

## PgGo

Riju Tarafder<sup>1</sup>, Shubhrajit Roy<sup>2</sup>, Ira Nath<sup>3</sup>, Sk Alauddin<sup>4</sup>, Rakesh Paramanik<sup>5</sup>  
<sup>1,2,3,4,5</sup>JIS College of Engineering, Kalyani, Nadia

---

**ABSTRACT:** This paper is a web and application based on the Utility towards the betterment of Students life. The paper basically creates a webpage which is a merger of too many messes, room rent into a website and android application. This website helps to find out Mess, PG and personal room rent easily. We are here to take a step forward towards all these works and implement it onto a very single platform so that it is accessible to the user to do so very comfortably. The main motto of this paper is to access most of the very common problems of students or outsider into a single zone. The website is beneficial as well as accessible to all the commoners in the hope that the user can produce the useful output as a result

**KEYWORDS**– webpage, website.

---

Date of Submission: 09-07-2020

Date of Acceptance: 25-07-2020

---

### I. INTRODUCTION

PgGo the “House Rental System” has been developed to override the problems prevailing in practicing manual system. This website is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to carry out operations in smooth and effective manner

It reduced as much as possible to avoid errors while entering the data. It also provides error message entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all is provides it is user friendly. As described above, can lead error free, secure, reliable and fast management system. It can assist the user to concentrate on their activities rather to concentrate on the record keeping. Thus, it will help users in better utilization of resources.

Every organization, whether large or small, has challenges to overcome and managing the information category. This is designed to assist in strategic planning, and will help you to manage your workforce anytime, at all times. These systems will ultimately allow users to better manage resources

### II. LITERATURE SURVEY

Over the year’s landlords/property managers have had a problem in maintaining and managing their customers and their own records. Management has become difficult because of the issues that include:

- Data growth: Data increase day to day. Storing and maintaining all data manually is very difficult Lack of computerized system: Currently most landlords/property managers use the manual system in recording and maintaining their property and customers data
- Data security is not assured: In a manual way, data is recorded on books/papers which may easily get damaged leading to loss of data.
- There is no database to store information: Potential of data loss or damage is very high because data is stored on tangible files.
- Human resource: The current system has too much manual work from filling a form to filing a document, delivering manifesto. This increases burden on workers but does not yield the results it should.
- Thorny Job: In current system if any modification is to be made it increases manual work and is error prone.
- ERROR: AS THE SYSTEM IS MANAGED AND MAINTAINED BY WORKERS ERRORS ARE SOME OF THE POSSIBILITIES. LACK OF THESE CRUCIAL REQUIREMENTS MAKES MANAGEMENT OF THE TENANTS AND HOUSES VERY DIFFICULT AS SOME TENANTS MAY END UP NOT PAYING RENT

### III. METHODOLOGY

To The term methodology means the technique and procedure adopted by conducting a research study. It outlines how data will be collected and the tools for collecting data, system methodology, the proposed system input and output, users and systems development tools.

#### 3.1 Facts Finding Techniques

It shows how data will be collected from the users of the system. The data collection techniques to be used include:

### 3.1.1 Objectives

It will use this technique to collect information about how the current system operates and its processes. This involves systematically watching and recording the behavior and characteristics of operations and processes. It gives more detailed and context related information and can adapt to event as they occur however the method may be time consuming.

### 3.1.2 Questionnaires

I will prepare a number of questionnaires whereby I will submit them to business owners (Landlords) to get a deeper insight of how the system is going to work. I prefer this method because it gives more information from various individuals and offers greater flexibility as the opportunity to restructure questions. This technique is preferred because it will provide a closer contact between the users and the developer hence dispelling the probability of the completed system being rejected by user(s). This technique also: Permits clarification Has high response rate than interviews. Helps get full range and depth of information

### 3.1.3 Secondary Data Collection

This data I will collect from existing sources e.g. books, internet, journals and magazines that was collected by other researchers and analysis was done. It is from that data that I will then compare with the primary data and make a decision and conclusion.

## 3.2 System Development and Methodology

System development methodology is a technique that issued to show how the proposed system will be developed. In this case, the methodology used will be a waterfall model.

### 3.2.1 Waterfall Model

It is comprised of the stages that the developer will use when developing the system. It is a sequential model hence, the name waterfall. The developer has to finish with one stage before going to the next one. It comprises of the feasibility study, analysis phase, design phase, coding phase, testing phase, implementation phase and finally the maintenance phase. It is a simple model and easy to use and understand.

With waterfall development-based methodologies, the analysts and users proceed sequentially from one phase to the next. The deliverables from each phase are voluminous and are presented to the project sponsor for approval as the project moves from phase to phase. Once the phase is approved by the sponsor it ends and the next phase begins.

## IV. PROPOSED METHOD

Our proposed system gives all the features provided by the traditional existing systems, but instead of working only with nonspatial database, the system also works with spatial data. The system will have the following prominent features: - Specification based searching: This feature provides the related information to the users according to the specification they have provided to the website. Agent Notification Once the user is focused in a particular property and clicks the "Confirm" button a mail type message would automatically be sent to the agent who manages the corresponding zone, informing agent about the user's name, his contact number and email address. Adding property for giving rent A user can add his property that he is willing to sale or giving rent so that it can be viewed by other potential users focused in similar property. For this purpose, the user is supposed to enter not only the location but also pictures and the cost at which he is willing to sale that property. Allowing users to look interesting property. Providing user with map-based search Once a particular area is selected the user can gain needed related information on the basis of geographical factors. Whenever searching is done for a new house, the main focus is on the location. As location being a spatial entity, we are using the advantages given by spatial databases for our application. The application provides the user to select any particular location and get information appropriately. Spatial database is used for providing geographical information of the rental houses. Different examples of spatial data are existing, but the Important example of spatial database is satellite image. Satellite image system will act as a reference system. This is a basic website where user can register then log in and manage their property. This website helps the process and removes the overhead documents. The availability of website makes the process more user friendly and makes it more effective. User can register post their proper as well as know the rates of property in a zone. There are some important issues in developing the rental housing web application. First, the search time should be minimum. This depends on 2 techniques. Second, the web application should give the services that both buyer and seller want. Third, the web application should have a friendly user interface.

#### 4.1 Design Started

The system is designed with several interaction cues on each web page that makes up the web application. These cues are well-defined such as make several functionalities that the application exposes to collect, process and output data. Access to these functionalities is made possible by the well-designed user interface which embodies several technologies such as PHP to process data. The application is built in a modular form where these functionalities are built into modules. Some of the modules are as follows:

1. properties-search
2. submit-property
3. login

#### 4.2 Input Specification

The system is designed to accept several input details efficiently through input forms and user clicks. The data capture through the user keystrokes and clicks are received by specific modules on the system and relayed to the back-end of the system for processing. Input is called using the following page modules:

1. home.php: This is used to capture preliminary user navigation information and preference information which gives the system a method personalizing the page for the user on the next visit
2. login.php: This is used to capture information of user to enter in the website and search properties n their requirement

#### 4.3 Output Specification

The system is designed in such a way that it efficiently provides output to the user promptly and in a well-organized manner. The format for the several outputs is made available on the output web pages. Output can be relayed using the following page modules:

1. properties-search: By clicking property option list pf properties display which are currently available
  2. compare-properties: this displays output information for the properties with comparisons.
- contact: this page helps the customer to get in contact with the developer team.

#### 4.4 Database Specification

The database system used to implement the back-end of the system is ..... Access to the system was made possible by\_\_\_\_\_.

**Table 4.4.1: Database**

ID	user_login	user_pass	user_nicename	user_email	user_url	user_registered
1	rijutarafder000	\$P\$BWFfXQgzf1/bRcKT5bpGPBORfgZ0mR1	rijutarafder000	rijutarafder000@gmail.com	https://pggoo.com	2020-05-11 16:35:12
2	riju.tarafder34	\$P\$BQiMm2eMLfQ2Ma6ShroEBaU56PvR.	riju.tarafder34	riju.tarafder34@gmail.com		2020-05-11 22:37:34
3	elsa savage	\$P\$B.Yf6gB89f509YuvoajwGbbgj1rNf/	elsa-savage	jonna.l.crosbygerdes@healthpartners.com		2020-05-12 00:29:11
4	esme cowan	\$P\$BUnazdLbq58CM8yqLpmcw4269ihBLw/	esme-cowan	jeff_gordon_018@hotmail.com		2020-05-12 09:14:34
5	arlo adkins	\$P\$BN380elbhsYkwaxFkpO9gSUXz4ya.	arlo-adkins	billygarcia@prodigy.net		2020-05-12 09:25:45
6	laurel harris	\$P\$B0uJm1bqcabBSq1k3UgMcvnlnLQxO.	laurel-harris	hleo12@gmail.com		2020-05-12 12:29:01
7	jayda michael	\$P\$BwrFIE207ZR/UzEyaA4UeB1lIXafaw0	jayda-michael	paramedic119csmrawa@yahoo.co.jp		2020-05-12 14:27:29
8	roselyn snyder	\$P\$BVBbtax2khMN6DUW.wVCgqcaakNPer1	roselyn-snyder	debbie.k.huang@gmail.com		2020-05-12 23:58:35
9	hudson bush	\$P\$Ba0HPXCu0ckW55Otp4sg/eVHRdKPCF0	hudson-bush	mike.allenkeating@gmail.com		2020-05-13 06:06:07
10	riya humphrey	\$P\$BXnWvwNwMzhOXCh0A06QhZ8oJRcBo.	riya-humphrey	sandra.brestrich@gmx.de		2020-05-13 10:59:15
11	rockybiswas	\$P\$BmXp5srlwXUCjCFQlyFzyXP5ovOI1	rockybiswas	nr601581@gamil.com		2020-05-13 13:01:22
12	jaylene thomas	\$P\$BBhcK4aQ2YdQZMBi0TOxkBBhbHjgQ.	jaylene-thomas	lawvanorder@yahoo.com		2020-05-13 20:10:40
13	Sajal-Biswas	\$P\$BWXQLThIP4Sct05WgSax01uJ6H6CQ/	sajal	sajalkumar306@gmail.com		2020-05-14 04:24:23
14	amelie short	\$P\$BSwXdlLaa70IM9Hxm5PHYAB.yXFkjml0	amelie-short	stephen.whyte@gmail.com		2020-05-14 07:12:02
15	jayda villarreal	\$P\$BLJkx6bdoc5TX1mbSoO.hEqtlquFI/	jayda-villarreal	mejuliam@web.de		2020-05-14 10:04:35
16	elsa cowan	\$P\$Bwzbp3MRoEuNKaw6LjdukhibiQPoa00	elsa-cowan	lmpaving@atlantcibbn.net		2020-05-14 10:41:48
17	shubhra52	\$P\$BhFyHUNcmz8Jksv4y7Em7XF.M4Janc1	shubhra52	shubhrajitroy6@gmail.com		2020-05-14 13:58:58
18	mary frazier	\$P\$BFsAPiS0b7ymMccqZTOKWmDY5Ku9EG/	mary-frazier	joveljohanna@yahoo.com		2020-05-14 16:10:05
19	carley cowan	\$P\$BDkZKhmmUVNPcpTIU5RuUuj38xe1	carley-cowan	murlelohana@gmail.com		2020-05-14 19:09:53
20	amelie snyder	\$P\$Bb28uHIYRm2YoZXSh.xwabk.4ekuS41	amelie-snyder	bwashington@esri.com		2020-05-14 22:04:20
21	finnegan mcpherson	\$P\$BJE1hVUW4Hb.r4W6/Qz9zo0hLEzCjG/	finnegan-mcpherson	kevin.gallagher7@hotmail.com		2020-05-14 22:31:36
22	arlo jordan	\$P\$B32cvelFpyRny2wz7tsiFz3Ku90Rp1	arlo-jordan	chappsnet@gmail.com		2020-05-14 23:21:00
23	erin chambers	\$P\$BBG7iUSN7qFG0Gas0S1otWU5o0d3P/	erin-chambers	kaylyn@esgraphics.com		2020-05-15 07:20:05
24	amelie weber	\$P\$B3d/qCkMWemw2meWBoRcVSNvhxzR1	amelie-weber	anniesantos14@hotmail.com		2020-05-15 09:22:18
25	erin bush	\$P\$BebJU04vi93rNWYnU12DyxP1zIpg/	erin-bush	kt-mettingen@gmx.de		2020-05-15 15:07:47

## 4.5 database ER Diagram

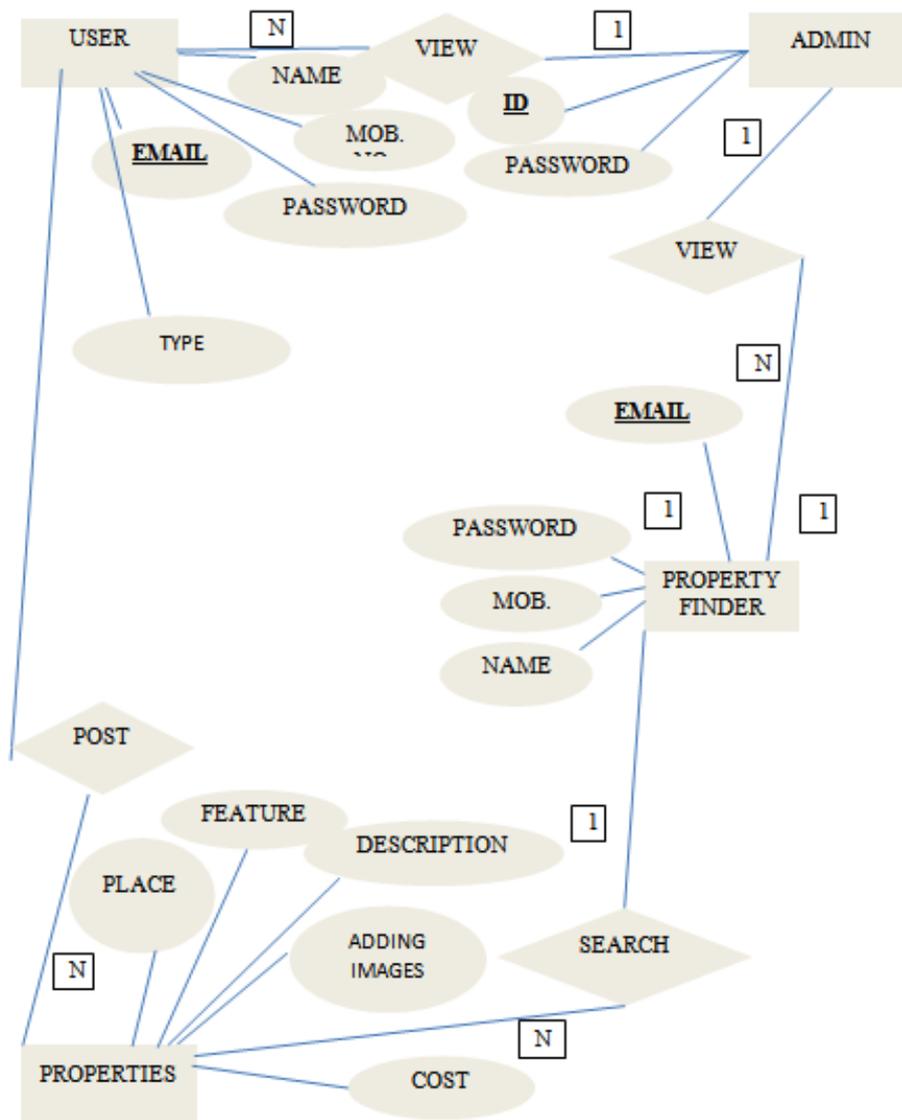


Fig 4.5.1: System ER Diagram

4.6 System Flow Chart

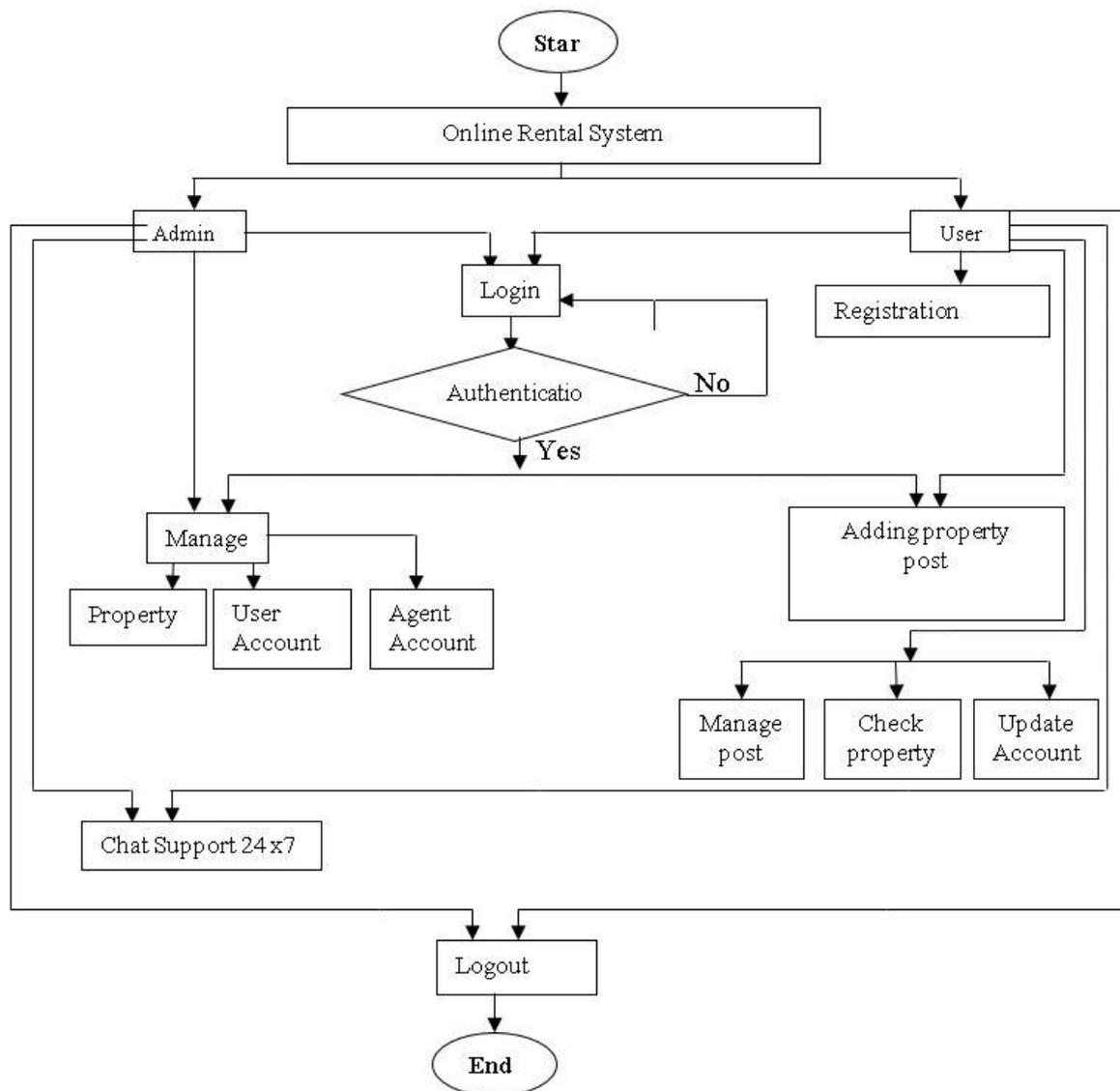


Fig 4.6.1: Overall System Flowchart

4.7 System DFD

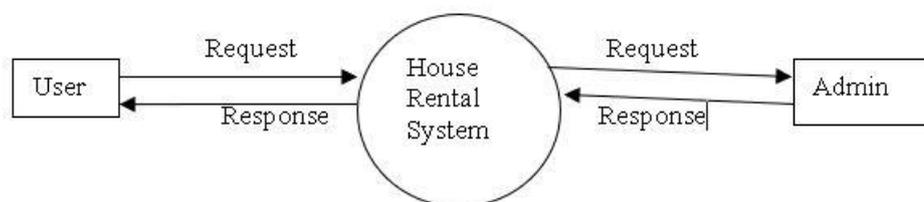


Fig 4.7.1: Level 0 DFD

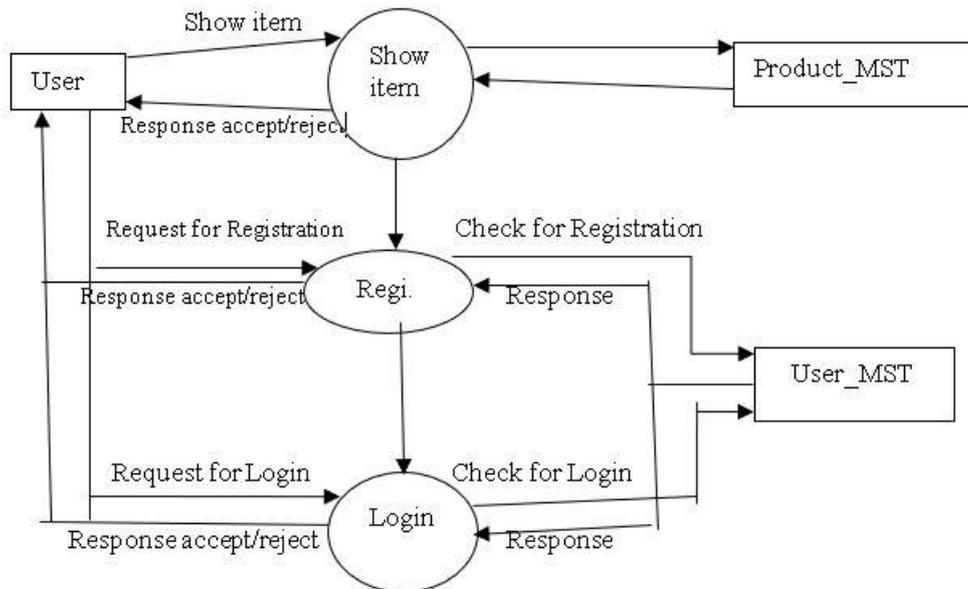


Fig 4.7.2: Level 1 DFD

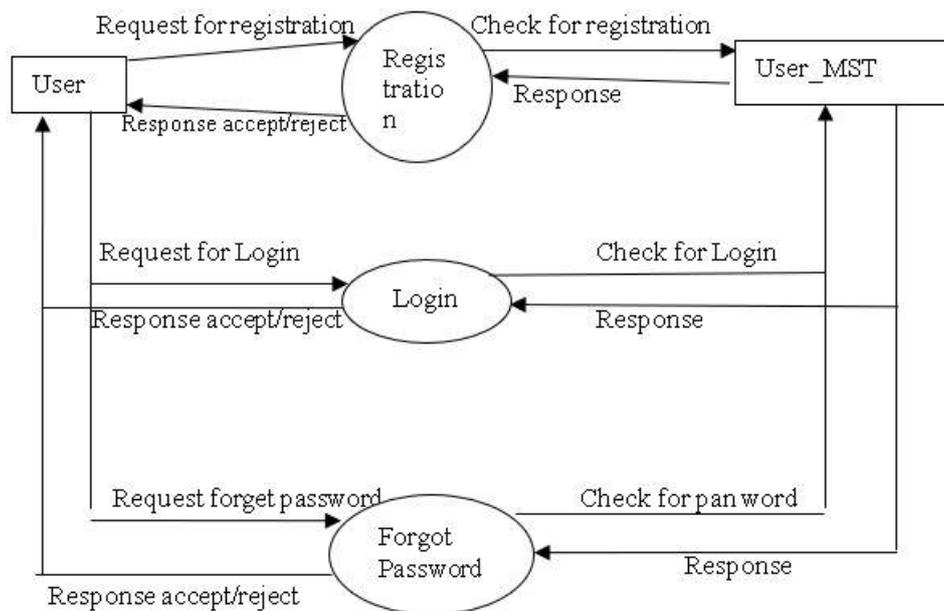


Fig 4.7.3: Level 2 DFD

## V. RESULTS

At the end of this project work, we were able to design and develop a website that can successfully handle online house rental process for PgGo. In the process of the design first-hand information on properties was obtained. This work also will serve as a stepping-stone for people research on this topic. Other benefits are:

1. provision of facility for handling text electronically using powerful and sophisticated word processors to produce elegant and error free documents
2. With this website, searching house, flats, mess, PG made easier. The systematic approaches used during each phase of the website development provides a clear road map that would be of immense help to anyone carrying out research work in this area.

5.1 Screenshots of End Result

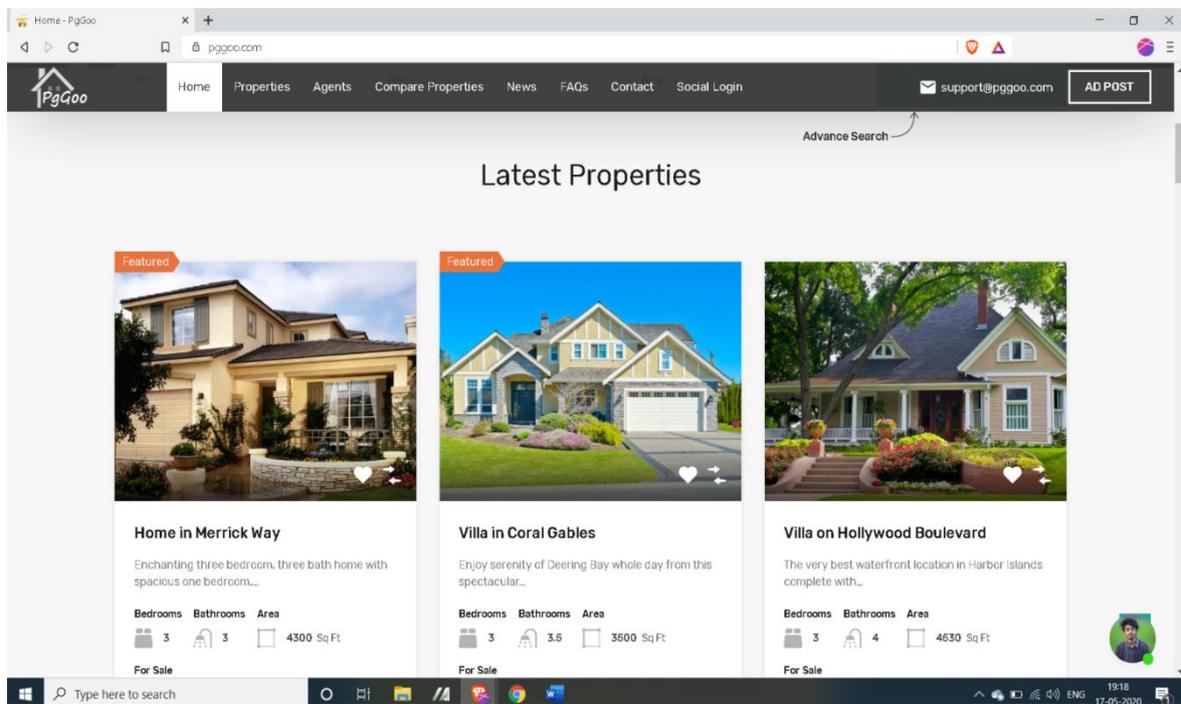


Fig 5.1.1: Home Page of PgGo

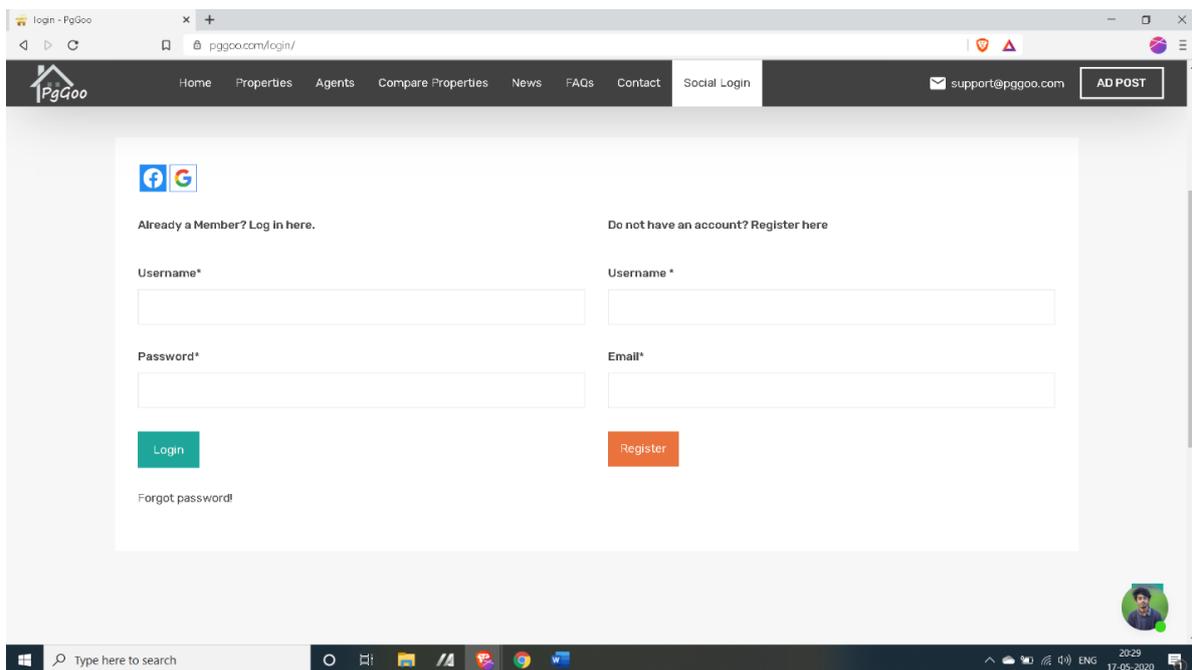


Fig 5.1.2: Login Page with Social Help

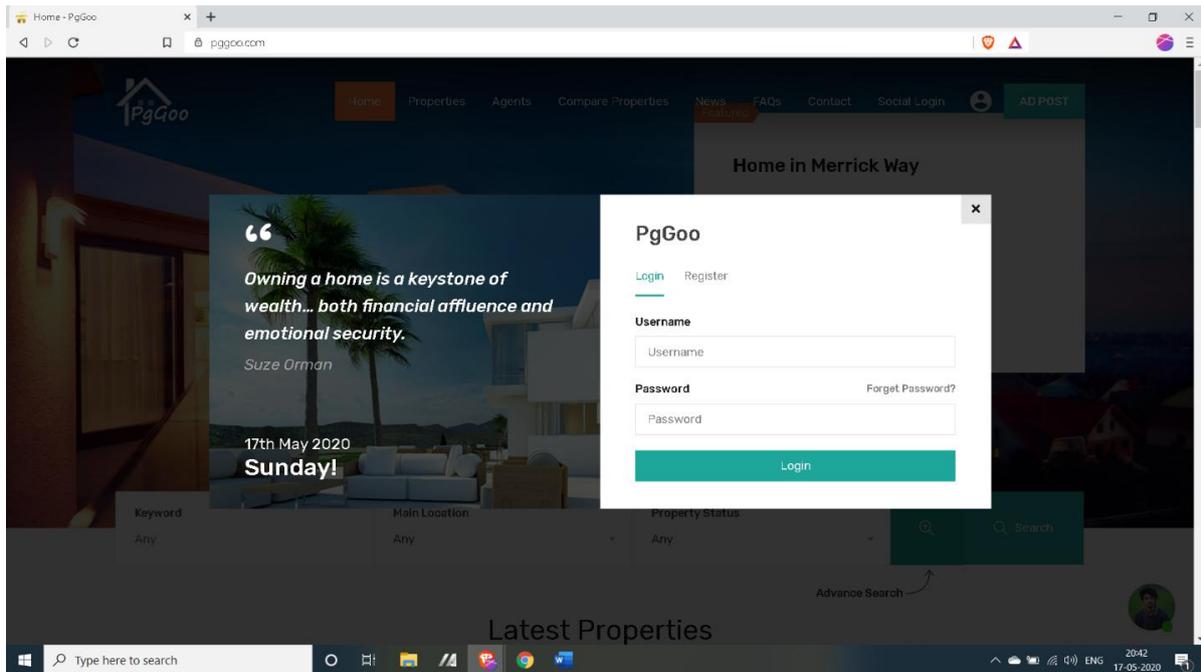


Fig 5.1.3: Login Page

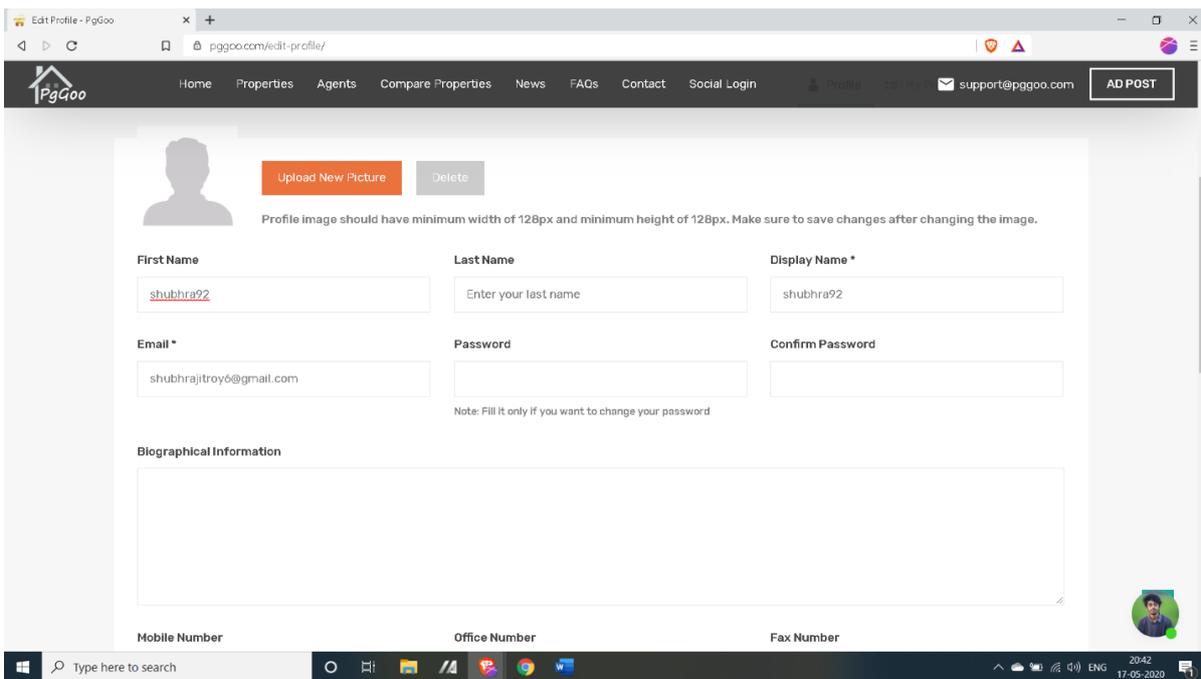


Fig 5.1.4: Profile Edit

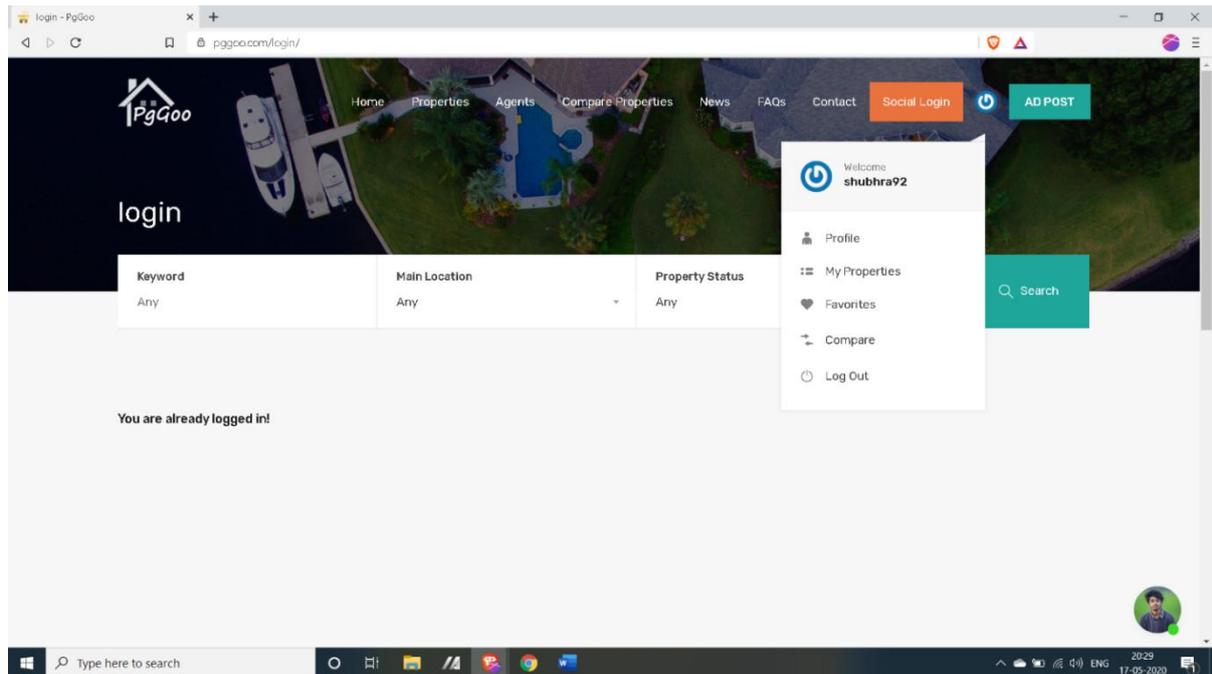


Fig 5.1.5: Logout Section

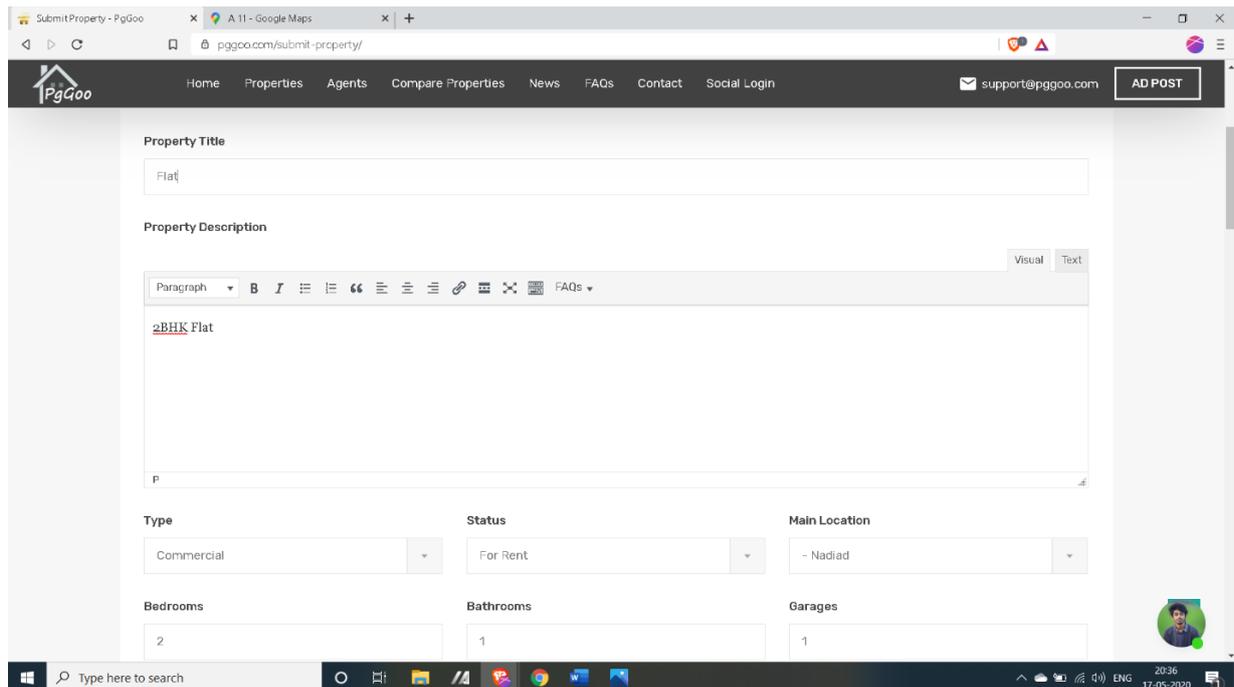


Fig 5.1.6: Adding Post

SubmitProperty - PgGoo | A 11 - Google Maps | pggoo.com/submit-property/ | support@pggoo.com | AD POST

Home | Properties | Agents | Compare Properties | News | FAQs | Contact | Social Login

**Bedrooms**: 2

**Bathrooms**: 1

**Garages**: 1

**Sale or Rent Price**: 8500

**Area**: 1400

**Lot Size**: [Empty]

**Virtual Tour Video URL**: [Empty]

**Year Built**: 2005

Address: A-11/416, A 11, Block A11, Block A, Kalyani, West Bengal 741235, India

Find Address | Drag and drop images here | Browse Images

Type here to search | 20:36 17-05-2020

Fig 5.1.7: Requirements Fill up

SubmitProperty - PgGoo | A 11 - Google Maps | pggoo.com/submit-property/ | support@pggoo.com | AD POST

Home | Properties | Agents | Compare Properties | News | FAQs | Contact | Social Login

**Floor Plans**

**Floor Name**: [Empty]

**Description**: [Empty]

**Floor Price ( Only digits )**: [Empty]

**Price Postfix**: [Empty]

**Floor Size ( Only digits )**: [Empty]

**Size Postfix**: [Empty]

**Bedrooms**: [Empty]

**Bathrooms**: [Empty]

**Floor Plan Image**: [Empty] | Select image

The recommended minimum width is 770px and height is flexible.

+ Add More

**Message to the Reviewer**: [Empty]

Mark this property as featured property

Type here to search | 20:37 17-05-2020

Fig 5.1.8: More Details to Fill in Post Section

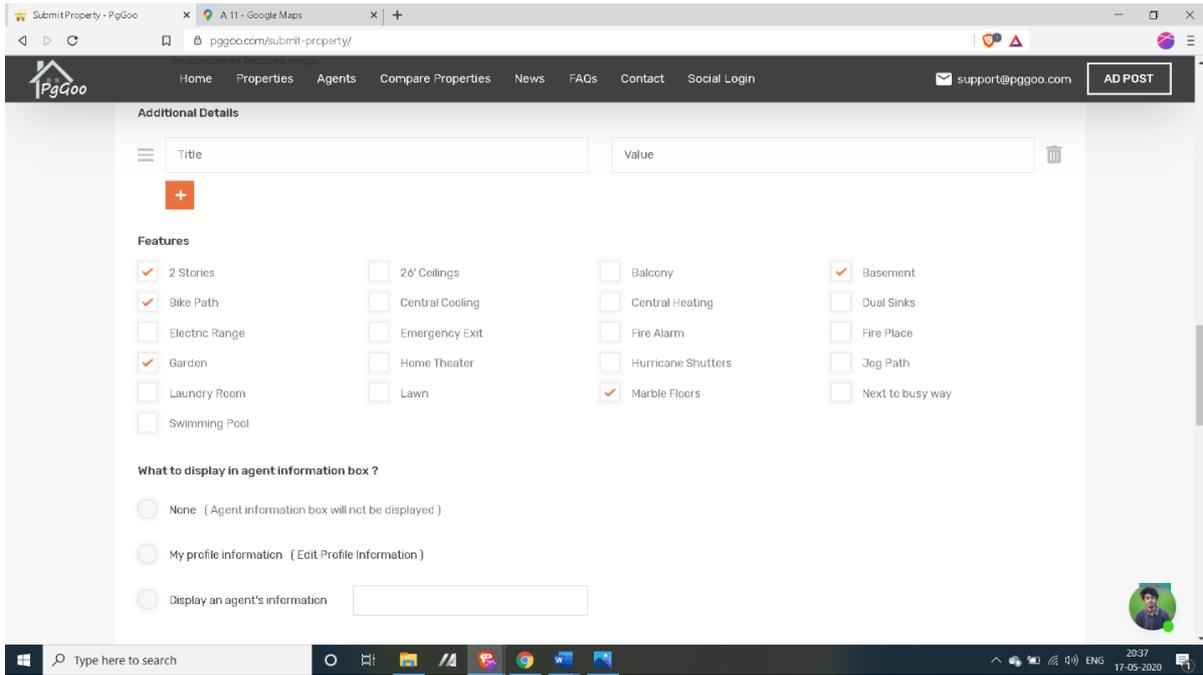


Fig 5.1.9: Additional Features

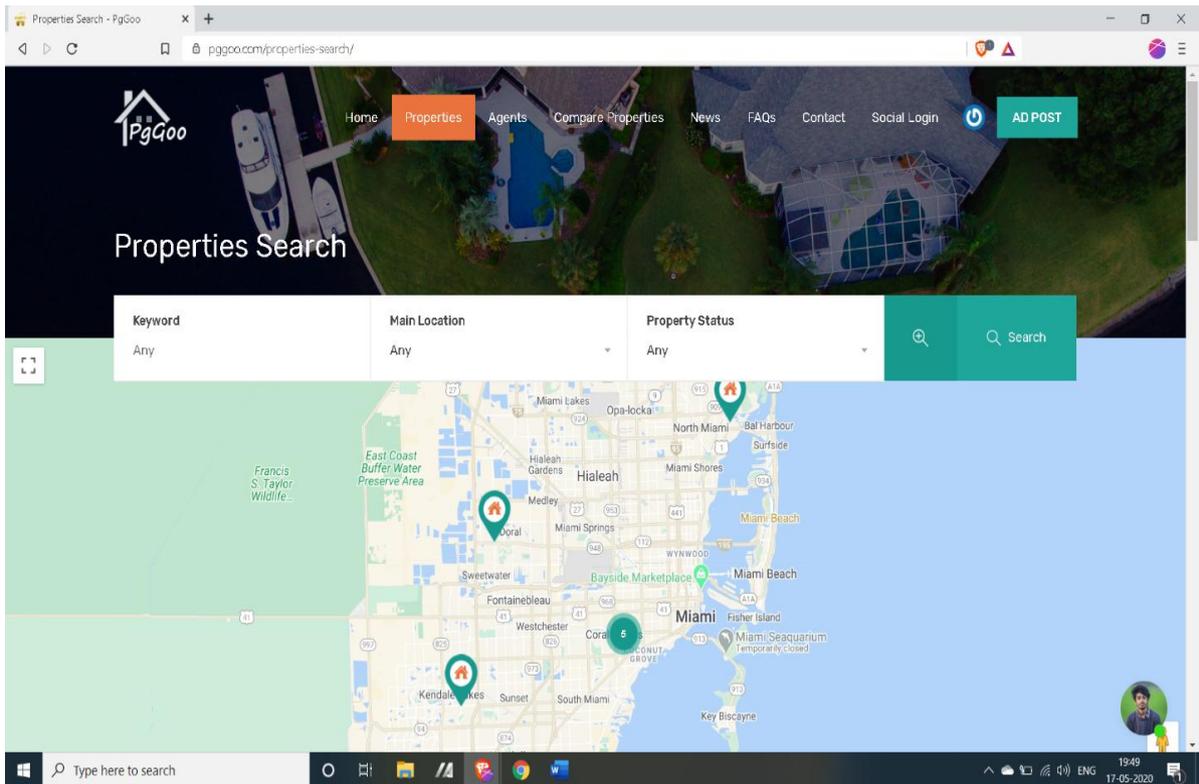


Fig 5.1.10: Map View

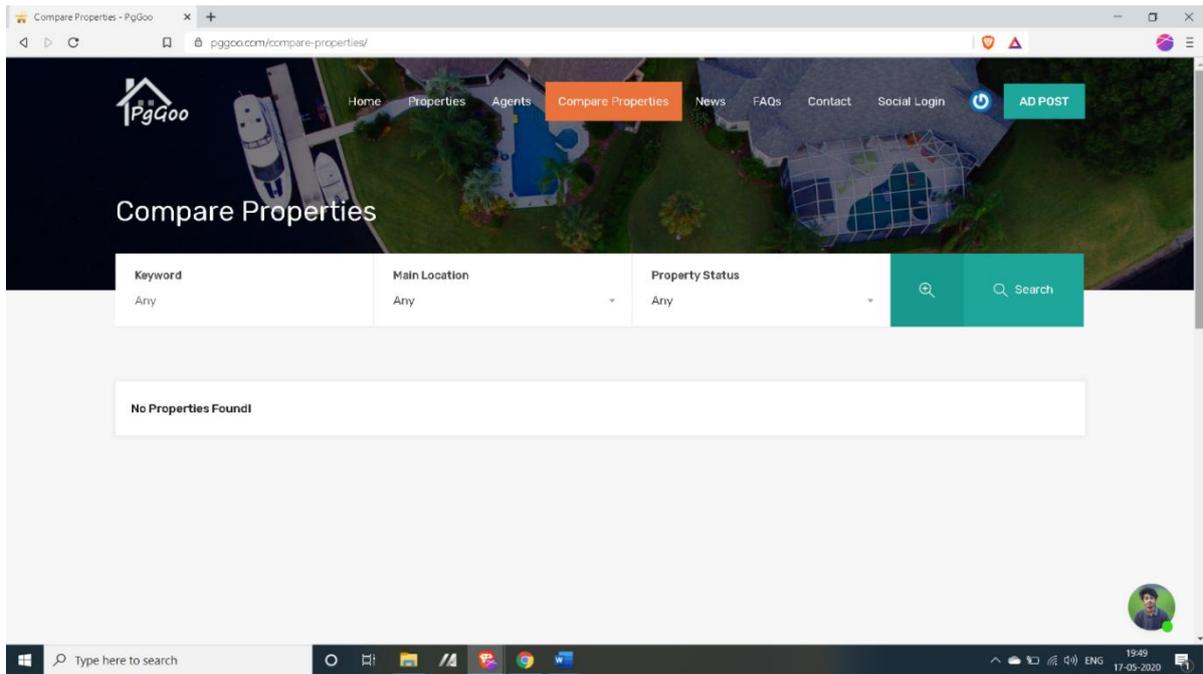


Fig 5.1.11: Properties Compare Section

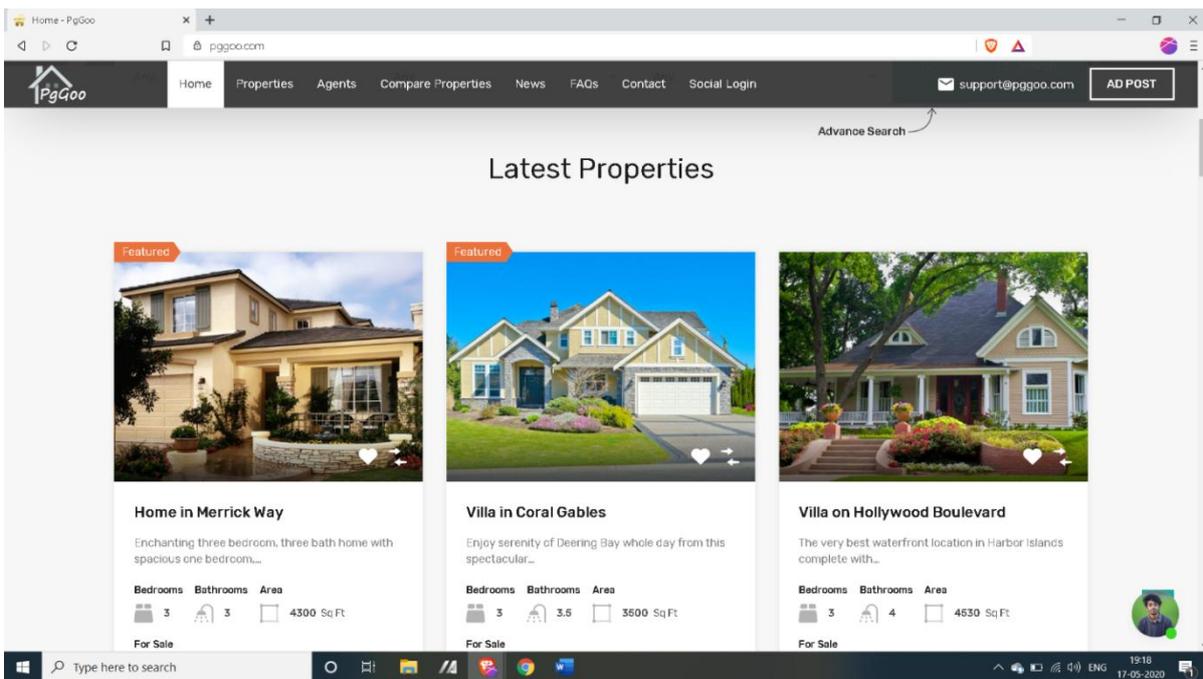


Fig 5.1.12: View of Latest Properties

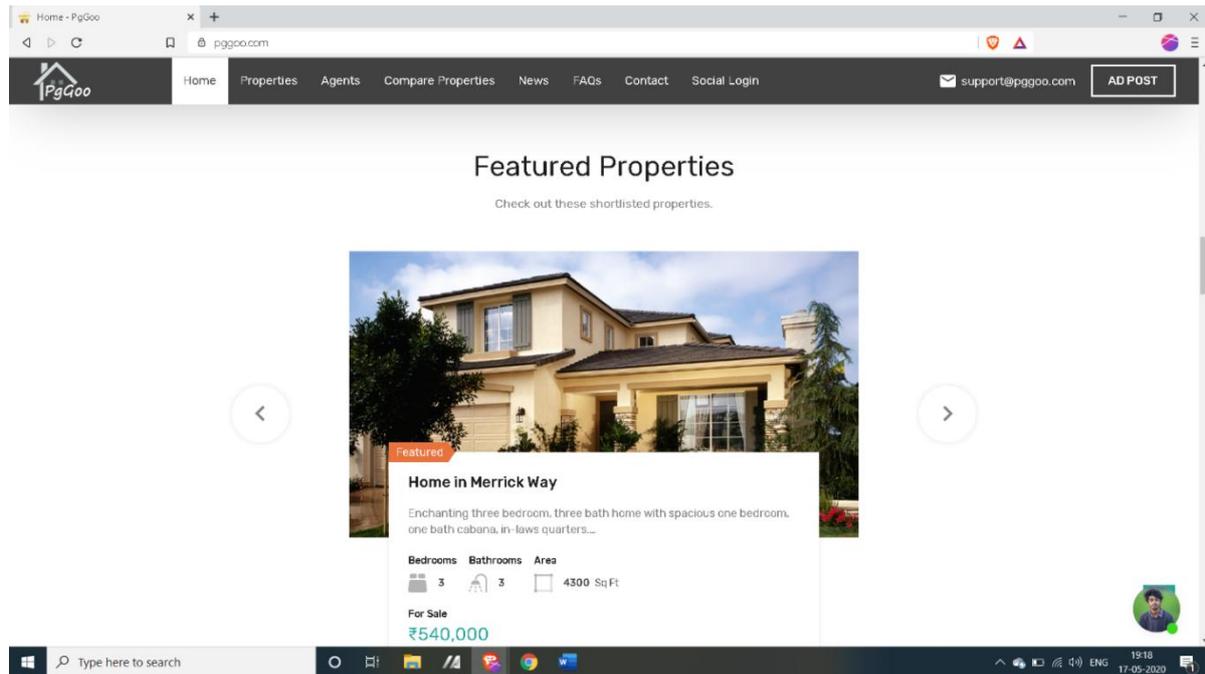


Fig 5.1.13: Featured Properties

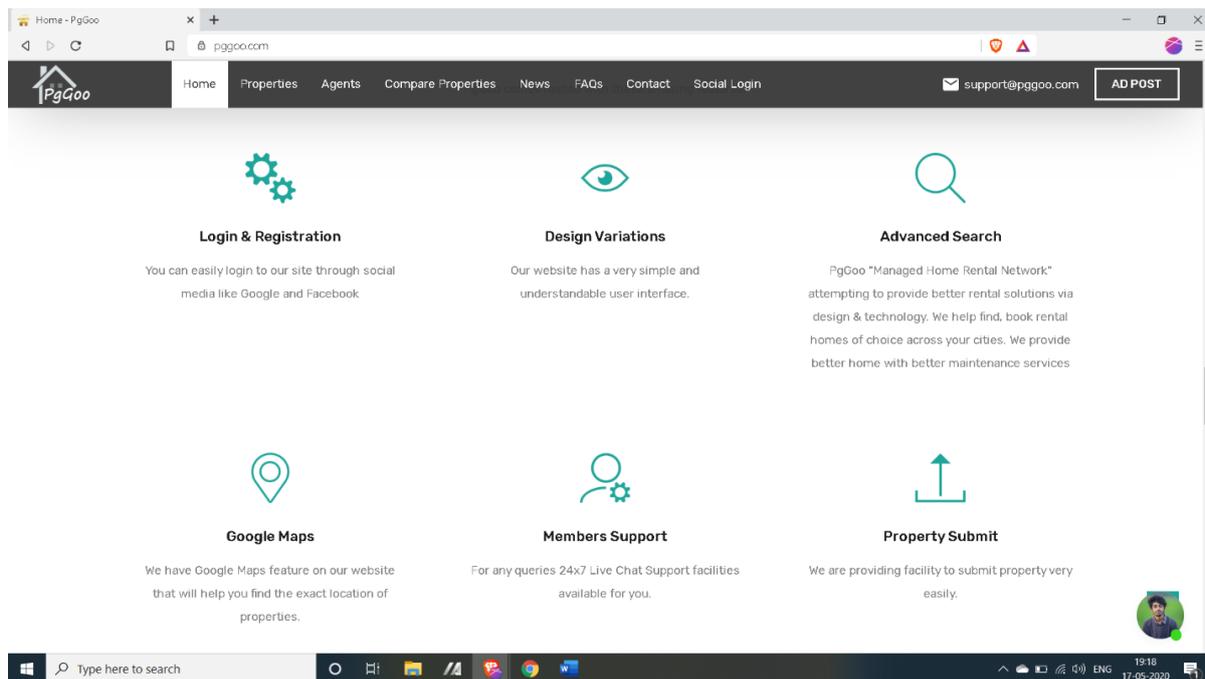


Fig 5.1.14: Website Information

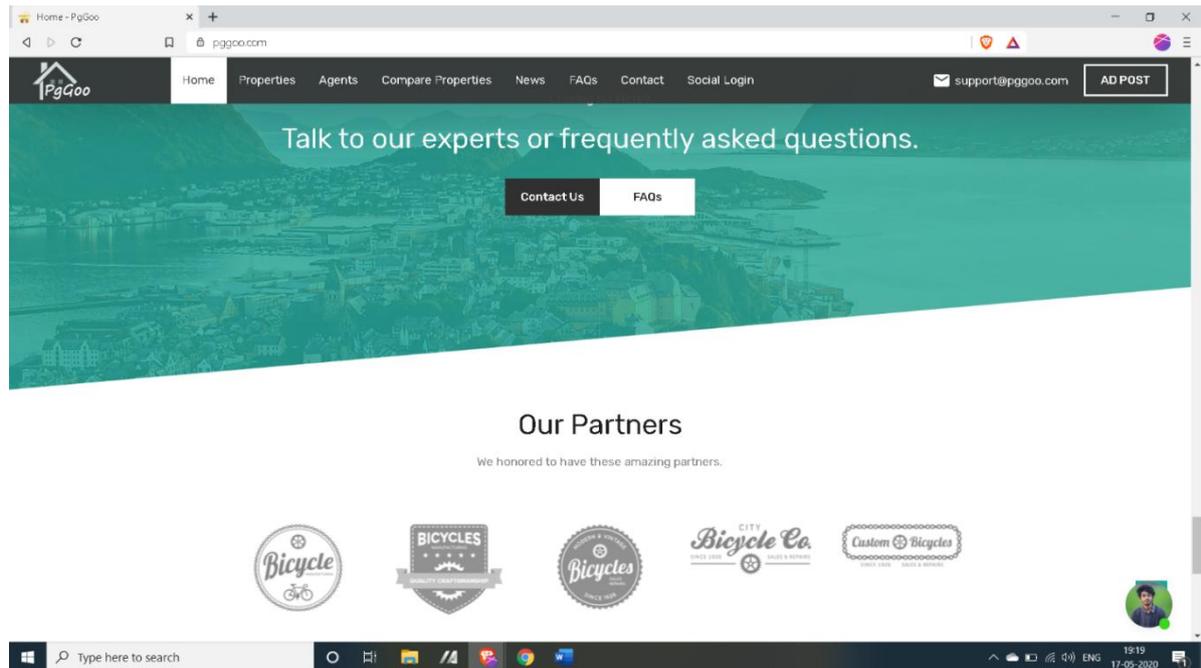


Fig 5.1.15: Partners Advertisement

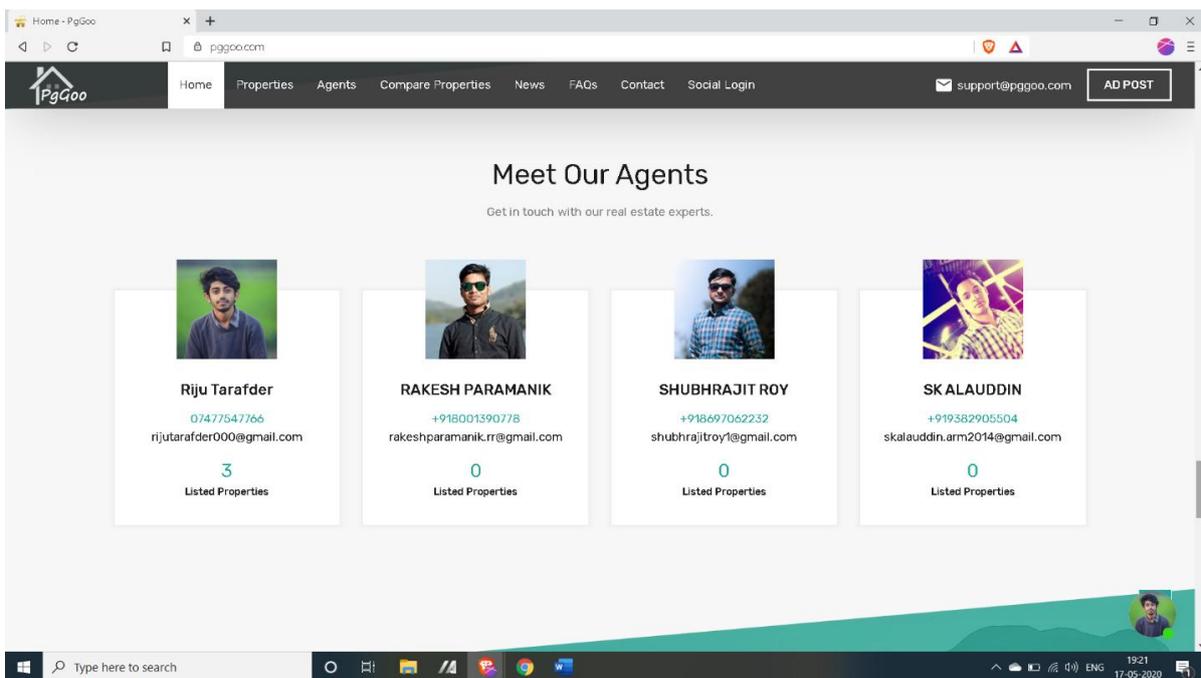


Fig 5.1.16: Property Agents Details

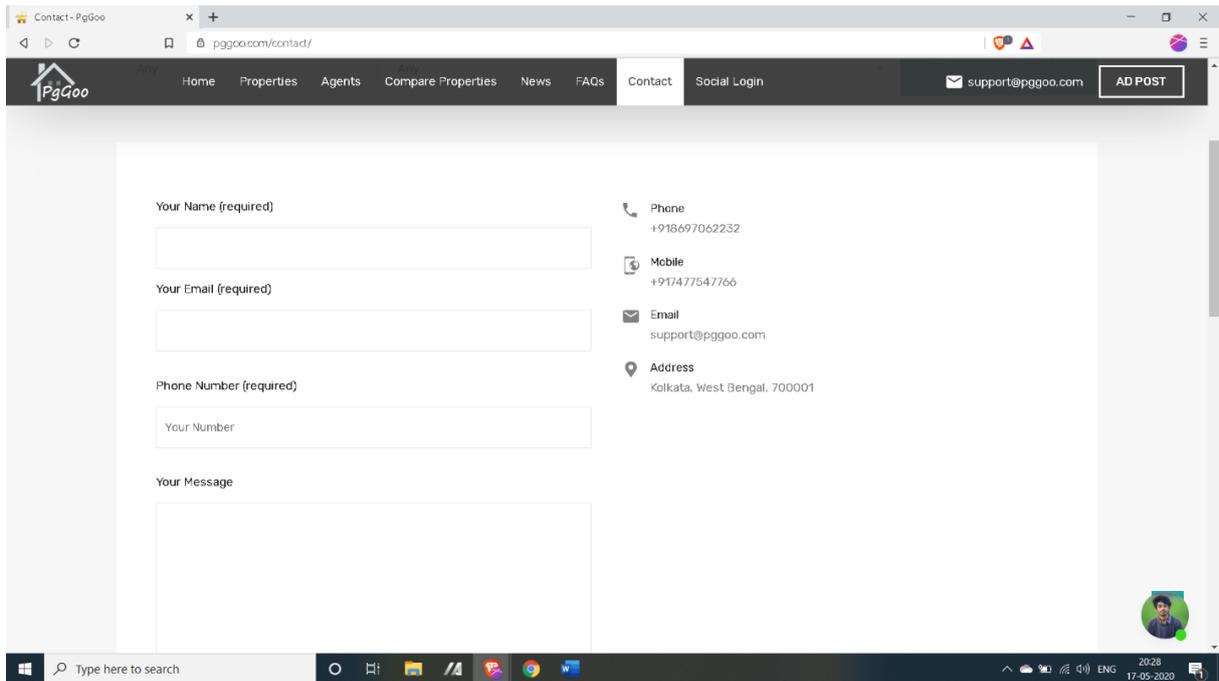


Fig 5.1.17: Contact Us

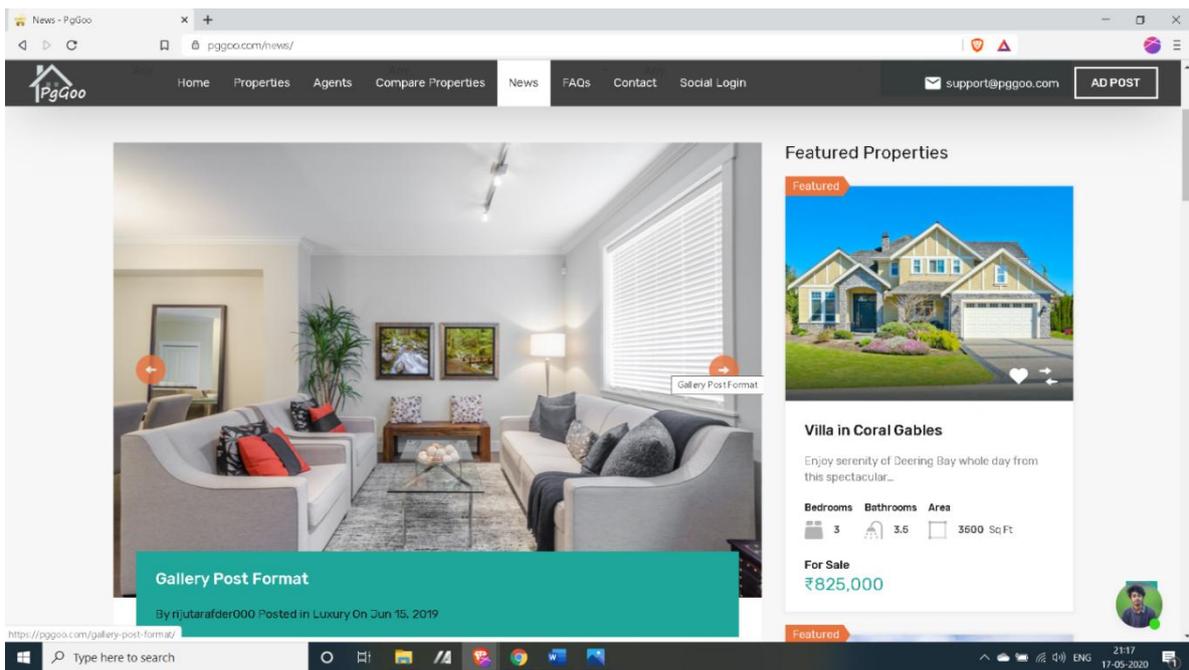


Fig 5.1.18: Latest Updates and News

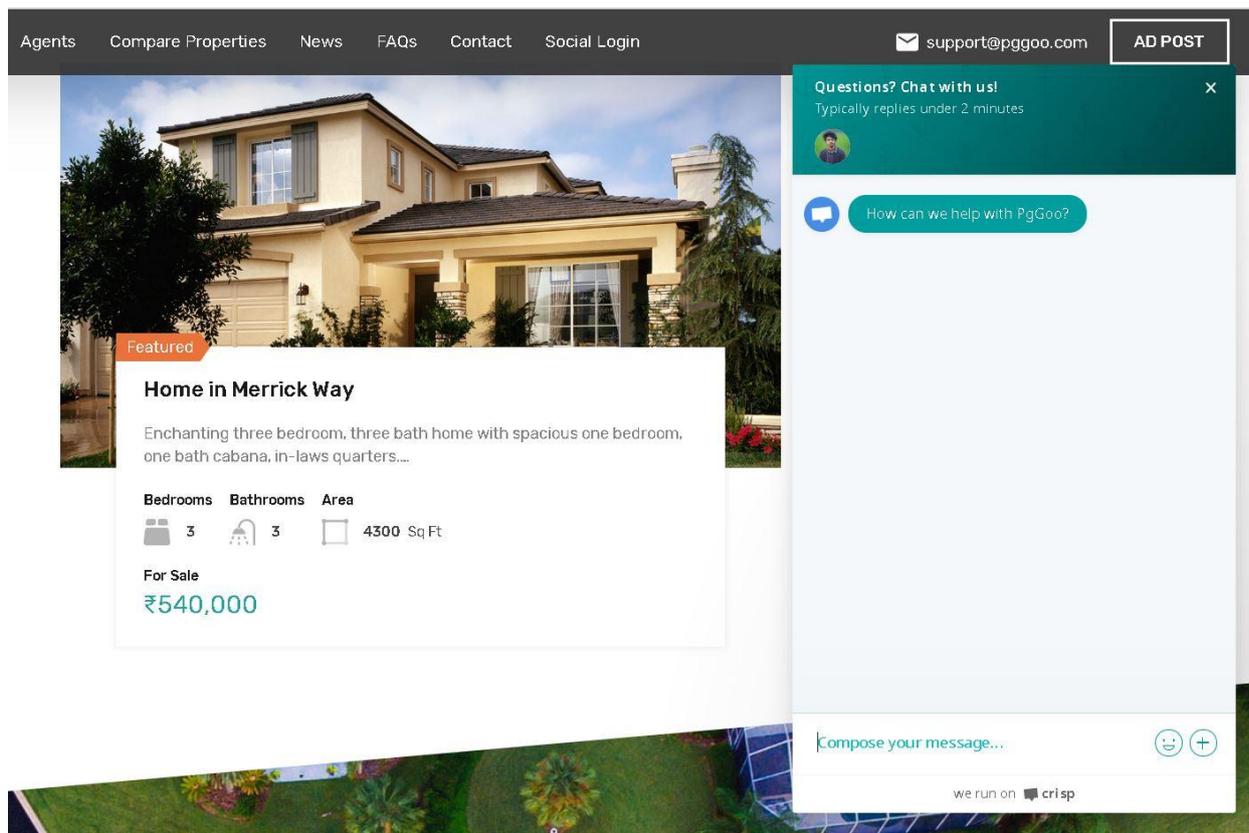


Fig 5.1.19: Chat Box

## 5.2 Discussion

It is known that for any meaningful computer-based information management to be integrated into any organization, proper training and orientation has to be given both to the staff and management. Proper training should be given to the data entry staff on how to handle the computer hardware especially during backup process. The staff should also be highlighted on the need and advantage of the system and how it equally assists them in their various field of work. Should also be informed of the cost of maintaining this new system so that they will handle it carefully.

## VI. CONCLUSION

The development of “House Rental System” involved many phases. The approach used is a top-down one concentrating on what first, then how and moving to successive levels of details. The first phase started with a detailed study of the problems and prospects of searching House, PG, Mess, Flats and Apartments in any house rental websites. In the course of this study, many problems were discovered to have hindered the effectiveness of the existing manual system. These problems, information needs and activities were documented and later used as the basis for system design, which immediately followed the first phase. The design phase was concerned primarily with the specification of the systems elements in manner that best met the organization’s business needs. During this phase, strict adherence was made on proven software engineering principles and practices. To implement this design, a computer program was then written and tested in php environment. It is hoped that effective implementation of this website product would eliminate many problems discovered during systems investigations.

House Rental business has emerged with a new goody compared to the past experience where every activity concerning House rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of functions and how these functions are achieved has been reshaped by the power of internet. Nowadays, customers can reserve book/buy/sale House online, rent House online, and have the house contracted successfully without any sweat once the customer is a registered member of the House Rental Management System.

The web-based House rental system has offered an advantage to both Tenants as well as Landlordsto efficiently and effectively manage the business and satisfies customers’ need at the click of abutton.

---

**REFERENCES**

- [1]. Junaid Ahmed Kirmani et al, International Journal of Computer Science and Mobile Computing, Vol.6 Issue.7, July- 2017
- [2]. The Development of Online House Rental and Advertising System A. G. Norjihhan& T. H. Chew Faculty of Computer Science and Information Technology, University of Malaya 50603 Kuala Lumpur, Malaysia
- [3]. International Journal of Scientific and Research Publications, Volume 4, Issue 11, November 2014 1 ISSN 2250-3153 www.ijsrp.org Rental House Management System Henry Peter Gommans , George Mwenda Njiru , ArphaxadNgukaOwange
- [4]. DESIGN AND IMPLEMENTATION OF AN AUTOMATED REAL ESTATE PROPERTY MANAGEMENT SYSTEM
- [5]. HOME RENTAL AND RELOCATION SERVICES SYSTEM by Alphonse MINANI from REPUBLIC OF RWANDA INDEPENDENT INSTITUTE OF LAY ADVENTISTS OF KIGALI
- [6]. <https://housing.com/rent/property-for-rent>
- [7]. <https://easytolet.in/>
- [8]. <https://www.nobroker.in/>

Riju Tarafder, et. al. "PgGo." *International Journal of Engineering Science Invention (IJESI)*, Vol. 09(07), 2020, PP 34-50. Journal DOI- 10.35629/6734