Abstract – The objective of the project is to contact the Rental House & Apartment in smart manner. The admin can add a new house or apartment. The corresponding house owner can register the details under the respective category with exact location and sample house or apartment gallery. The user can make use of this app to view near Rental House & Apartment details like name of the house owner, contact details, mail address, house address, sample house images with description of the house. The admin also add a route and contact details of nearby shops like grocery shop, carpenter shop, supermarket. Admin can send a notification of news feed to the user. If the user comes to new area, very difficult to find the house. In this case, this application helps to find the Rental House & Apartment with exact location and google map route. The user can search the available rental house as per the area selected using search box. The user can also added the favourite house or apartment. The details of house with sample house gallery photos and rental details are viewed to the user. The application focused the public to contact directly with the house owner about the rental house details and therefore intermediate persons can be overcome. The absence of intermediate person will reduce the cost of rent and as per the range, the user can contact the owner. Only admin and authorized users have an access to modify the house or apartment details.

Keywords: location prediction, house quality, vacant place.

1. INTRODUCTION

A website is a collection of related web pages that can be visited using a web browser. A website can be a tool for the companies that will allow them to get in touch with millions of web surfers all over the world. A website will make the company’s business look more reliable if they are represented in a professional way.

It also gives businesses the chance to portray themselves in ways they want to be seen, with a platform that’s built on their terms and can effectively market the services or products they offer. Because of websites ability to reach people around the world, industries such as hotels, apartment, rental houses, room for rent and the likes utilized the advantage of using this technology. According to Signh (2015), the most popular app for hunting a house is Hosing.com. With the help of this app, one can post a flat for sale, find a new apartment to rent or buy, search for a hostel, and look up new localities. This app has detailed data and pictures of every property. One can use filter and search every specific detail needed. An example of a website that offers room, space, apartment or house is Airbnb. It is free to create a listing. The host decide how much to charge per night, per week or per month. Each listing allows hosts to promote properties through titles, descriptions, photographs with captions and a user profile where potential guests can get to know a bit about the hosts (Guttentag, 2015).

Hot pads at hotpads.com focuses on regency of the listing of new apartments registered to the system as top search when user navigates through the system (Zillow, 2005). Andy A. Lapada, Department of Information Technology, Eastern Samar State University, Philippines. In the Philippines, there is a mobile application called Board Me App that locate the nearest available boarding houses in Manila. It uses Global Positioning System (GPS) to locate and display its geographical information and other important details including the contact information of the owner (Abella et.al, 2017). In the case of Borongan City in Eastern Samar, Philippines, it is still a problem in finding or locating the closest boarding houses. That is why the researcher took this opportunity in developing a website that can help in finding rooms for rent based on the needs of the customer.

2. OBJECTIVES OF THE STUDY

This study aimed to develop an online way of searching room for rent. Specifically, this
study aimed to develop a website that:
1. Allows the user to search rental houses, apartment and the like based on their needs;
2. Compare room rates;
3. Add new account (rental house owner and clients);
4. Real-time update of the status and the availability of rooms;
5. Evaluate the system using IBM usability evaluation tool as an intermediary questionnaire

3. EXISTING SYSTEM

In existing system the public won't get an intimation of rental house directly. The intermediate person plays a main role in viewing the available rental house. The user cannot communicate directly with the owner of the house therefore. The user won't any option for comparing the available rental house therefore as per the range, the house can't be predicted by the user.

Limitation of Existing System

- The user won't get an intimation of house for rent, therefore a user need to move around for searching.
- The user wants to depend on intermediate person to communicate the rental house owner, which will increase the cost.
- The user can't directly interact with the house owner and knowing the details of the rental house as per the area will become a risky task.

4. PROPOSED SYSTEM

In proposed system, the application build to intimate the rental house or apartment directly to the user. The user can make use of the application to view the details of the rental house or apartment. The application helps to overcome the rental house brokers thus the user can interact directly about the rent details.

As per the range of rent the user can search the house from the database. The details of the area surrounds the house can be viewed by the user.

Advantage of Proposed System

- The user can get an intimation of any newly added house which helps to search the needed house in a secure and quick manner.
- The location can be viewed through the map thus the user can know the nearby places.
- The user can directly interact with the house owner which will avoid the third party person, thus the rental prize can be reduced.

5. RESEARCH METHODOLOGY

Rapid Application Diagram (RAD) is an object-oriented approach to systems cycle that includes a method of development as well as software tools (Kendall & Kendall, 2005)

![Figure 1. Rapid Application Development](image)

It shows the step by step process of the method used by the researcher to develop the system.

Research Design

This study has been subjected to an evaluation testing. The researcher used developmental-evaluated design to test the system acceptability.

Instrumentation

The questionnaire utilized to evaluate the system was based on IBM Software Usability Scale. It serves as a frame work or model for providing world wide acceptable software qualities required for software evaluation. Under this standard:

Mean

This is the average of the scores - the mathematical center of a distribution. It used symmetrical, unimodal distributions of interval or ration scores. The formula for mean is:
Where:

\[
P = \frac{n}{t} \times 100
\]

Percentage

It defines as the part of expressed in hundredths. The formula for percentage is:

Where:

\[
P = \text{percentage} \times \frac{n}{t} \times 100
\]

Where:

- \(n\) = number
- \(t\) = total number of respondents
Coding Scheme

Level of Agreement  Adjectival Rating
5  Strongly Agree
4  Agree
3  Slightly Agree
2  Slightly Disagree
1  Disagree

For Acceptance Testing
The obtained mean was interpreted using the following:

Numerical Rating Scale  Adjective Rating
4.2–5.0  Highly Usable
4.19–3.4  Usable
3.39–2.6  Moderately Usable
1.8–2.59  Moderately Unusable
1.0–1.79  Highly Unusable

Output and Graphical User Interface (GUI)

This part of the documentation shows there search output and User Interface of the website.

6. RESULTS AND DISCUSSIONS
In order to gauge the acceptability of the website, alpha and beta testing were conducted. A total of fourteen experts and 32 end-users evaluated the system. This section presents the result of the system tested and evaluated to determine the usability using the Software Quality Evaluation Tool based on IBM Computer-System Usability Scale. The following are the result of the expert and end-user testing.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>WEIGHTED MEAN</th>
<th>ADJECTIVAL INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I am satisfied with how easy it is to use this system</td>
<td>4.5</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I can effectively complete the tasks using this system</td>
<td>4.6</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I feel comfortable using this system</td>
<td>4.6</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>It was easy to learn to use this system</td>
<td>4.7</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>The organization of information on the system screens is clear</td>
<td>4.8</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>The interface of this system is pleasant</td>
<td>4.6</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>Overall, I am satisfied with how easy it is to use this system</td>
<td>4.9</td>
<td>Highly Usable</td>
</tr>
</tbody>
</table>

| GRAND MEAN | 4.83 | Highly Usable |

Figure 2. Home page of the website
It allows the user to search rental houses, apartment, rooms and the like.

Figure 3. User login page
It shows that the user can login the account as an owner or as a customer.

Figure 4. Add New House or Apartment
It shows that, the admin can add a new house or apartment to the website.

Figure 5. Set longitude and latitude Coordinates
It allows the admin, to set the exact longitude and latitude coordinates of the particular rental house or apartment.
The above table shows the grand mean of 4.63 interpreted as highly usable. It can be inferred that experts rated all questions as highly usable. This result shows that the system is following standard based on its usability. With the over-all result of 4.63 interpreted as Highly Usable, the system adhered to the IBM standard.

<table>
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<tbody>
<tr>
<td>Overall, I am satisfied with how easy it is to use this system</td>
<td>4.7</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>Overall, I am satisfied with how easy it is to use this system</td>
<td>4.8</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I can effectively complete the tasks using this system</td>
<td>4.6</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I am able to complete my work quickly using this system</td>
<td>4.4</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I feel comfortable using this system</td>
<td>4.7</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>It was easy to learn to use this system</td>
<td>4.6</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>Whenever I make a mistake using the system, I recover easily and quickly</td>
<td>4.8</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>The organization of information on the system is clear</td>
<td>4.8</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>The interface of this system is pleasant</td>
<td>4.4</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>I like using the interface of this system</td>
<td>4.5</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>Overall, I am satisfied with how easy it is to use this system</td>
<td>4.7</td>
<td>Highly Usable</td>
</tr>
<tr>
<td>GRAND MEAN</td>
<td>4.64</td>
<td>Highly Usable</td>
</tr>
</tbody>
</table>

Table 2 reveals the overall mean of 4.64 interpreted as highly usable. Based on this result, the system passed the IBM standard on system usability.

7. CONCLUSION

Thus the application is meant to be user-friendly, and any type of individual can effectively use it. Any Rental House & Apartment can be tracked at any moment to suit the user's needs. The Rental House & Apartment will get further salutary by getting the house owner contact to the user in direct manner. The general public can get rapid assistance with all types of rental houses and apartments. The programme is linked to a Google map, which allows users to quickly examine and navigate the place. As a result, the programme intelligently meets all of the user's needs.

8. FUTURE ENHANCEMENT

In future our project is meant to satisfy the requirements of rental house or apartment owners. Many user-friendly interfaces have been implemented as well. This package will prove to be quite effective in meeting all of the users' requirements. It is with utmost faith that I present this software to you hoping that it will solve your problems and encourage you to continue appreciating technology because it is meant to change and ease all our work that seems to be very difficult. In extent we can add GPS system in build and can give live chart online option to users. It also allow local business to push deals or coupons within a particular geographic area.

RECOMMENDATION

After a thorough analysis of the study, the researcher recommends the utilization of this website in order to provide assistance to those people who are in need of different apartments or rooms for rent.

9. REFERENCE


