

Web application for booking paying guest & explore mess and stationary in the nearby location

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Abstract-In the current era, the web applications which are used by the user for various rental purposes like room accommodations, paying guest services, food services, and other day-to-day activities are present in different applications with their respective modules. These modules are not only complicated but also discreet which make the whole task time-consuming and lethargic. In order to eradicate these problems, we need a solution such that the user is able to complete as well as modify his/her rental accommodations

1. INTRODUCTION

With the introduction of rental accommodations emerged various applications dealing in their respective fields like booking paying guests, hotels, flats services. Some of the well-known applications are NESTAWAY, OYO ROOMS etc. When people felt the need of locating restaurants, they developed yet another application to eradicate the problem of searching a restaurant for having food. Some of the applications in this field are ZOMATO, FOODPANDA etc. These applications are perfectly fine in their respective fields but they are discrete. Due to this nature of isolation, a particular user when trying to access both these features in a single platform finds him in a spot of bother. In order to remove this issue of redundancy, we are generating an application which will merge all the features into one single application. This integrated platform will help the user to save data, time and money. Let us consider an example where a first year student belonging to a different state or locality comes to a particular place.

Certainly he doesn't have any knowledge about the place. He needs to roam around for hours in order to search a place for shelter, a place where edible food is available. During the time of examination or assignments he /she have to look out for various stationary shops and other day-to-day activities. If all these problems are solved by browsing a particular application, the world of the user will turn out to be very easy and accessible. Our application will provide rental accommodations (paying guest services), food zones, and stationary shops in the proximity of the particular user. Once the user browses our application, he just has to enter his location and everything the user requires for his living will be one click away. The idea is very simple but will turn out to be very helpful and

time saver for a particular user because it is completely based on real time issues which a common man faces as an immigrant in a new locality.

2. LITERATURE SURVEY

Literature survey is mainly carried out in order to analyse the background of the current project which helps to find out the flaws in the existing system and guides on which unsolved problems our can work out. So, the following topics not only illustrate the background but also uncover the problems and flaws which motivated to propose solution and work on this project. A variety of research has been done on learning of collective behaviour. Following section explores different references that discuss about several topics related to collective behaviour.

This system allows the user to do their booking online by them self. Some of task that the system can do are providing a query for arriving date and the length of staying, providing the number of On rooms, view all available rooms and provides user the ability to choose one or more of them, recording the number of on rooms, view all available rooms and provides the user the ability to choose one or more of them, recording kind of guests and how many going to be in the single room, providing the cost of booking, asking the users if they want additional service; such as, dinner or breakfast, storing the user detail; like, name, address and telephone, asking the user for confirmation, final confirmation views with the detail of booking and the guests can review or cancel the booking. For more understanding to the system is provided with some figures with expiation. The first figure shows the relationship between the end user and the web server and how the users interface stats and the application is done step by step. The second figure shows the relationship between the user and the screen. The screen transfer HTML codes to interface and when the user interact with it some process are done then the screen shows another pages. While the third figure shows how each page is related to each other.

The user can go to the next page by three ways. The first one is the user after inserting his/her information goes through pages in sequence way. The second way by navigation and this way provide the user the ability to go the pervious pages or to login page. The final one is one user insert unaccepted the page will keep the recent page.

3. Existing System

In Existing System, various discrete applications solve the purpose of what we are trying to demonstrate in this project partially. Being discrete, they will incur their respective data in a different manner. Due to this there is a huge consumption of data and time. The user when tries to own a rental paying guest and consume food in a food zone he/she has to open separate application for this purpose. Therefore the system lacks integration of this application. Say a person books a room in a paying guest on the basis of his location using NESTAWAY, which only provides the detail and infrastructure of the accommodation, he/she will not have any access to find a suitable food zone. Since food and shelter go hand in hand, that is it will be futile to book a room in an area without food zone in the proximity.

Therefore the existing system though solves the problem but does it in a way which is hectic, lethargic and time consuming which gives us a hint to design an application based on the algorithm of integrating these platforms.

1. There are hotel room booking and flat booking services available like OYO & NESTAWAY.
2. Applications to locate, rate & visit the restaurants are available like ZOMATO.
3. There are no solutions yet to locate stationary shops in the proximity of the location.

3.1 Disadvantages of Existing System

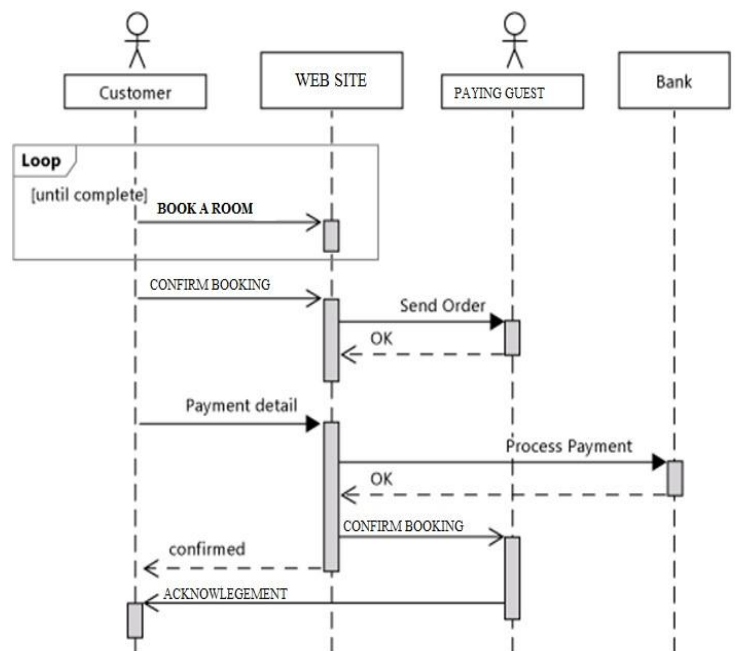
1. They are meant for hotel and flat services only. None provide paying guest solution.
2. Lack of budget based restaurant services in the application.
3. Lack of integration.
4. High data consumption.
5. Time consuming.
6. Different platforms for different jobs

4. Proposed System

We propose a project which is a web application used to book paying guest rental accommodations, food zone, or a restaurant, as well as stationary or student related articles' shop in the proximity of the location of the user. It is an application which contains all the three modules in an integrated platform. Previously in the existing system they were discrete and random, now it is merged into one distinct application. This not only includes facilitates the clients but also helps various users to host their accommodation on the website. When a user browses our website, he/she enters his location (or taken up manually). Our website will have various cloud storing features. Using

this cloud services, the user will be able to track down the entire paying guest in the neighbourhood. The user can then contact the particular host of the rental service regarding the reservation and availability of the room. The availability features can be updated by the host using our application accessing the cloud storage. Using real time tracking, the user will be able to sniff around our application and find food zones on the basis of the location of paying guest. This will remove the problem of transportation from the paying guest to the restaurant.

Fig -1: Sequence diagram



Day-to-day activities in the life of a student include searching for stationary shops. Now using the website, they can easily find the shops located nearby using Real-time tracking. One of the most salient features of our website is the use of E-Mail notification for availability and updates. When a host advertises his/her service on our website, have the responsibility of updating their status and ratings. The user when searches his/her accommodations, these searches will be stored as a history and in order to implement data mining technique. This technique will scan all the previously searched queries and then generate a result which is as per the preference of the client. Once a user finds him in the position in a position to avail the service, using the chat option they can establish an end to end communication between the client and the host. All in all this will serve a perfect blend of easiness and time saver using sophisticated techniques like data mining, real time tracking, and cloud storages.

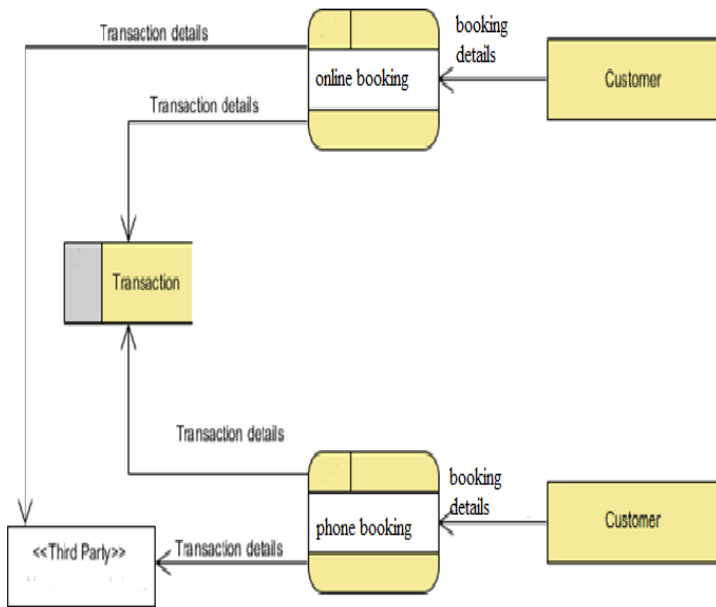


Fig -2: State Diagram

5. Modules

5.1 User Module

I. Registration:

1. Registers user details for using files. Only registered user can able to login in cloud server.
2. The registered user includes credentials like Name, Address, Contact info, Photographs and other supplementary details.
3. The user creates a user name and password on the basis of which he is authenticated. Once authenticated, he/she can login into the system.

II. Location tracking:

1. The user can upload his current location status on the basis of which, search results are fetched dynamically.
2. The location can be entered even manually using the drop down menu.
3. Another way of locating himself is by the use of automatic location tracker which is the GPS (Global Positioning System).

III. Browsing:

1. Browsing the website using the location, the user can reserve a paying guest accommodation(s).
2. Once the location of the paying guest is determined, the food zones nearby the location can be tracked down.

3. The browsing further facilitates the user to find the location of various stationary shops in the proximity of the current location.

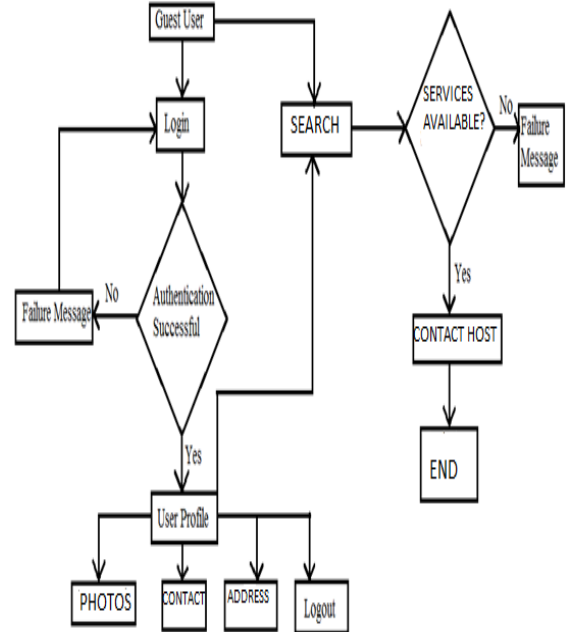


Fig -3: Data flow diagram

5.2 Host Module

I. Host registration:

1. A host on our website can advertise his/her rental services, restaurants and stationary shops.
2. For a particular service, the respective hosts can create their own profile where they upload various details like Name, Address, Tariffs, Pictures and Availability.
3. The website features a separate module for host which is created by the generating their respective user name and password.

II. Updates:

1. The host generates a notification regarding the update of availability for a particular accommodation.
2. The inauguration as well as closure of a particular service can be introduced in the updates.
3. Tariffs, which are the most important entity of the service, can be dynamically altered by the host.

III. Communication:

1. For the reservation, the host can establish an end-to-end communication using the contact information provided by the user in his profile.
 2. He can further extend the communication to those clients who have previously visited the avail the service describing any alteration in the tariff.
- IV. Advertisement:
1. For advertisement purposes, the website can facilitate the host to announce various discounts and drop-in tariff during the peak seasons.

6. CONCLUSIONS

Web application abridges the gap between the user and the hosts. This integrates basic amenities for the users especially the students in one platform. It further extends the feature of advertising the hosts' accommodation facilities over the website application. All in all this application will turn out to be a boon for all the students by providing them with a portable all-in-one application. None of the applications in the existing system support such a user friendly atmosphere where all the three features are merged into one integrated platform. There are many conclusive features in the website which suggests there can be further development and an outlook can be created for business perspective using various hosting platforms. The inclusion of cloud services makes it all the more remarkable. The integration of these platforms can make a subtle environment where a user can incur less data and also save time. The evidence that the website uses the positioning system can serve as a tool which will be serving as a boon for the website in the layout. The portable and the easy approach of the website will lead to the future development of website. This website culminates all the day-to-day issues which can be taken up as an idea for business perception. In the long run this website can serve as a potential business supplement. Since the communication between the client and the host is subjunctive and very wide open this may lead to data transparency. This application not only serves the issues but also looks after the choices or preferences of the clients using this application in a new location. From the managerial point of view it is rightly said "Time is Money". Finally to wrap the content of the report, it suggests a method to reduce the time and data of an individual which serves as an asset to the being.

REFERENCES

[1]. [https://www.nestaway.com/search_new?latitude=&longitude=&locality=&per_page=30&min_price=&max_p](https://www.nestaway.com/search_new?latitude=&longitude=&locality=&per_page=30&min_price=&max_price=&city=bangalore&gender=boys&bed_type=bed&isgrid=false)

[2]. https://www.zomato.com/mysore/vijay-nagar-restaurants/northindian?sort=ca&establishment_type=16&cft=1&category=2&veg=1

[3]. http://www.rightstay.com/?utm_source=mmt&utm_medium=tab&utm_campaign=RightstayDeal&intid=homepage_tab_Rightstay

[4]. [https://www.foodpanda.in/restaurants?user_search=&sort=minimum_delivery_time_asc&sort=minimum_d](https://www.foodpanda.in/restaurants?user_search=&sort=minimum_delivery_time_asc&sort=minimum_delivery_time_asc&cuisines%5B%5D=93&page=1)

[5]. <http://www.bigbazaar.com>