"PG LOCATOR APP"

Mr .Nawale Rohit Ramhari , Mr. Mouriya Narayan Dilip , Mr.Saindane Sumit Madhukar, Mr.Wagh Prasad Sunil
UG Student, Department of Computer
Engineering
BVCOE & Rc Nashik

Prof. S.R.Jadhav
Assistant Professor，*Department of Computer*
Engineering BVCOE & Rc Nashik

ABSTRACT
In the present system a customer can get only little information like address, contact number and food. Due to lack of information like price, exact location, security measures, the customer is unable to find the best PG of their choice. Often the customer may be misguided. The main objective of the project is to develop an application that provides PG's information regarding the location, facilities, food, price, maps, transportation facility, and safety measures. Any news, information, advertisements, displayed on this website reaches millions of potential customers. The proposed system is a android based application and maintains a centralized repository of all related information. The system allows one to easily access the relevant information and make necessary judgments regarding the PG's selection. User can take a look on different aspects of the information provided like location map, food, price, transportation facility and even securitymeasures and select a best PG of their choice.

Date of Submission: 15-05-2022   Date of acceptance: 30-05-2022

I.   INTRODUCTION
1.1 MOTIVATION:
When any person goes to a new city to live as a rental, he/she will definitely get confused. So this application particularly highlights the many advantages of PG (paying guest). This app offers a flexible housing choice to adapt to changing financial circumstances including the need to relocate quickly. This app is most commonly useful for the young adults who leave their family homes for studies, jobs, etc

1.2 PROBLEM STATEMENT:
To develop an application for the young adults who leave their family homes for studies, jobs, etc., and provide with the PG's information regarding the location,fascilities,prices,etc.

II.   LITERATURE REVIEW
As compared to the other applications like Zocalo, Pep rooms, Zelo where the app focuses in giving the static information about the PGs, but not the dynamic i.e., there is no in-depth details about the PG's all over the city. Our app, "Live inn" is an informative application which is providing the information based on our city. It will provide the information to those people who are staying in our city as a paying guest. Mainly it will give a list of available houses for rent in their required budget. This application gives detailed information about all the PGs around the city and also, they are all sorted according to the area, so that search can be made easy. Thus, allowing the users to search it according to their need, there are no specific applications on this domain. But there are static apps which does not give a detailed description about this domain. When the users are viewing the different houses, instead of directly booking the house they can added to their favorite. And then from this sorted list of houses users can book the house later on. In our application, we are also going to provide various facilities like Tiffin service, Laundry service, Gym etc. In the present system a customer can get only little information like address, contact number and food. Due to lack of information like price, exact location, security measures, the customer is unable to find the best PG of their choice. Often the customer may be misguided.

III.   SOFTWARE REQUIREMENT SPECIFICATION

3.1INTRODUCTION:

Finding hostel or PG accommodation with best amenities can be a major headache when you move to a new city, and often entail endless hobnobbing with real estate agents and brokers. So our App helps people in finding pg in just few minutes. Our PG locator is an android based application that helps to find a good and authorized PG.

In the present system a customer can get only little information like address, contact number and food. Due to lack of information like price, exact location, security measures, the customer is unable to find the best PG of their choice. Often the customer may be misguided. PG locator is a mobile app that seamlessly connects and interacts with everyone globally. PG locator is a valuable tool for the modern business. Our Project "PG Locator App" is a new way to help people meet their needs for living. It will benefit the community of students, working people, and therefore the larger community as a whole..

3.1.1 Project scope

Now-a-days, the process of house hunting is simplified with the introduction of the PG locators. The pain of unnecessarily spending some amount of money on the housing brokers is also reduced to a certain level with the introduction of this app. To develop an application that provides PG's information regarding the location, facilities, food, price, maps, transportation facility, and safety measures is the main purpose of this project.

3.1.2 User classes and Characteristics

1.3.1 User: the peoples who wants to book a pg through our app.

1.3.2 Pg Owner: The peoples who wants to register their pg on our app.

3.1.3 Assumptions and Dependencies

•   User are able to interact with the system.

•   User is able to navigate in each and every window of our app.

•   User is able to book pgs

3.2 FUNCTIONAL REQUIREMENTS

1)   Username and password will be provided after user registration is confirmed.

2)   Password should be hidden from others while typing it in the field

3)   Pg owner Should be able to edit the details of his/her pg

3.2.2 System feature:

•   24x7 Support

•   Every Type of user can use it.

•   Highly secured System

3.3.2 Software Interfaces

Android Studio: Android Studio provides the fastest tools for building apps on every type of Android device.

3.4 Non-functional Requirements

3.4.1 Performance Requirements

Performance requirements for proposed system are as follows, System will perform if proper database is been provided.

3.4.2 Safety Requirement

No safety requirements is been needed as our system is purely software oriented

3.4.3 Security Requirements

Firebase provides some security on its own to keep our data secured by controlling the access control.

3.4.4 Software Quality Attributes

•   **Correctness**: System is planned in such way that it will give most correct output.

•   **Reusable**: This software is reusable.

•   **Portable**: It is a app based so its introduces portability.

•   Also system satisfies other quality attributes such as reliability, interoperability, maintainability, and flexibility

3.5 SYSTEM REQUIREMENT
3.5.1 Database Required
NoSQL (Firebase):- The Firebase Realtime Database is a cloudhosted NoSQL database that lets you store and sync data between your users in real-time

3.5.2 Software Required
1.Android Studio
2. Java JDK
3.Android SDK

3.5.3 Hardware Required
1.Processor: Intel core i5 (Min)
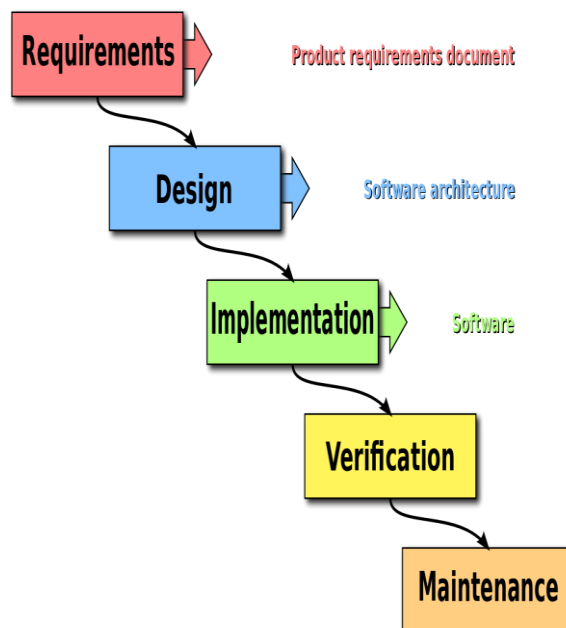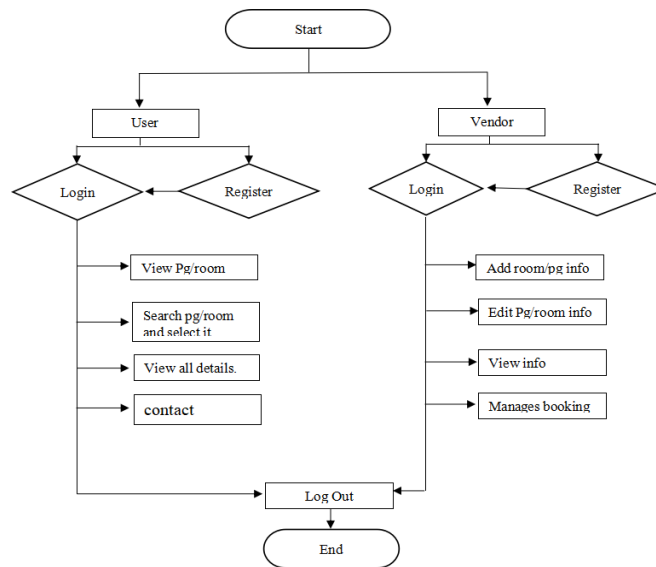2.RAM: 8 GB
3.Smartphone

3.6 ANALYSIS MODEL: SDLC MODEL

Figure 3.1: Waterfall model

The Waterfall Model was the first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases. The Waterfall model is the earliest SDLC approach that was used for software development. The waterfall Model illustrates the software development process in a linear sequential flow.
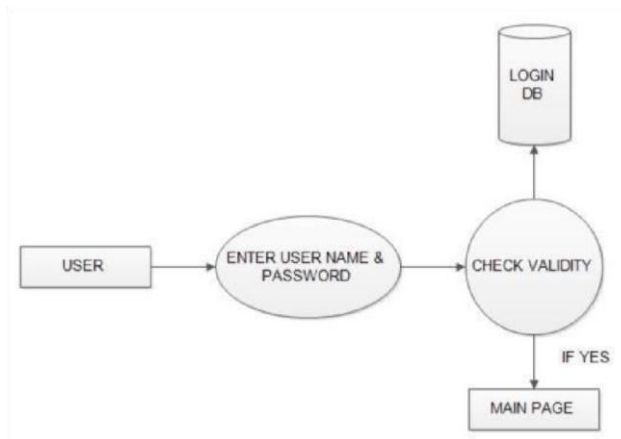
4.1 SYSTEM FLOW DIAGRAM

The system flow diagram is one of the graphical representations of the flow of data in a system in software engineering. The diagram consists of several steps that identify where the input is coming to the system and output going out of the system. With the help of the diagram, it is possible to control the event decisions of the system and how data is flowing to the system. Therefore, the system flow diagram is basically a visual representation of data flow, excluding the minor parts and including the major parts the system in a sequential manner**.**

4.2 PROPOSED ALGORITHM:

In the proposed system customer need not go to the location for renting the pg. He can view the details of the pg/room on the app and can even contact the owner if they decide to rent it. The room owner will be vendor of the system. Room/pg owner can appoint moderators who will help owner in managing the customers.

4.3 DATA FLOW DIAGRAM
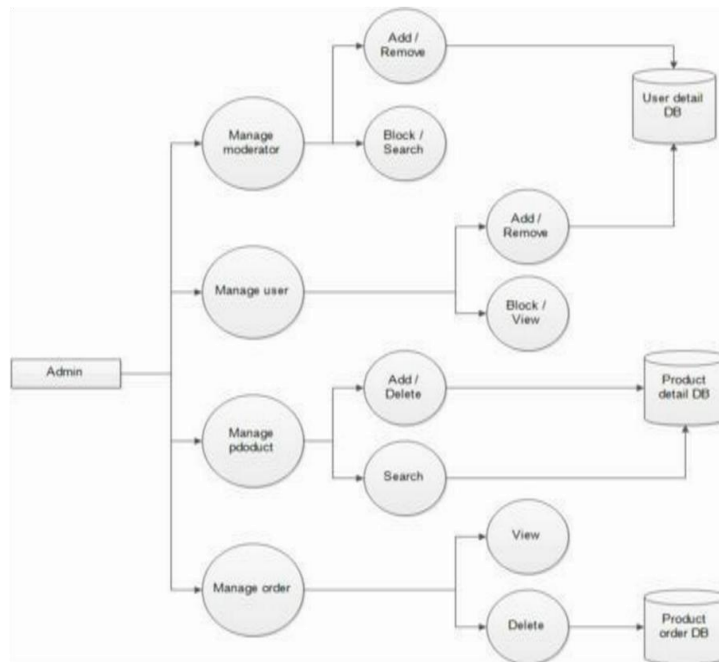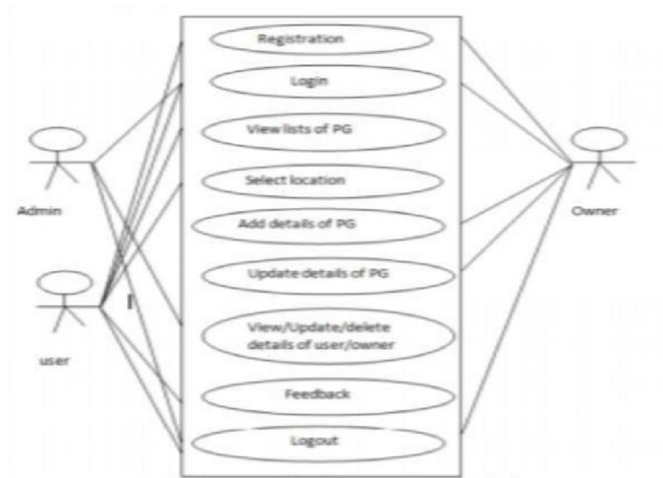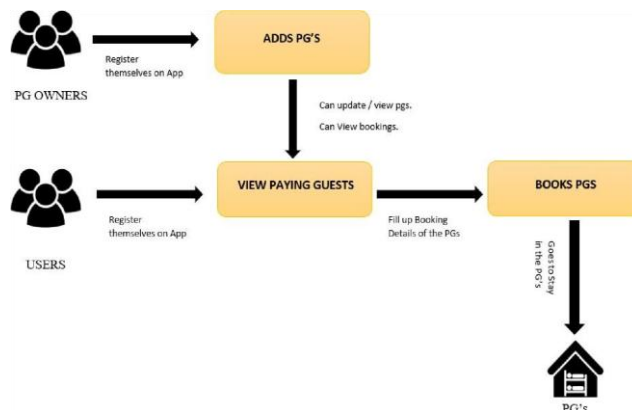**4.3.1 DFD Level 0**

4.3.2 DFD level 1

Figure 4.3.2: DFD Level 1

4.3.3 Use Case diagram

5.1 SYSTEM ARCHITECTURE

OTHER SPECIFICATIONS
5.2 Advantages
1 .Time saving.
2 .Easy to Use
3 .helps in getting a good pg at less cost
4. Fast

5.3 Applications
    Our application can be used by any individual of any age or any gender who wants to get a pg in the same city or the other cities as per his/her requirements in less costs and in few minutes because our project helps user in saving their time and reducing their house broker cost by making available all the pg's at their desired location through our app.

5.3 Limitations
The main limitation or drawback of our project is that it cannot run on the other platforms like iOS or web which limits its usage to the android users only

5.2 CONCLUSION
    PG Locator is a user-friendly app which enables the people to easily locate authorized PGs only. time has been an important factor in everyone's life and when people move to different places to study or to work, they definitely have to waste time in searching for accommodation. This app turns to be very time saving for us by providing individuals an option to book their pg by just sitting at home using mobiles.

REFERENCES
[1]. Beginning Android Programming by Haseman.
[2]. Android Application Development by James C. Sheusl.
[3]. Programming Android by Zigurd Mednieks, Laird Dornim, G. Blake Meike, Masumi Nakamura.
[4]. Android Programming by Bill Phillips, Brian Hardy. [5]. the Complete Reference JAVA by Herbert Schildt.
[5]. Ian Sommerville "Software Engineering" Person Education Ltd,9th Edition
[6]. MichaelBlaha,James Rumbaugh "OOMD" Person Education Ltd,2nd Edition
[7]. Elmasri and Nava the "Fundamentals of Database System" Person Education Ltd 5 h Edition
[8]. Mauro Pezze,Michal Young "Software Testing" John Willy and Sons Pte. Ltd Edition