ABSTRACT

This project is entitled as "STAY BEFIKAR" it has become easy to search PG accommodation nearby the work place. It was difficult earlier to go a place to work which was situated at long-distances and hence had to lose good opportunities, as we don't know where to stay and where unaware about a particular city.

But now it has become easier to find an accommodation nearby the work place in affordable price. By using this application, users can find many number of paying accommodation nearby work place or desired place.

Chapter 1

INTRODUCTION

With the evolution of technology, customers are becoming more inclined towards online-based searches, and the offline market is shrinking. The local offline search market faces challenges and low acceptance in corporate cultures, lack of awareness, paper wastage, language barriers, and insufficient information. The Stay-Befikar is a web application provides local search for different PG online. To simplify the day to day activities of the Users, Stay-Befikar delivers a local search for a structured database of local PG listings. Stay-Befikar makes it easy to locate and find detailed information about a particular PG/Rooms like Boys PG, Girls PG, Salon shop, Mobile Shops, Renting House or Flats, Cloths shops and along with this information we can provide discount offers if any.Stay-Befikar is the Local Search Engine that provides comprehensive updated information of all the Business to Business and Business to customer products and services.

1.1 Objective

The main objective of this project is to make available the detailed information about the Product/Services at one place so that the user need not worry about the other resources to find the required information.

Chapter 2

LITERATURE SURVEY

2.1 Existing system:

Currently in Paying Guest Accommodation System we have to ask and search for the PG manually and we should go there and see what all facilities are there and what kind of rooms are there. So we don't have that much time to ask and find out where to stay and what is the price and all.

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Disadvantages of Existing system

- ✓ Time-consuming.
- ✓ We cannot get all the information in shorter time.
- ✓ We have to travel more and visit more new location to search PG.
- ✓ Records are maintained manually.
- ✓ No proper information is provided.

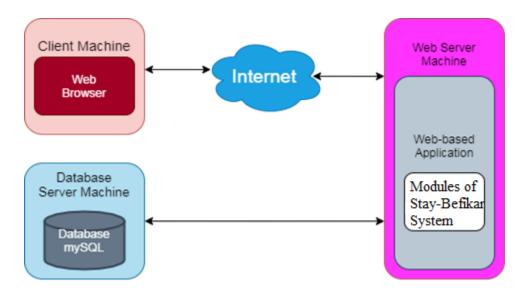
2.2 Proposed system

In the proposed system, We gather all the information regarding from owners of paying guest accommodations and customer requirements and that information we will entered into the system so that, customer doesn't have to go there and searches for PG's where he wanted to search. Customer will get desired locations where he wanted to stay in his nearby workplaces. We are going to overcome all the drawbacks which is present in existing system.

Advantages of proposed system

- ✓ First and foremost thing is that, it saves our valuable time.
- ✓ Reduction of number of manual material used for the data storage.
- ✓ Backup facility provided in case of data loss.
- ✓ Speedy retrieval of data.
- ✓ Cost benefits.
- ✓ Increased data security.
- ✓ No need to visit any place to get information about PG's.
- ✓ We can search and filter all the PG's directly from our place.
- ✓ We can check all the details about PG's in details like Room type, Amenities, Facilities and food categories etc.

2.2.1 System Architecture



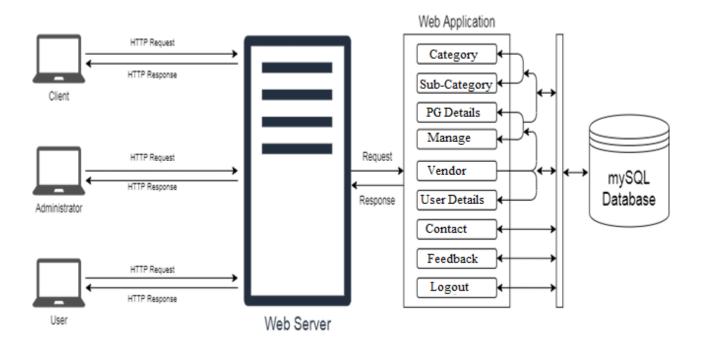


Fig 1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. Stay-Befikar System architecture is shown in (fig. 1) includes web-browser client, MySQL Database Server and Web Server, Application server contains processing modules for data processing.

Web-Browser client - provides access to Stay-Befikar system can be provided via the web-interface, user can use any modern web browser (including Microsoft Internet Explorer, Google Chrome and Mozilla Firefox) to login to the system and use it. Web-Server that comes with cloud Linux operating system used to install application and database software for hosting solution that utilizes server system. The View of Stay-Befikar system – in this application provides us the possibility of complete control over the management of the PG/Room's add and delete information for Stay-Befikar System.

MySQL Database – to guarantee scalability and fault- tolerance, data stored in MySQL Database, and the load balancer works in a completely transparent way. The web-interface for the Stay-Befikar system has been developed using the Bootstrap library. The interface of the developed web-forms is provided on the (see Chapter. 6). Architecture of Stay-Befikar System

2.3 Feasibility study

A feasibility study is an analysis used to measure the ability expectation to complete a project successfully including all relevant factors that affects it such as operational, technical and economical.

A feasibility study is used to determine positive and negative outcomes of the project.

2.3.1 Operational feasibility

Vendors are ready to use this application software for managing their information and it is acceptable by administration as well to make available all the information at one place.

2.3.2 Technical feasibility

A number of issues we have to consider while doing a technical analysis.

- Understand the different technologies involved in the proposed system.
 - Before commencing the project, we have to be very clear about what are the technologies that are to be required for the development of the new system.
- Find out whether the organization currently processes the required technologies.
 For this project we have used Visual StudioCode as a front-end editor and MySQL as back-end.

2.3.3 Economical feasibility

In this study, the cost of the proposed system is less as compared to the maintenance cost in the existing system in which more cost involved in maintenance. The system also reduces the administrative and other users to do various jobs that available software can do. So, this system is economically feasible.

Chapter 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 Introduction

This document describes the software requirements, hardware requirements, purpose and the nature of the software which are developing.

3.1.1 Purpose

Those principle reasons this project may be on mechanize the existing system of information in which data will get from the different data sources to reduce the time of data collection the proposed system came into exist.

3.1.2 Scope

We gather all the information regarding from owners of paying guest accommodations and customer requirements and that information we will entered into the system so that, customer doesn't have to go there and searches for PG's where he wanted to search. Customer will get desired locations where he wanted to stay in his nearby workplaces. We are going to overcome all the drawbacks which is present in existing system.

The suggested product Stay-Befikar will actualize all for the user's. Also, check accessibility. There would be three conclusion modules Admin, Vendor, and User/Visitor. Admin can do all functionalities without any restrictions. Vendors can have limited options according to their needs, and Users/Visitors can search for the PG/Room's or the product they need

3.2 System Specification

3.2.1 Hardware requirements

Processor : Pentium 4 or Above
RAM : 512 MB or Above
HDD : Minimum 20 GB

3.2.2 Software requirements

Operating System : Windows XP or above IDE : Microsoft Visual Code

Designing Tools : HTML, CSS, Bootstraps

Server Side Programming language : PHP

Server : XAMPP Server

Back End : MySQL

Web Browser : Google Chrome, Internet Explorer etc.

3.3 Requirement specification

3.3.1 Functional requirements

- Administrative
- PG Owner Module(Vender)
- Users:

• Administrative:

Stay-Befikar in the role of administrator will manage all day to day activities. As well as verify PG/Room's and their services.

Responsibilities of Administrative

- ✓ Admin can see all detail in brief.
- ✓ Admin can add Vendors (PG Owners)
- ✓ Admin can See all PG's which is added by Vendors
- ✓ Admin can see Users Details.
- ✓ Admin can see Users Suggestions and Feedbacks.

• PG Owner Module(Vender):

Vender is the person who's responsibility is to provide correct and genuine information about their PG/Room's.

Role of Venders

- ✓ Manage their profile.
- ✓ Add Own PG details.
- ✓ Interact with Users.
- ✓ See feedbacks form Users.
- ✓ Manage PG's and Information's.

• Users:

Visitors, as users, can seek the PG/Room's information available on the Stay-Befikar portal. If they need the PG/Room's, they may contact Vender for further information and avail the services or buy the PG/Room's.

Role of Users

- ✓ Search for PG's and sort easily.
- ✓ Give Feedback about PG and PG Owner.
- ✓ Manage PG Rent Records etc.

3.3.2 Nonfunctional requirements

The non-functional requirements describe the aspects of the system that do not relate to execution of the system.

Below are the nonfunctional requirements of the system.

- **Usability:** This defines how the system is used easily by the user. How system will create user friendly relation with the user. Here in Stay-Befikar, this software is totally user friendly GUI based system. Anyone can get idea of how to use system by seeing itself.
- **Security:** This gives surety about the system access security by the unauthorized person. This system provides different login for all level of users.
- **Reliability:** It defines how the software will work without failure for a given time. Stay-Befikar will respond properly with time period.
- **Performance:** performance will measure the response time of a system and accuracy of the result. Stay-Befikar will respond at accurate time of request.
- Modifiability: this required to make the changes into the system accordingly. Stay-Befikar is modifiable software, it can modify as required.

3.4 Tools and Technologies used

3.4.1 Tool

Microsoft Visual Code:

Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, MacOS and Linux. It comes with built-in support for JavaScript, Typescript and Node.js

- Developers can use VS Code to build web applications in JavaScript, Typescript, <u>ASP.NET</u>
 <u>5, Node.is</u> and others.
- Support for debugging: Debugging support for Node.js (JavaScript and Typescripts) on all platforms and experimental support for Mono (C# and F#) on OS X and Linux.
- Intelligence support. See below image for list of language supported and for intelligence support
- Customizable editor: You can change themes, keyboard shortcuts and workspace settings.
- Create your own snippets and it also allows you to work with up to 3 files side by side.
- Editing features
 - Bracket matching
 - Parameter hints for methods
 - Selection and multi cursor
 - Go to definition and Go to Symbol support
 - Shows errors and warnings in status bar

3.4.2 Technologies

PHP:

PHP is a server side scripting language. That is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor. It is designed to web development. It is the general pretension programming language. PHP code can use with the HTML code.

- PHP meaning Hypertext Preprocessor.
- It used as middleware in programming language.
- PHP code is encaged within <? php....?> tag.
- It is server side programming language.
- It develops the web pages.

Features of PHP

- Supports Standard, Fast CGI and Apache module- The php is a standardized CGI program. It can run on any UNIX machine. As it supports apache module, PHP is fast and powerful programming language.
- Access Logging- PHP has the capability to access logging. User can maintain their logging.
 It stipulates the real time accessing to the user.
- Access Control- PHP consist a web screen configuration which handles the access control.
 In PHP, pages are protected with passwords.
- HTTP-based authentication control- To create the HTTP authentication for the Apache server.
- Extended Regular Expressions- Regular expressions used in PHP for pattern matching, string manipulation etc. PHP supports all common regular expressions.
- HTTP Header Control- PHP contains the HTTP headers. It uses the higher level website
 design. It is mainly use to send a Location. URL header is to redirect the calling client to the
 other URL.

3.4.3 Database

MySQL:

This is the database for developing web application. It meaning as structured query language. It is being widely used database in web applications.

MYSQL is defined as an open sourced database management system. It writes the queries. It is distributed, developed by Oracles Corporation. It supports all operating systems. It is used as backend for database to accumulate the data. MySQL runs on virtually all platforms including Linux, UNIX, and Windows. Although it can be used in a wide range of applications. MySQL is most often associated with web applications.

XAMPP Server:

XAMPP is open source software developed by <u>Apache friends</u>. XAMPP software package contains Apache distributions for Apache server, MariaDB, PHP, and Perl. And it is basically a local host or a local server. This local server works on your own desktop or laptop computer. The use of XAMPP is to test the clients or your website before uploading it to the remote web server. This XAMPP server software gives you the suitable environment for testing MYSQL, PHP, Apache and Perl projects on the local computer.

It can also be used to create and configure with databases written in MySQL and/or SQLite. And since XAMPP is designed as a cross-platform server package, it is available for a variety of operating systems and platforms like Microsoft Windows, Mac OS X, Linux, and Solaris.

3.4.4 Designing Tools

HTML:

Html is benchmark markup language that creates different web pages. The code in html is in the pattern of tags. It uses tags fenced in brackets like <html>. HTML tags commonly written in duo like <h1> and </h1>. Here first is wont to open the tag and second one is to close the tag.

To read the HTML files we use browsers, called as web pages. Browsers are not displaying the html tags. It executes the html files. HTML does an important role in web development. It represents the websites semantically and represents the structure.

What is HTML?

- HTML is Hypertext Markup Language.
- HTML renders the web pages.
- It includes a group of different various tags.
- Tags are used to create pages in web development.

CSS:

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. CSS brings style to your web pages by interacting with HTML elements. Elements are the individual HTML components of a web page.

- CSS was created to work in conjunction with markup languages like HTML. It is used to stylize a page.
- There are three styles of implementing CSS, and you can use the External style to accord multiple pages at once.
- You won't go far without seeing some kind of CSS implementation nowadays since it's as much of a requirement as the markup language itself.

JavaScript:

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

- JavaScript is a lightweight, interpreted programming language.
- Designed for creating network-centric applications.
- Complementary to and integrated with Java.
- Complementary to and integrated with HTML.
- Open and cross-platform.

Bootstrap:

Bootstrap is a free and open source front end development framework for the creation of websites and web apps. The Bootstrap framework is built on HTML, CSS, and JavaScript (JS) to facilitate the development of responsive, mobile-first sites and apps.

Bootstrap includes user interface components, layouts and JS tools along with the framework for implementation.

- Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website.
- o It is absolutely free to download and use.
- o It is a front-end framework used for easier and faster web development.
- It includes HTML and CSS based design templates for typography, forms, buttons, tables,
 navigation, modals, image carousels and many others.
- o It can also use JavaScript plug-ins.
- o It facilitates you to create responsive designs.

Chapter 4

DESIGN DOCUMENTS

4.1 ER-Diagram

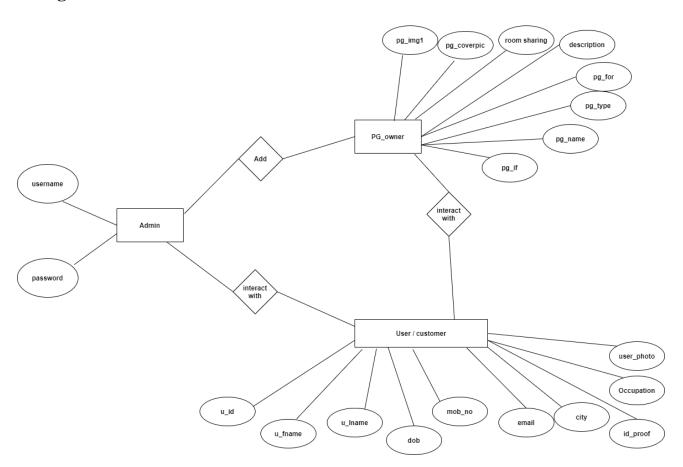


Fig.1 ER-Diagram: Entity relationship diagram

4.2 Data-flow-diagram

The Data Flow Diagram routes the flow of information for the system, by using the symbols like rectangle, circle and arrows, short text labels to show the data flow routes between each destination.

The data flow diagrams are functionally divided into, Zero level, First level and Second level data flow diagrams.

1. Zero level DFD

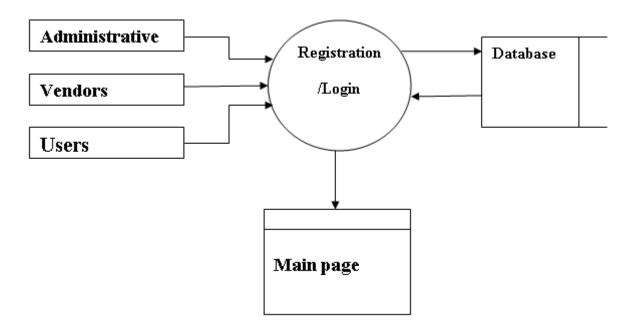


Fig.2 Zero level data flow diagram

2. One level DFD

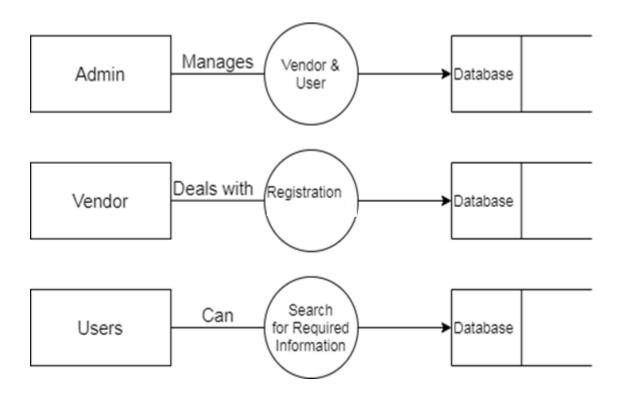


Fig.3 One level data flow diagram

3. Two level DFD

• Administrative two level DFD

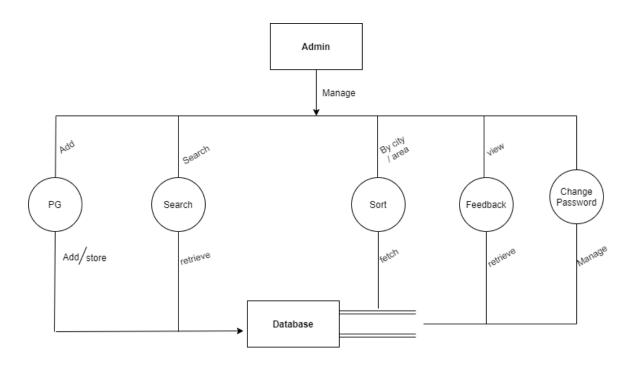


Fig.4 Two level data flow diagram

• Vendors two level DFD

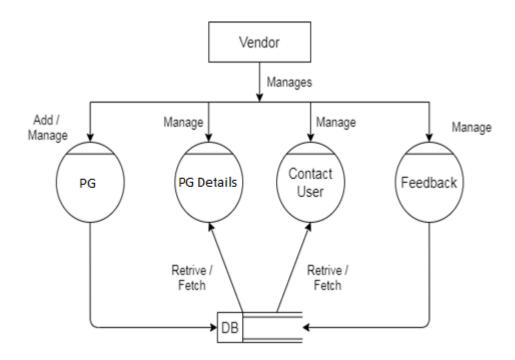


Fig.5 Two level data flow diagram

• Users two level DFD

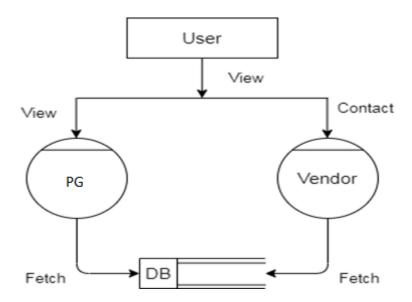


Fig.6 Two level data flow diagram

4.3 DATA DICTIONARY

After carefully understanding the requirements of the client the entire data storage requirements are divided into below tables.

1. city_details

Fields	Type	Description
c_id	int(100)	Primary key
c_name	varchar(100)	
v_code	varchar(100)	Foreign key

2. area_details

Fields	Туре	Description
a_id	Int(100)	Primary key
c_id	Int(100)	Foreign key
a_name	varchar(100)	
v_code	varchar(100)	Foreign key

3. amenities

Fields	Туре	Description
am_id	int(100)	Primary key
v_code	varchar(100)	Foreign key
shower	int(100)	
Chair	int(100)	
Bed	int(100)	
table	int(100)	
Washing machine	int(100)	
Fan	Int(100)	

4. Assign_amenities

Fields	Туре	Description
as_id	int(100)	Primary key
pg_id	int(100)	
am_id	int(100)	Foreign key
v_code	varchar(100)	Foreign key

5. contact_us

Fields	Туре	Description
cs_id	int(100)	Primary key
b_id	int(100)	
p_name	varchar(100)	
p_desc	varchar(100)	
p_photos	varchar(100)	
p_status	varchar(100)	

$\textbf{6. feedback_details}$

Fields	Type	Description
f_id	int(100)	Primary key
feedback_id	varchar(100)	
Fname	varchar(100)	
Lname	varchar(100)	
Email	varchar(100)	
Phone	varchar(100)	
Msg	varchar(100)	
Status	varchar(20)	
created_dt	varchar(100)	

7. feedback_reply

Fields	Туре	Description
feedback_id	varchar(100)	Primary key
Name	varchar(100)	
Email	varchar(100)	
Phone	varchar(100)	
Msg	varchar(1000)	
Status	varchar(20)	
created_dt	varchar(100)	

8. lgn_tbl

Fields	Туре	Description
lgn_id	int(100)	Primary key
Username	varchar(100)	
Password	varchar(100)	
Email	varchar(100)	
u_type	varchar(100)	
s_ques	varchar(100)	
s_ans	varchar(100)	
u_status	varchar(100)	

10. Login_info

Fields	Type	Description
Id	int(10)	Primary key
Name	varchar(100)	
Timestamp	varchar(100)	
ip_address	varchar(100)	
mac_address	varchar(100)	
Status	varchar(50)	

9. otp

Fields	Type	Description
Id	int(10)	Primary key
Username	varchar(100)	
Otp	int(10)	
Status	varchar(50)	
Timestamp	varchar(50)	
Hashvalue	varchar(100)	

10. PG_details

Fields	Туре	Description
pg_id	int(100)	Primary key
c_id	int(100)	Foreign key
v_code	varchar(100)	Foreign key
pg_name	varchar(100)	
pg_type	varchar(100)	
pg_for	varchar(100)	
description	varchar(100)	

room_sharing	varchar(100)	
pg_coverpic	varchar(100)	
pg_img1	varchar(100)	
pg_img2	varchar(100)	
pg_img3	varchar(100)	
pg_img4	varchar(1000)	
status	varchar(100)	

11. Vender_details

Fields	Туре	Description
v_code	varchar(100)	Primary key
v_fname	varchar(100)	
v_lname	varchar(100)	
v_email	varchar(100)	
v_mobile	varchar(100)	
v_alt_mob	varchar(100)	
v_idproof	varchar(100)	
v_photos	varchar(100)	
v_reg_date	varchar(100)	
v_type	varchar(100)	
v_status	int(10)	

12. User_details

Fields	Туре	Description
U_id	int(10)	Primary key
U_code	varchar(100)	
First_name	varchar(225)	
Last_name	varchar(100)	
Dob	date	
mob_no	varchar(100)	
City	varchar(100)	
id_proof	varchar(100)	
occupation	varchar(100)	
user_photo	varchar(100)	

4.4 Use case diagram

• Use case diagram



Fig. 7 System use case diagram

• Administrative use case diagram

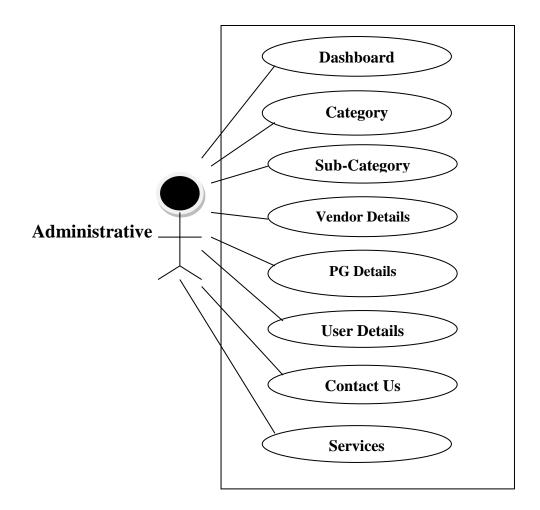


Fig. 8 Administrative level use case diagram

• Users use case diagram

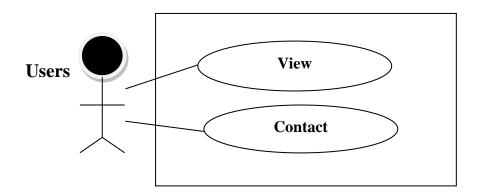


Fig. 9 Users level use case diagram

• Vendors use case diagram

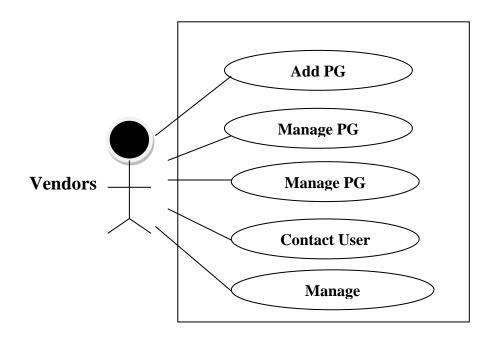


Fig. 10 Vendors level use case diagram

4.5 Activity diagram

• Registration page activity diagram

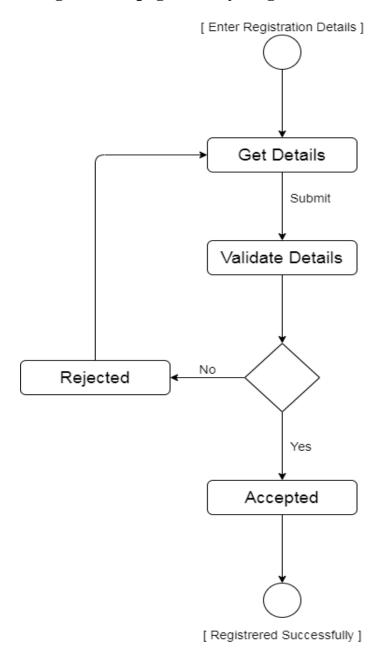


Fig. 11 Registration page activity diagram

• Login page activity diagram

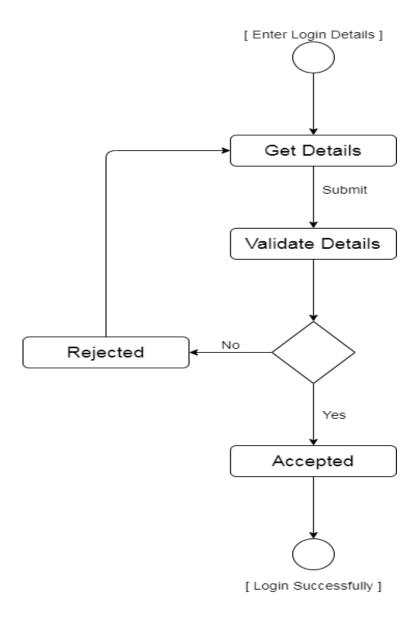


Fig. 12 Login page activity diagram

Administrative activity diagram

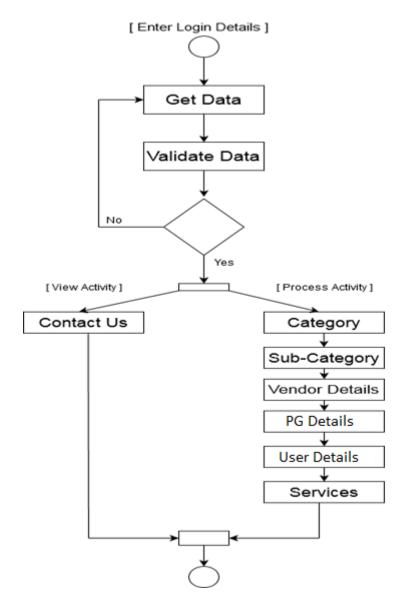


Fig. 13 Administrative activity diagram

Vendors activity diagram

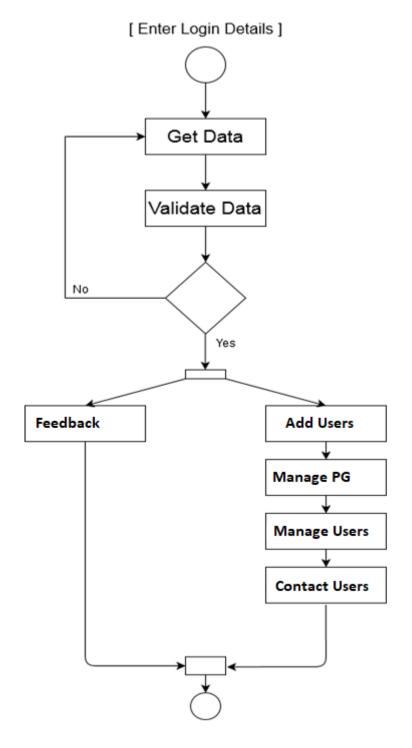


Fig. 14 Vendors activity diagram

• Users activity diagram

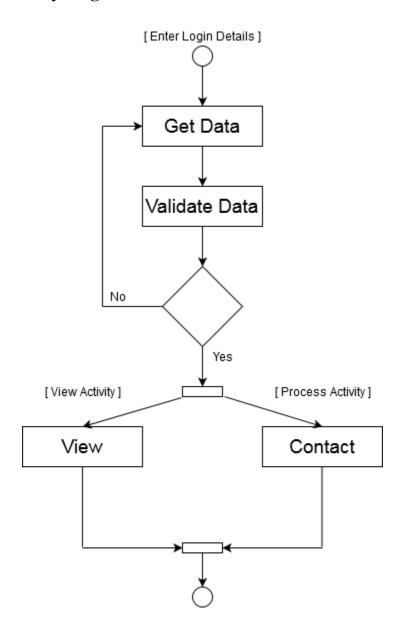


Fig. 15 Users activity diagram

4.6 Relational Schema

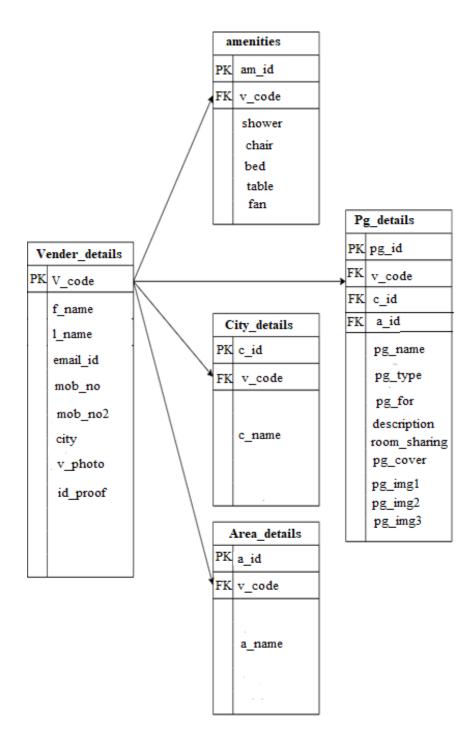


Fig. 16 Relational Schema

Chapter 5

VERIFICATION AND VALIDATION

5.1 Introduction

The verification and validation can also referred as software quality control. It is the process of checking whether the software fulfills its purpose and meets all the requirements.

5.2 Methodology used

Agile methodology

While each of the agile mythologies is unique in its specific approach, they all share a common vision and core values. They all fundamentally incorporate iterations and the continuous feedback that it provides to successively refine and deliver a software system. They all involve continues planning, continues testing, continues integration, and other forms of continues evolution of software. They are lightweight, especially compared to traditional waterfall style processes, and inherently adaptable. What is more important about agile method is that they all focus on empowering people to collaborate and make decisions together quickly and effectively.

- Test first programming
- Refactoring
- Continues iterations
- Simple design
- Coding standards

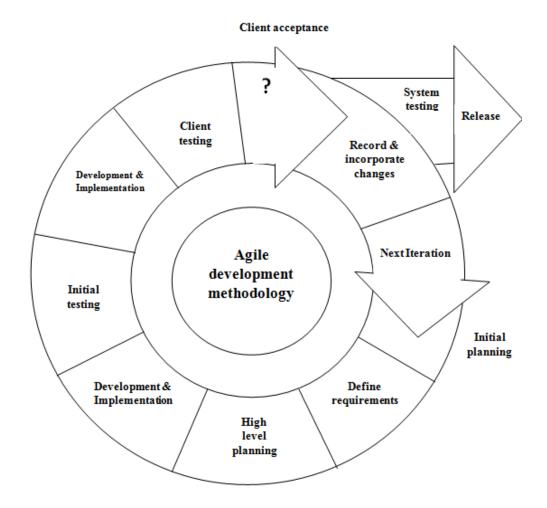


Fig. 17 Agile model.

The scope of work is not defined up front so We have used agile development approach to have agility and flexibility at the core of the entire development process. To find solutions for the evolving requirements through regular collaboration and communication. To Plan, analyze, design, develop, document, and test simultaneously and iteratively.

We have used agile model for web development by creating modules and integrating them per sprint. Then optimizing the site through several minor adjustments, rather than waiting for weeks and making major changes.

5.3 Testing technology

Black Box Testing

Black Box Testing is one of the approaches to the testing scenario or we can call it as the type of testing. In block box testing will do the test engineers, where the framework functionality will be checked. In the black box testing code will not visible to the test engineers. Here we are checking the missing function if any interface error, we will be checking the performance of the software and its behaviors. Here we also check any external error regarding the database access, etc.

White Box Testing

White Box Testing is also called as Code testing. This testing is done by the developer while developing the code for the software. This testing is concerned with the developer where the code will be visible to perform the testing, this testing involves step by step procedure to perform the testing. In this testing, we check all the independent condition and also the path in the code whether all the related path is executed at least once or not.

We also check whether the necessary loop and the condition were checked are not ,here we are checking the boundaries of the possibilities for the logical condition or decision for the true and false .here we will check the data structure is valid or not.

Ensure whether the possible validity check and validity lookups have been provided validate data entry.

Testing Strategies:

Levels of testing:

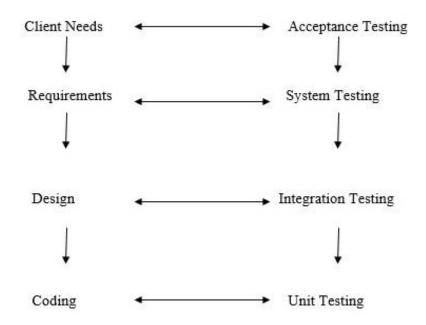


Fig. 18 Levels of testing.

The different testing is carried out which reflects its effectiveness and Efficiency of different phases of the software development where these test help to uncover the error in the corresponding phase.

There are two general strategies for testing software. There are as follows

Code Testing:

Code Testing where we will check the program logic is correct or not. To do this we are using the test case which is developed by the tester in order to check each and every path of the code logic as well as the flow of the program.

Specification Testing:

In this testing approach, we are using for the specification that is required to test the various behaviors of the application in various conditions. To perform the specification testing developer writes the testcase with all the combination of condition to perform the specification testing.

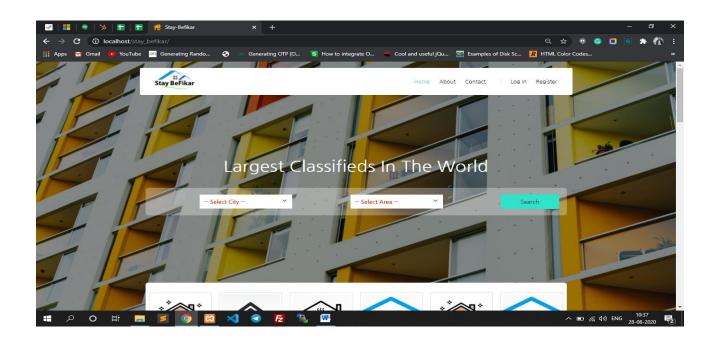
Integration Testing:

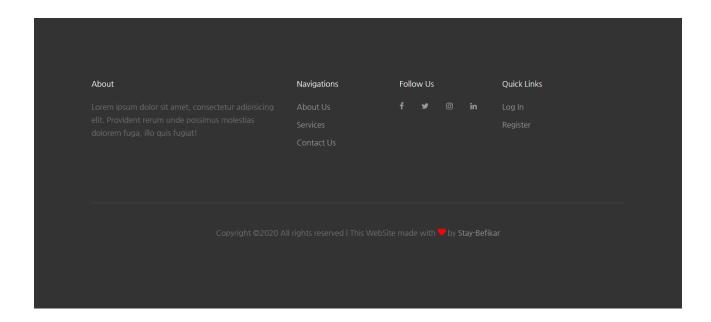
Integration Testing is performed after the unit testing, where the testing can involve the integration i.e. all the unit which are done with the testing those will be combined, integrated with the other entire module and performs the testing order to maintain the consistency.

Chapter 6

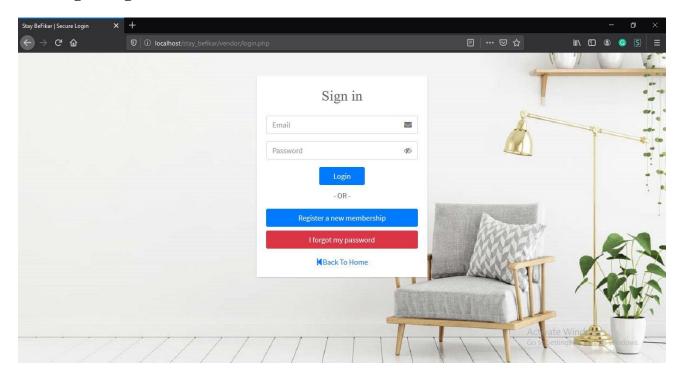
IMPLEMENTATION RESULT

1. Home page

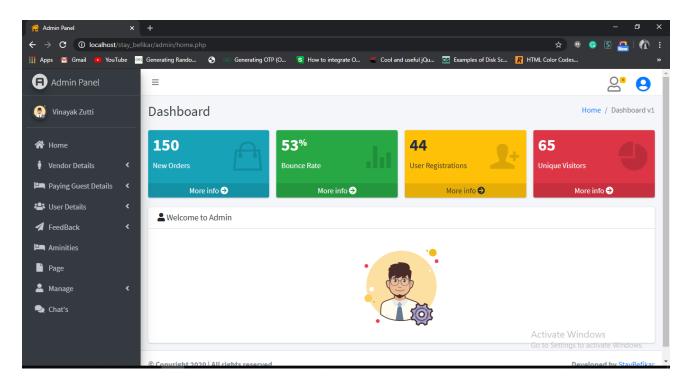




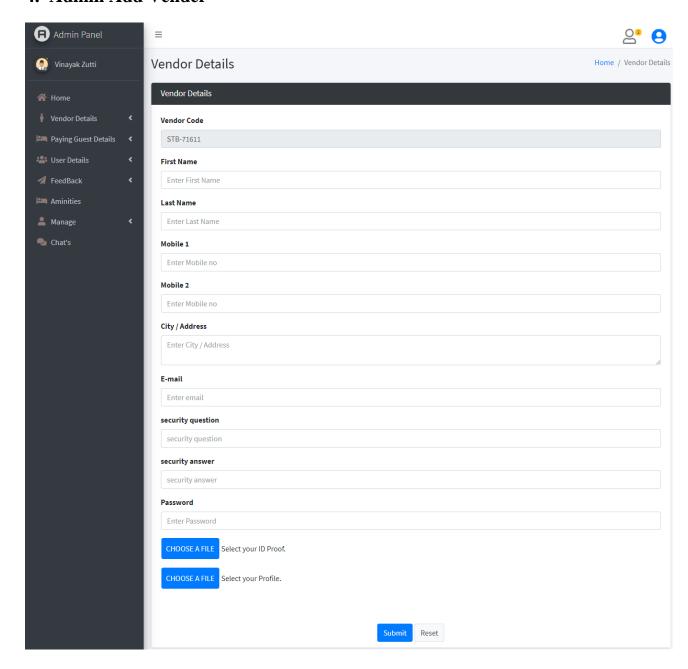
2. Login Page



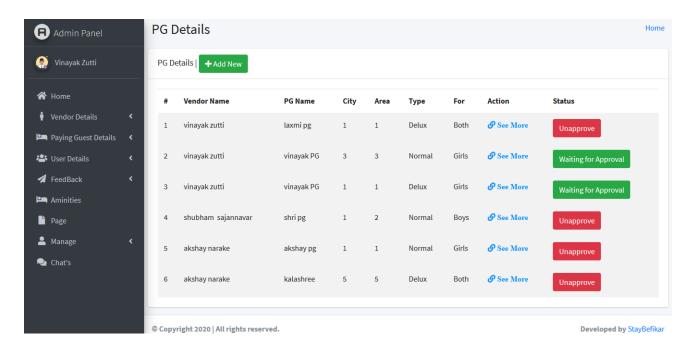
3. Admin Panel



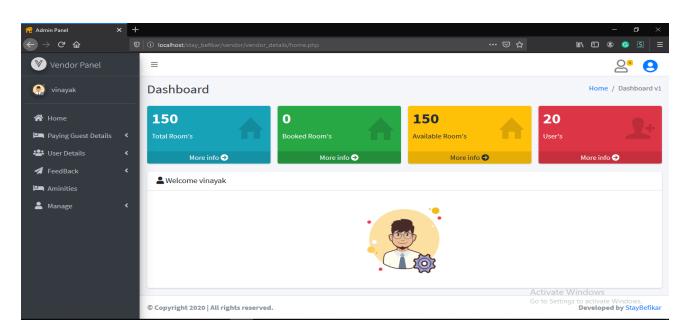
4. Admin Add Vender



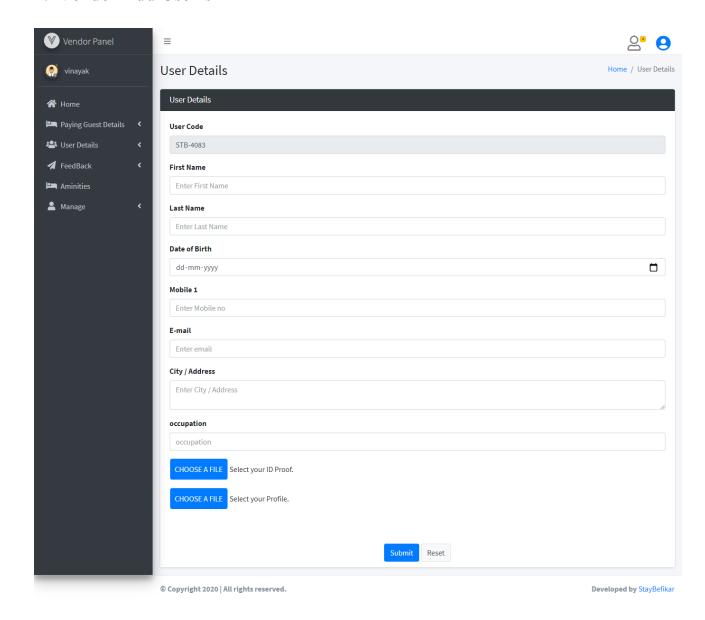
5. Verified approval Pg



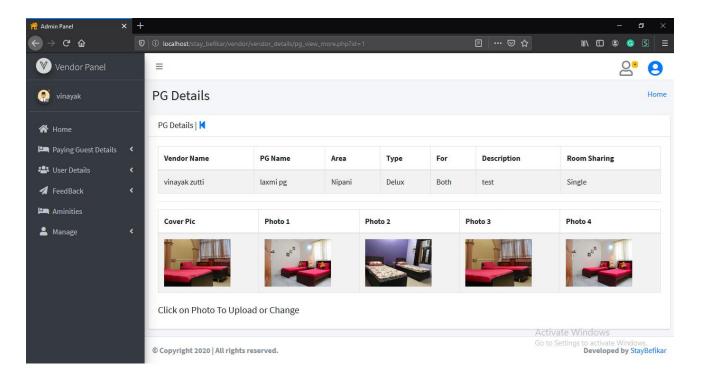
6. Vender Panel



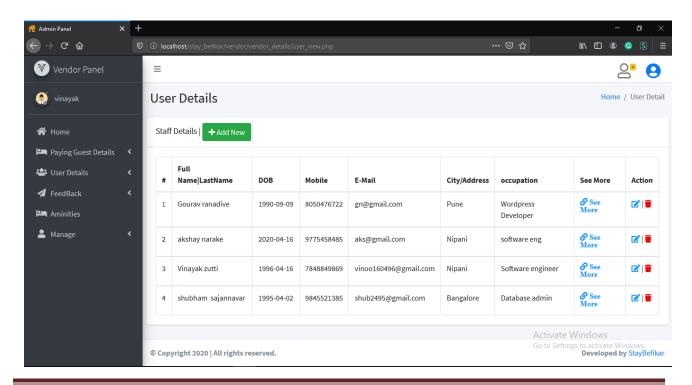
7. Vender Add User's



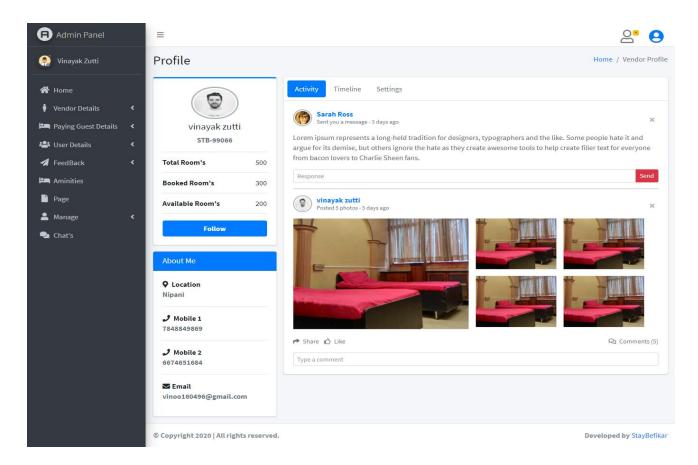
8. Room Details



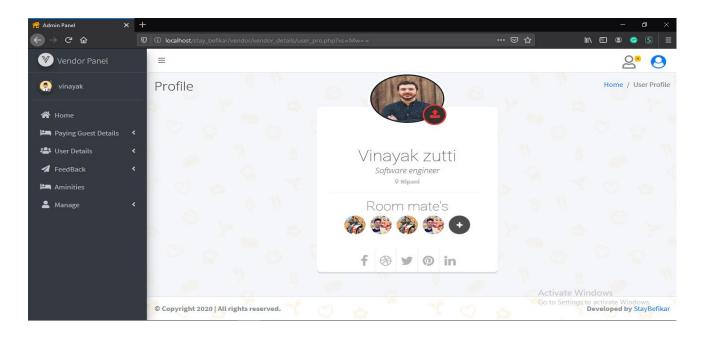
9. User Details



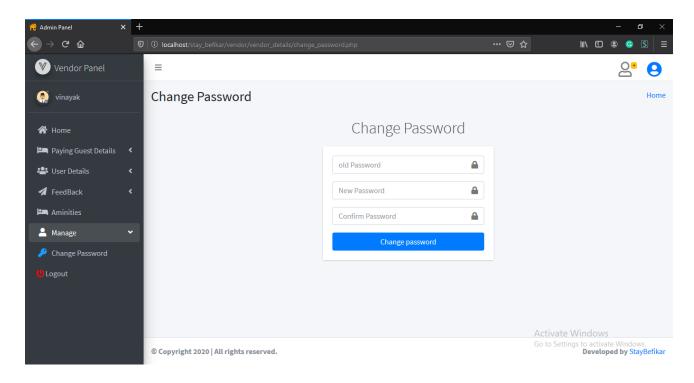
10. Vender Profile



11.User Profile



12. Change Password



Chapter 7

CONCLUSION AND FUTURE SCOPE

This Stay-Befikar application is developed for the necessity of the users to get the entire nearby PG and service information at one click. Using this application makes it easy to locate and find detailed information about a particular PG/Room's. Stay-Befikar is the Local Search Engine that provides comprehensive updated information of all the PG/Room's and services.

The main moto of the future enhancement is to subjoin additional features and update the application in the future to make the application more efficient for providing better user service to the users.

Some future functions are:

- Customize according to local demands.
- Target a smaller area and then expand.
- Vendor Panel can be customizable according to the plan.
- Use/Visitor can have a panel to discuss the issue or access the functionality of the system to get the things done.
- The payment gateway integrations.
- The discussion forum and communication portal will enable.

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