calls from a bad signal caused by the staff can not hear the information. This will result in poor customer service. In addition, such a manual, paper-based documentation system makes it difficult to sort and rank customer and hotel information. This can impede some reporting and decision-making. And our team can provide need to improve the phenomenon of enterprises with a set of online, the network reservation system, customers can be anywhere in the network, the use of personal computers or mobile devices (such as mobile phones, tablets PC, laptops, etc.) to access our project, enter the hotel reservation system, they can browse and select a room, Make reservations with your own information. The hotel receives the request and makes subsequent decisions. This is compared with the traditional reservation system, it does not rely on manual, and information will be automatically saved in the background database of the hotel, reducing the possibility of error. For customers, this method of booking on the network is more convenient and fast.

Motivation

The motivation for our team's decision to develop this project is simple: the situation of COVID-19 has improved compared to the previous two years. Tourism is one of Australia's major industries, and we can see from the latest data that Australia had a very high number of arrivals in January 2022. This gives more tourists the opportunity to travel to Australia.

Overseas Arrivals and Departures, Australia

Statistics on international travel arriving in and departing from Australia.

Reference period January 2022

Released 16/03/2022

▼ Future releases

▼ Previous releases

Key statistics

In January 2022:

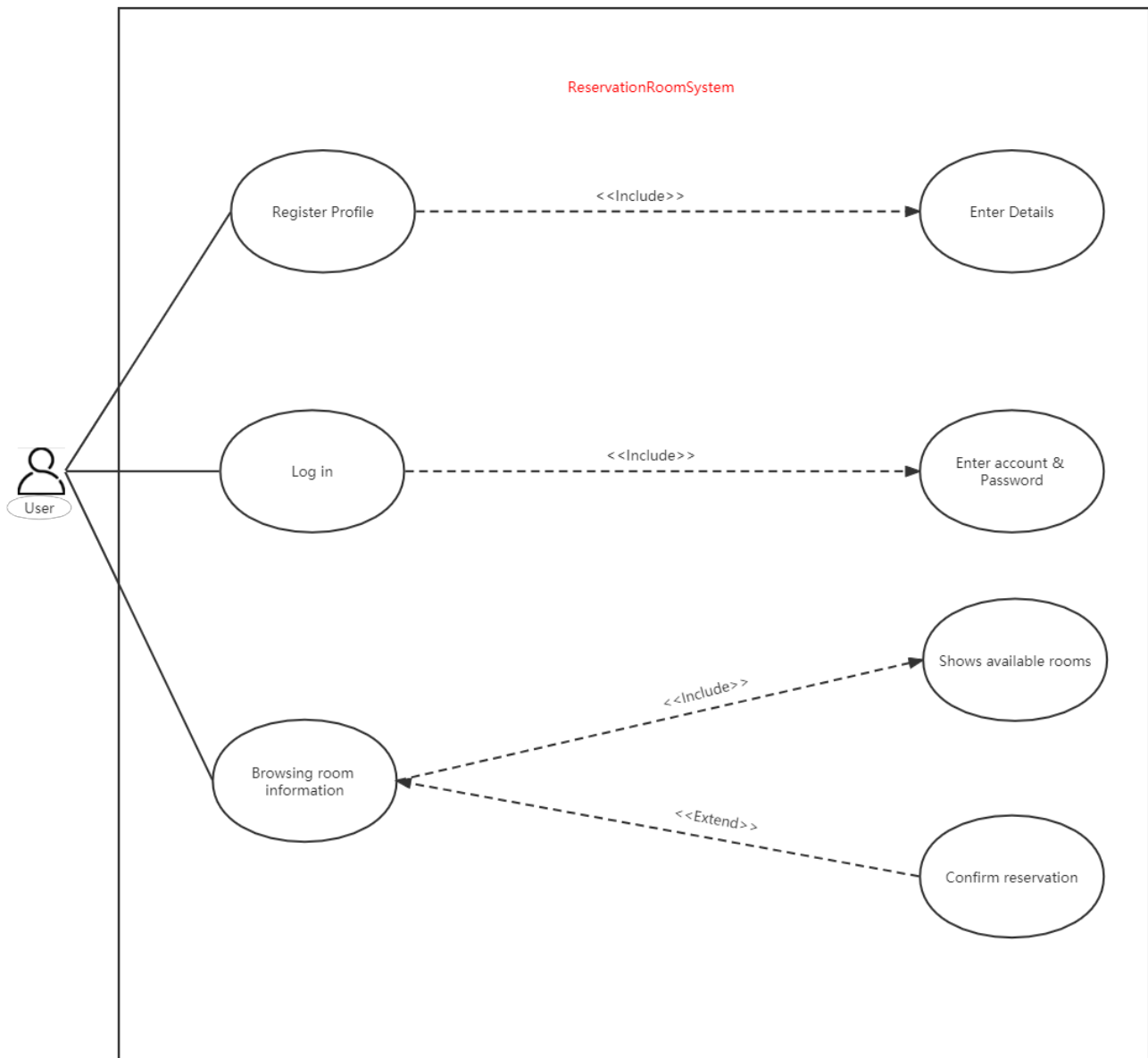
- Total arrivals: 265,190 – a monthly increase of 69,420 trips.
- Total departures: 188,200 – a monthly decrease of 39,030 trips.

From this data, we can know that this project has certain market demand because our products can let customers know the hotel information and room configuration before travel. At the same time, booking hotels online during the pandemic can also avoid human contact and reduce the potential spread of the virus. Compared to traditional booking methods, our program can help customers get a better accommodation experience during their trip.

Second, we choose to use the web to make our system, because the mainstream mobile devices on the market and applications of the personal computer (PC system, ios, android), all need to use different languages to compile, in order to let all platform applications run smoothly and compatible, the same procedure we need to do three times or more, This will greatly increase the cost and duplication of effort. Secondly, the applications on the three different systems are difficult to maintain. Once errors occur, it takes a lot of time to troubleshoot. In addition, the students in our group are still college students and have only learned limited IT courses. Using web pages is simple, and fast, and the web development kit language compatibility is excellent, can be applied to all the above systems at the same time, compared to each system's individually compiled applications, web pages can also achieve the desired effect.

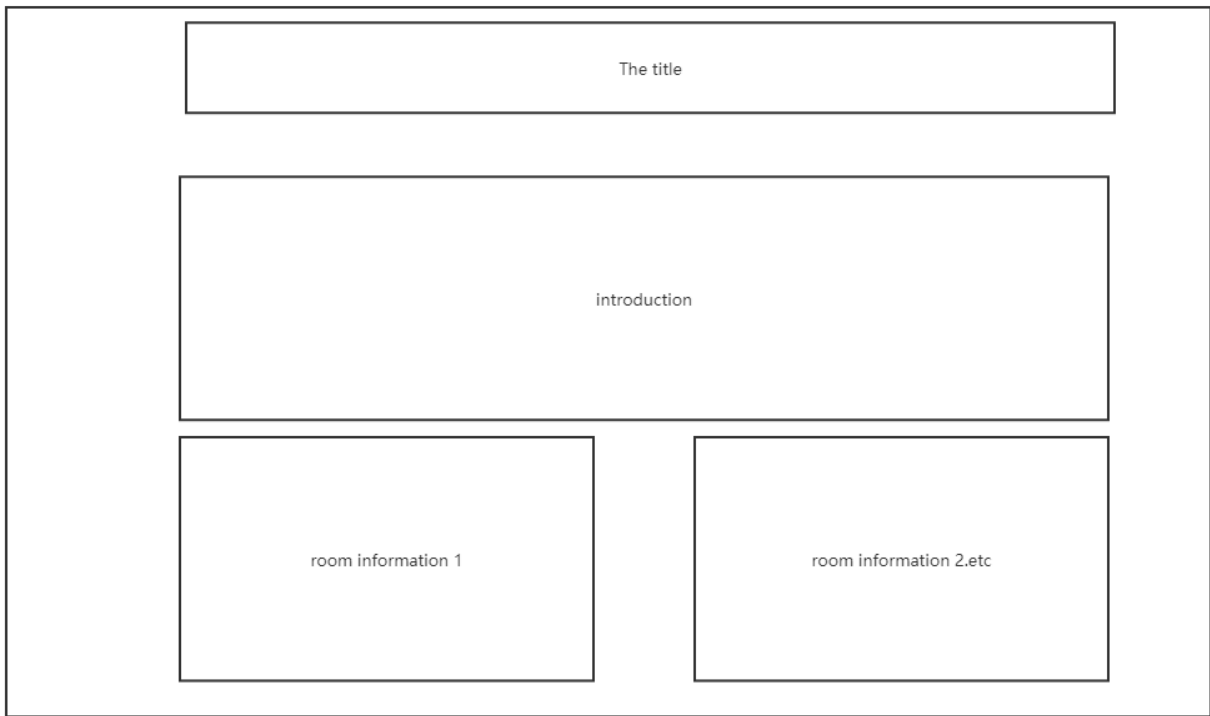
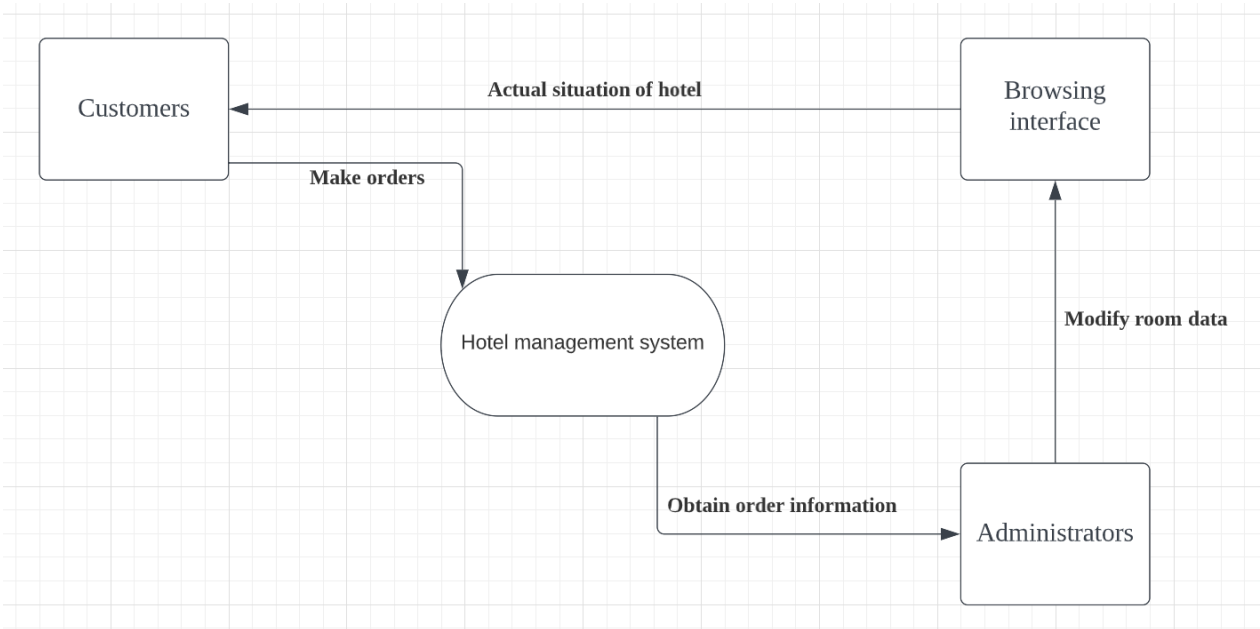
Combining the above two points, I think we can improve the Australian immigration this year to improve the tourism industry, and it is also a let customers try to use the opportunity of our products, compared to our competitors, our system is available to small businesses, so we can use the low-cost competition strategy, with less cost, And more compatible web development methods to provide a competitive advantage in the industry.

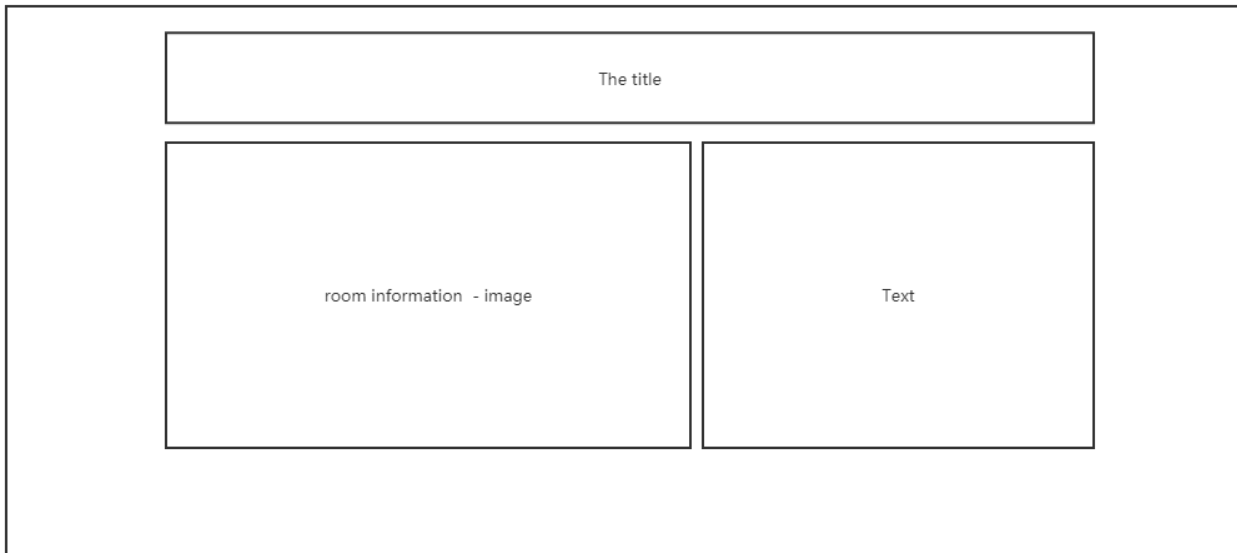
The following is a use case diagram of our product to show how the user participates in the reservation system.



When users need to book a room, they can open the web page to enter our system. In the system, users first need to register to save their own information, when the customer registers an account and logs in. You can view information about each room, including details such as room size, amenities, prices and a picture of the room. When the customer has a room that he wants to book, he can make a reservation. When the user confirms the reservation, the system will prompt the user that he has completed the operation.

The following data flow chart shows administrators' management of the system and the impact of users' and administrators' operations on the system. The administrator can change/add/delete room information according to the actual situation of the hotel, which will affect the information that users see in the browsing interface. The customer can select according to this information. When the user confirms the selection, the confirmed request will be sent to the system background for the administrator to obtain.





From the example diagram of the system, we can see that the system is presented as a website. When users enter the home page, they see information, including title pages/menus with features, information about the hotel, and information about the different rooms of the hotel. When the customer clicks on the room information, it will enter a page showing specific and more detailed information. All pages can be switched through the menu function of the title page, and the customer can switch to different pages at any time by this function.

Customers can perform the following detailed operations in our system to complete the process:
Register - Login System Page Select and view room information booking Enter the user's details
Confirm the reservation

When the customer confirms the reservation, the system will send the customer's information (data) to the background. The technology will be implemented by connecting the ordering system to a simple database. So when the customer confirms the reservation, the reservation system will give us the data back to let us know that the customer has confirmed the reservation.

When the customer completes the above steps, we will try our best to reduce the load of the system on the device, so that the customer can use our system more smoothly and quickly, and reduce the occurrence of system crashes and bugs as much as possible.

We made the following changes to the system to meet the REQUIREMENTS of UI criteria as far as possible, so as to improve the user experience of the system. Because our products are designed to make it easy for customers to see the information they want to see, we try to present information as visually as possible. At the same time, the UI design should be as simple as possible, the size should be appropriate, can not use a large number of high contrast or colour conflict, so as to avoid negative impact on the customer's browsing information. When saving customer reservation information, the web page caching feature automatically stores user information in the background cache, preventing customers from performing tedious and repetitive operations or entering the same information multiple times. In each step of the system, we provide a step to go back to the previous step, so that customers can easily reverse their actions if they make a mistake, or if they want to choose, go back, or cancel the current step. At the same time, in some key steps, we will conduct a second confirmation to ask users whether they need to perform, so as to prevent accidental contact from causing other results.

The above use case diagrams and concepts are all the assumptions of this project. In the actual production process, we will adjust/change some functions according to the test situation and the

production level of our team. Because feasibility is a very key factor, it is difficult to see whether some functions are reliable in the project without testing. So by the time the deliverables are complete, we'll have more refined use case diagrams, concepts, and some extensibility of the system that we've built.

In terms of profit channels, we plan to recommend this system to some hotels that still register customer information and book rooms by manual system after the work is completed. We feel that this system is ideal for sales, because it can improve inefficiency, error prone opportunities, and increase the hotel's revenue. At the same time, the development trend of information system management is inevitable, because now the computer, the prevalence rate of mobile devices, more and more high, there are more and more industry towards informationization, there are a lot of this industry have plenty of opportunity to make a new change, to change a booking hotel industry is undoubtedly one of the options.

Tools and Technologies

I plan to build this project as a web page. Because of the high compatibility of web pages, different mobile devices only need to use browsers to run on mobile devices. We will be using Web programming technologies (HTML/PHP), and web programming is not only an open-source technology, it also has very low software and hardware requirements. We use Notepad+ software for editing, which supports and is compatible with most of the programming languages. In terms of hardware, ordinary home or office computers can meet this requirement, because the web programming technology is run locally.

At the same time, we can consider using modular web editing technology (such as WordPress) to develop this project. Compared with traditional marginal technology, this is a modular web editing platform, which can be built with ready-made templates more easily.

This project will be used on mobile devices or personal computers, so our project will adapt to these devices as much as possible and carry out as many tests as possible to improve the compatibility of the project on different devices and reduce the occurrence of errors. We also try to make the interface as easy to recognize as possible, using appropriate fonts, background colors, text and image layouts, etc. Improve user experience.

Skills Required

There is no doubt that the operation of a project requires the cooperation of people in different positions to achieve success. In terms of our project production, front-end personnel need to learn some basic network skills, such as application programming and construction, because our project runs on the network. We can use WordPress for modular web page editing, or we can use traditional HTML/PHP language to build our projects.

This project also requires some artistic skills, because we need to give our clients a comfortable browsing experience, so we may need to hire someone who knows graphic design to help us design the user interface to improve the browsing experience.

At the same time, our products may need to connect to the database to upload and read data, so we also need some programmers who are proficient in database application skills.

Finally, we need someone familiar with business information systems. Because it is important to have use case diagrams along the way, this will give everyone involved in developing an understanding of how users and operators are involved at every step of the project.

I think we need these people or skills to keep the whole development process running efficiently and professionally.