

HOTEL MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted by

MEHAKDEEP SINGH- 20BCI0319 SOUMYA JHA- 20BCE2547 ARPITA PAL- 20BCE2559

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1. INTRODUCTION

Like any other industry, the hotel business offers owners and guests socio economic prospects. Its purpose is to offer consumers hospitality services. These clients may include tourists, businessmen, foreigners, travellers, and other visitors.

Customers are generally limited in their ability to find a place to spend the night because the customary procedure is to hunt for a hotel once you have arrived at the specific spot, step inside, and see if there is an open room. If there isn't a room available, you'll need to move on to the next nearest hotel and make another inquiry.

What transpires, then, if you move around occasionally extremely late at night in quest of a room and all nearby hotels are fully booked.

Other times, you might be fortunate enough to have the hotel's phone number and can call them to make a reservation. But do the hotel staff members actually guarantee that you will have a room? To go and have a room reserved for you would be fortunate. Those who walk in are quickly taken care of as opposed to those who may call to book a room. If you have friends or family in the region you want a room reserved, they must go and check for you at other times as well.

The hotel and the customer are not connected by any mechanism that verifies that the consumer has actually reserved a room, therefore for some reason he is guaranteed a room. This can make customers really stranded especially if it is getting late in the night.

1.1. Abstract:

The hotel business is a business enterprise for the proprietor and a haven for the visitor or traveller. If a consumer has not made sufficient plans according to the current system, he may become stranded in his attempt to book a hotel room to spend the night.

Hotel Booking System is a booking engine that assists hotels in accepting bookings and processing payments online. It enables visitors to make secure online reservations through hotel websites.

Hotel Booking System is a full-featured hotel quote system that includes the critical functions of Hotel HTML, CSS, PHP for Hotel Booking System. It is an online reservation system that manages hotel room availability and online bookings. It handles

all hotel reservations made through the hotel website. Additionally, it increases customer experience and offers immediate confirmation for hotel reservations.

With the use of an online reservation system, customers may arrange their dates and duration of stay, choose their room type, and pay all at once.

The majority of travelers these days book hotels online, so hotels are searching for an internet solution to increase hotel income.

1.2 Problem Statement:

Web application for Hotel reservation. We will take the selection criteria from user and display the hotels list for user basing on the criteria. User can book the room if there is availability of the rooms in that particular hotel.

After analyzed various traditional hotel room booking system, we had noticed the below problems in their system.

- Manual system for storing records is not consistent as some inaccuracy can creep in while writing records manually.
- Guest or visitors may face hard time to getting place to stay in area.
- It is difficult to store record of availability of room and huge number of customer's records.
- More manpower is required and the current system consumes too much time to making reservation and storing data.
- Maintaining of up to date availability of inventory is bit difficult, thus, it is making hard for executive to search the particular records and room.
- Payment processing and collection is difficult.
- Inaccurate of records or data.
- There is no centralized database can be created as information not at one place.
- More money and paper and other resources are wasted to store the record of available rooms and customers.

Normal user:

- Can register for the site
- Search the hotel details based on the criteria.
- Book the hotel room
- Book taxi services
- View various facilities

A good hotel booking system needs to have a user-friendly interface that helps both guests and staff.

A convenient calendar front-desk view will be a huge advantage to make the reservation process simpler. The software will need to have a plugin or javascript that can be embedded into your hotel's website. Or, it should be able to redirect visitors to an online micro-site or portal from which they can complete their reservations.

The <u>booking engine</u> should provide your guests with all the information that they may look forincluding prices, packages, room types, add-ons, inclusions, and other details, without them having to scroll through your website.

Review Management

Reviews are extremely important to your hotel's reputation and business. They are the best marketing tool your hotel can have. According to a report by SiteMinder, 81% of travelers prefer to read reviews before booking a hotel, and 91% of 18 to 34-year odds treat reviews as they would personal recommendations from friends.

As a hotelier, you should encourage your guests to leave online reviews for your hotel. Make it a point to engage with those reviews by replying to them. This provides a better experience to your guests as they feel acknowledged and appreciated.

A proficient hotel booking system allows you to both records your guests' feedback as well as reply to the feedback that has been given. Genuine and prompt response to feedback can potentially convert guests into loyal customers.

24/7 Support:

The hospitality industry never sleeps, and problems with software can occur at any time. Make sure that your service provider offers 24/7 support.

Choose a provider with excellent service and support, and willing to offer you quick and easy resolutions at any time.

A hotel system manages information about rooms, reservations, customers, and customer billing. A customer can make reservations, change, or cancel reservations through the hotel website. When a customer makes reservations, he/she needs to check if a room the customer want to reserve is available. If a room is available, the customer enters his/her information to the system and receives a confirmation number from the web site.

A desk clerk checks in a customer with only a prior reservation, change the checkout date, and check out the customer. A room is assigned to the customer at check-in time and a customer billing record is created at that time. The customer billing record is updated every night at 12. When a customer checks out, the desk clerk prints the bill. A customer can pay by cash, check, or credit card when he/she checks out.

Minimal Features:

- Adding Hotel information such as hotel name, location, number of rooms, facilities etc.
 to the database
- Listing the hotels based on different criteria selected by the user.
- User able to select a hotel and book a room.
- Booking permitted only if there are rooms available
- Displaying the reservation status.
- Registration of users.
- Update user details.
- Modify hotel details.
- Approval of the details entered by the hotel agent.
- Delete user/hotel details by admin

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1.3 Technical Specification:

- The system supports customers booking and able to modify them
- Customers can search based on hotel, apartment, inns (ex. Radisson, Singapore)
- When a customer search for hotels, apartment, and the search result must contain hotel or
- apartment information (Address, Ratings, and Price) and also its availability within
- choosing check in and check out date.
- Customers able to cancel their booking from their account.
- Staffs able to edit customers booking information (updating check in, check out, room
- preferences, bed preferences and also cancelling booking).
- Customers can book online and pay with credit or debit card.
- The system must send booking confirmation email after successful payment.
- Customers can write reviews about hotels and apartment and also rate them.
- Customers able to check their booking status from their individual account.
- Customers can send feedback or call the company for booking purposes.
- Customers can check for latest promotion or deal.

NON FUNCTIONAL REQUIREMENTS

- The system must ensure that all the transferable data as for examples customers credit or
- debit card number, CVV Code, e-payment should be done in secured connection.
- The system must be able to handle multiple transactions a time.
- The system must provide customers 24*7 hours online booking service.

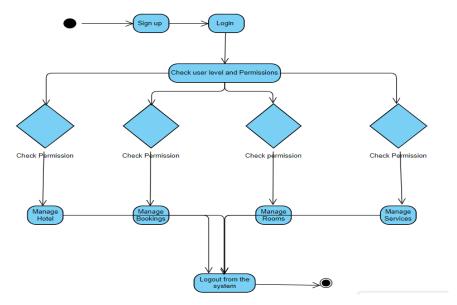
- The system should support almost all the browsers (Internet Explorer, Safari, Chrome,
- and Firefox).
- The system should be able to convert the price from Malaysian to USD and SGD.
- System should send the newsletter about ongoing promotions or deal to registered
- customers.
- Customers need to cancel the booking before 24 hrs. otherwise their credit card will be
- charged for one day.
- In promotion time the system will charge credit card promptly.

2. Existing System Problems:

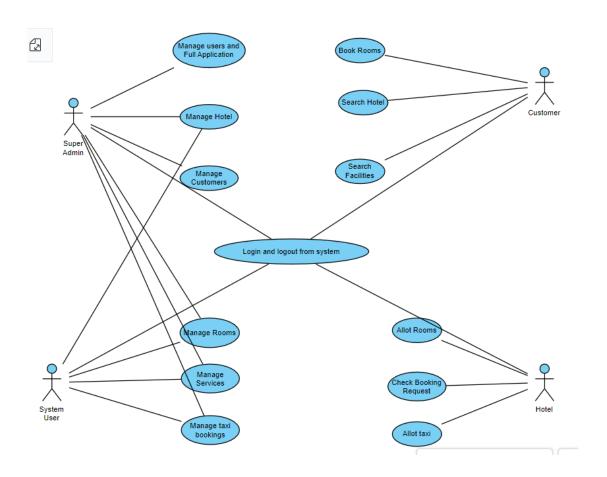
So, the existing Systems may or may not include Mishandled Reservations and Double Bookings. A nightmare scenario for any hotel manager, the double-booked room or mishandled reservation is a tough but sometimes unavoidable part of the job, Incorrect Guest Preferences, Third-Party Scams and not being able to upload ticket pdfs.

3.1. UML Diagrams:

Activity Diagram:



Use Case Diagram:



3.2. Module Description:

HTML:

HTML Modules allow web developers to package and access declarative content from script in a way that allows for good componentization and reusability, and integrates well into the existing ES6 Modules infrastructure.

The introduction of ES6 Script Modules has provided several benefits for javascript developers including more componentized code and better dependency management. However, easy access to declarative content has been a consistent limitation with Script Modules. For example, if one wants to pack a custom element definition in a module, how should the HTML for the element's shadow tree be created? Current solutions would involve generating it dynamically (document.createElement or innerHTML), but it would be preferable to simply write HTML and include it with the module. With HTML Modules this will be possible.

There is clear demand for this functionality in the developer community -- ideas pertaining to HTML Modules have resulted in a great deal of developer and browser implementer engagement.

HTML Imports were proposed (and implemented in Chromium) as a solution, but they were developed independently of ES6 Modules and have several limitations:

-Global object pollution

- -Parse blocking with inline script
- Independent of dependency resolution infrastructures between HTML Imports and HTML Modules
- Non-intuitive import pass through

Integrating HTML Modules into the existing ES6 Module system, rather than creating it as a standalone component, will address these gaps.

HTML Modules are the new proposal for importing HTML files into a document.

HTML import supported a similar feature and permitted to import an HTML file (eventually containing itself JS and CSS) but it has been deprecated and JS module import has partially substituted that feature.

The point of HTML imports are to complete that part and make possible to import HTML files again instead of JavaScript files only. Today you just can't import files that contain HTML (again, you could do that when meta rel=import href=myfile.html> which is not supported anymore). If you want to do that, you have to write HTML in JavaScript string prior to process it.

The proposal also introduces notions such as import.meta.document that refer to the internal document to be imported.

Note that is it a proposal, even though it could be inserted into the spec, it should then be implemented by browsers, and finally adopted by the community in order to remain and become a stable feature.

JavaScript Modules:

A module in JavaScript is just a file containing related code.

In JavaScript, we use the import and export keywords to share and receive functionalities respectively across different modules.

- The export keyword is used to make a variable, function, class or object accessible to other modules. In other words, it becomes a public code.
- The import keyword is used to bring in public code from another module.

JavaScript modules allow you to break up your code into separate files. This makes it easier to maintain the code-base.

JavaScript modules rely on the import and export statements.

CSS module:

CSS modules are:

CSS files in which all class names and animation names are scoped locally by default. So CSS Modules is not an official spec or an implementation in the browser but rather a process in a build step that changes class names and selectors to be scoped (i.e. kinda like namespaced). CSS Modules takes a different approach. Instead of writing plain HTML, we need to write all of our markup in a JavaScript file, like index.js.

During our build step, the compiler would search through that styles.css file that we've imported, then look through the JavaScript we've written and make the .title class accessible via styles.title.

Our build step would then process both these things into new, separate HTML and CSS files, with a new string of characters replacing both the HTML class and the CSS selector class.

With CSS Modules, it's a guarantee that all the styles for a single component:

- 1. Live in one place
- 2. Only apply to that component and nothing else

Plus, any component can have a true dependency

With CSS Modules, and the concept of local scope by default, this problem is avoided. You're always forced to think about the consequences as you write styles.

For instance, if you use random-gross-class in HTML without applying it as a CSS modules-style class, the style will not be applied, as the CSS selector will be transformed to ._style_random-gross-class_0038089.

PHP Modules:

PHP modules are extensions mostly written in C language. They can be compiled with PHP to enable static loading (as part of the binary file) or dynamic loading (with the php.ini directive: extension=modulename.so).

There are different types of modules – core extensions, bundled extensions that are still part of the PHP package and fully external extensions. The last ones are not part of the PHP core and not included in the package.

Shared hosting and Managed VPS servers by SuperHosting.BG support a vast number of PHP modules. Some of them are static and do not require activation to start being used. To enable PHP dynamically loading modules, you need to access cPanel » PHP Manager by SuperHosting » PHP modules management.

The phpinfo function allows you to view all statically loading modules. All content from the Configure Command field, starting with —enable or —with is a compiled PHP module.

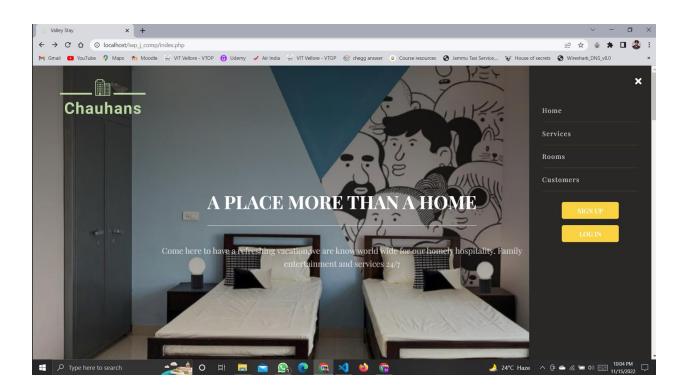
The dynamically loading modules (modulename.so) can be viewed in cPanel » PHP Manager by SuperHosting » PHP modules management.

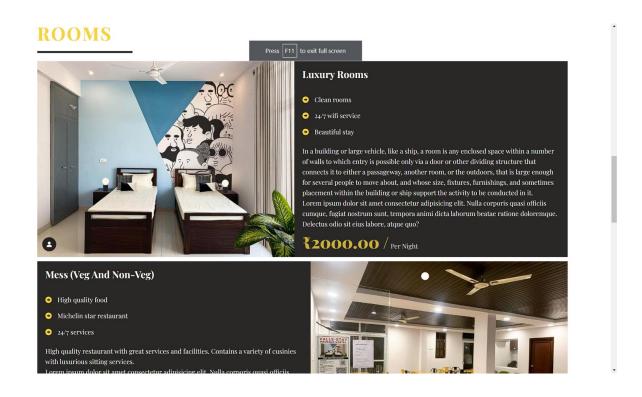
Code Link:

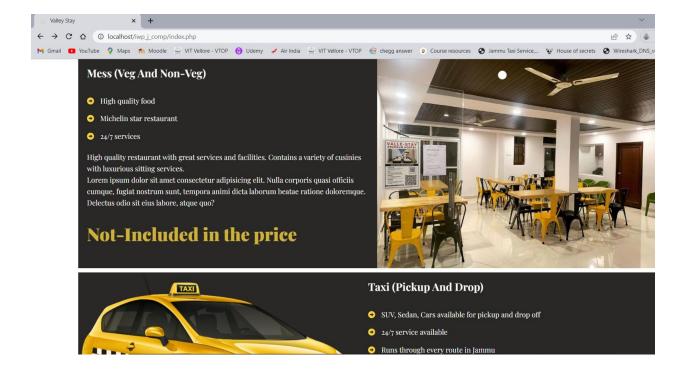
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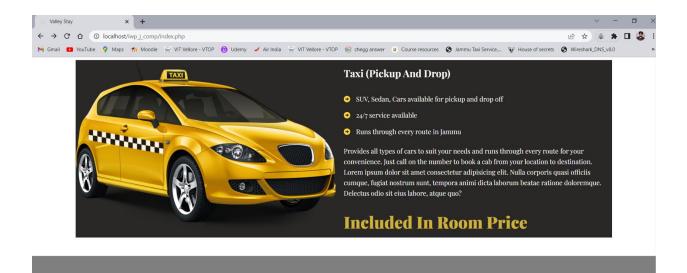
4. Results:

Home Page:

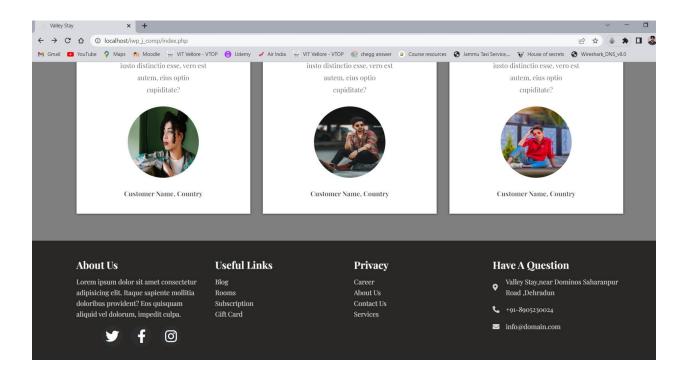




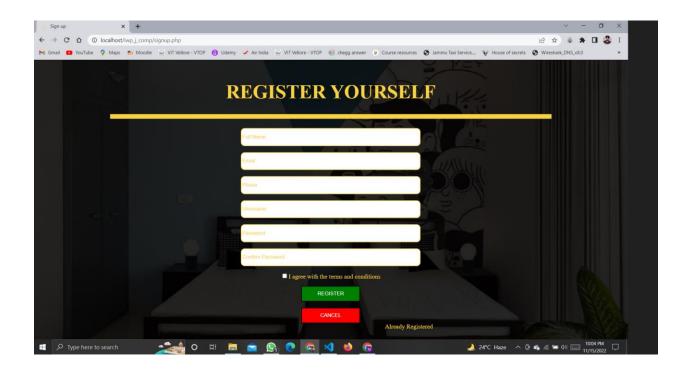




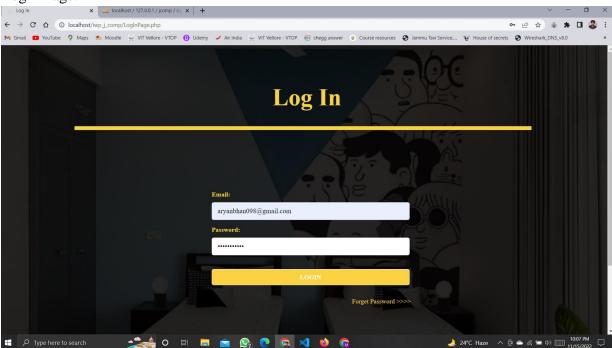
Customer Reviews:



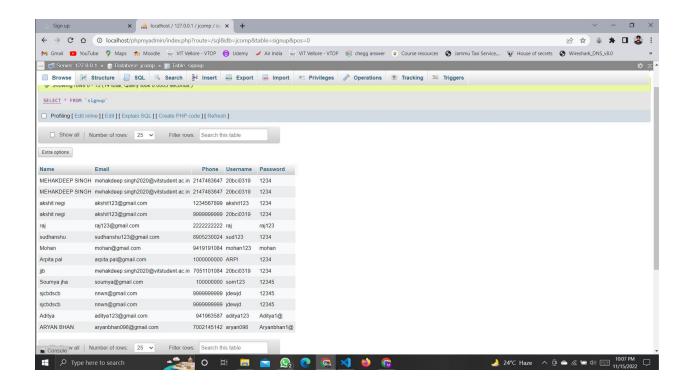
Signup Page:



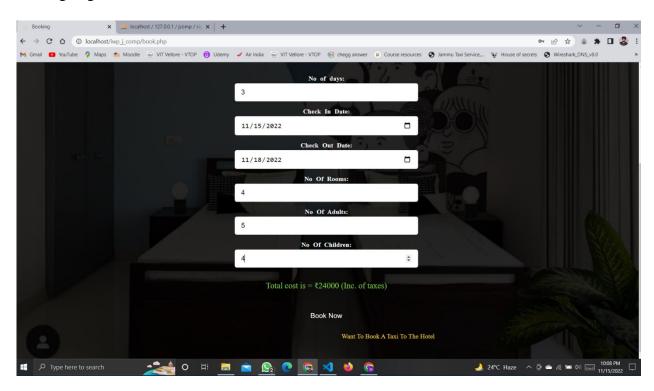
Login Page:



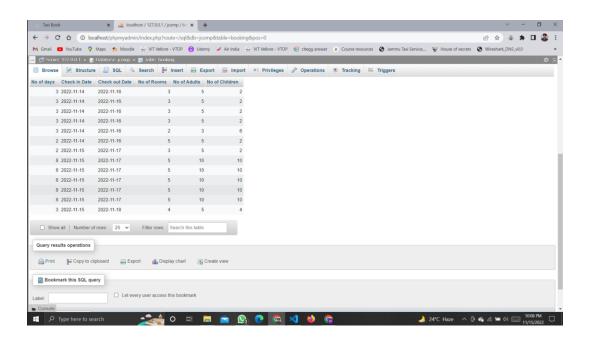
DataBase:



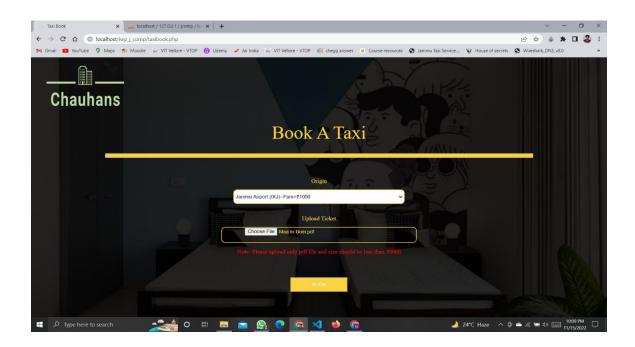
Booking Page:



Room Booking Database:



Book a Taxi:



5. CONCLUSION

In this project we were able to deliver the product as stated in Abstract and is Scalable after testing across users. We are able to create the hotel booking website and are able to submit bookings , place bookings on taxi services and access all information required by the client.

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