

1.INTRODUCTION

1.1 OVERVIEW OF THE PROJECT:

In this fast growing technology, we still have to take the appointments of person who solve the problems related to our daily life like plumbing related problems, electrical related problems, electronic related problems, mechanical related problems, pest control related problems, home paint related problems and machine repairing service related problems. To take the appointments of service provider we have to call him or personal meeting we can meet him, and it is not sure that we get the appointments of the service provider at a time because there are many problems occur, like the service provider is busy at somewhere else or service provider is not present at office when we go there or service provider wants heavy cost for fix the problem etc. We are not getting any service on time and also not proper changes of services. It is also not secure in terms of safety concern.

To overcome these type of problem we are going to make our android application and website where the people get appropriate result. Admin can list out the required home service. Along with this, it can easily manage them by adding or removing these services. This management will let the admin deliver a better customer experience. Admin gets authority of verification of order request raised by the customer. After then it would check the work and select or reject it accordingly. However, the admin has to make specific arrangements to stop service providers from refusing request. Reviews are a must have feature as they guide both the parties while choosing their allies. This feature will assist you to review all the reviews from both the ends. You can flag poor performers as well as can mention top performers based on their reviews.

You can manage negative pr abusive reviews of users or rivals through this feature. You can flag negative reviews to highlight the positive ones as well. There are some instance with an on demand home services business model that the clients have to face some critical issues and to solve these issues. That is why it is essential that your home service app contains a customer help and support section where the users can get quicker resolution of their queries. This facility saves the time of the home services business admin as well. You must verify the profiles of all service providers and prevent any fraudulent to register. Besides this you can provide your contact number or add an issue option to the customers so that they can discuss the queries or issues with you that are not your list. Also this thing will let you know the latest problems faces by the consumers so that you can get prepared before hand.

1.2 MODULE DESCRIPTION:

There are three types of modules.

- Admin
- Worker
- User

ADMIN: Admin manage all information and has access rights to add delete, edit and view the data related to the bookings made etc.

Sub Modules:

- **Admin login:** Admin can login with username, password.
- **Category:** Admin can add the lots of categories and see the category. Admin can manage all the categories of service.
- **Appointments:** Admin can view the appointments.
- **View Worker:** Admin can see the worker
- **Rating:** Admin can also view the ratings by users.

WORKER: This module provides the details of services that are available. A user can select the appropriate service they wish to have, depending on their convenience and location.

Sub Modules:

- **Worker register:** Worker should register with their details od, name, etc.
- **Worker login:** Worker login to their home page by entering username, password.
- **View appointments:** Worker can view the appointments
- **View feedback:** Worker can see the feedback in comment

USER: This module provides information related to various services that are being offered for each service, the application allows the user to select the date and time for the service.

Sub Modules:

- **User register:** User should register with their details od, name, etc.

- **User login:** User can login to their home page by entering username, password.
- **View services:** User can see the lot of services.
- **Appointments:** User can appointment in issue with their details id, user id, etc.
- **Feedback:** User give the feedback with their details category id, worker id.

2.SYSTEM STUDY

2.1EXITINGS SYSTEM:

There are a lot of advantages of having home service app. As the name itself states this is mostly about service and activities in way to improve the quality of life comfort and convenience and even to save electricity and time money. No rewiring, No wall damage. Just transform your home in to a smart home just in 4 hours. You can control appliances from anywhere, it works remotely. It works on any appliances like Tv, Geyser, AC etc. wisher by Schneider Electric India is the most convenient and affordable smart home solutions. easy to use, easy to install and easy on the budget.

Advantages:

- Managing all of your home devices from one place.
- Flexibility for new devices and appliances.
- Time saving
- Conveniences
- Cost-effective
- Accessibility
- Make and receive payments securely.
- Multiple Service providers
- Better home security.

2.2 PROPOSED SYSTEM:

In this system we have to follow some rules and regulations for the creation of an account. As the user complete the registration process they will get confirmation message on this particular mail id. After that customer schedule the services which they want to be fulfilled. After the completion of they service if customer is not satisfied so they could get return policy accepted or reservice for making convenient service

Disadvantages:

- Technical difficulties
- Security
- Dependence on technology
- Quality issues
- Limited customer support

3. SYSTEM SPECIFICATION

3.1 HARDWARE SPECIFICATION:

- ❖ Processor : I3
- ❖ Hard disk : 500GB
- ❖ Mouse : Logitech
- ❖ RAM : 4GB (minimum)
- ❖ Key board : 110 keys enhanced

3.2 SOFTWARE SPECIFICATION:

- ❖ IDE : Visual studio code
- ❖ Front End : PYTHON, ANDROID
- ❖ Back End : MYSQL
- ❖ Design : HTML, CSS
- ❖ Browser : Internet explorer, Firefox
- ❖ Operating System : Windows 10/11

Software Description:

PYTHON LANGUAGE INTRODUCTION:

Python is an object-oriented programming language created by Guido Rossum in 1989. It is ideally designed for rapid prototyping of complex applications. It has interfaces to many OS system calls and libraries and is extensible to C or C++. Many large companies use the Python programming language, including NASA, Google, YouTube, BitTorrent, etc.

- **Free and open-source** - You can freely use and distribute Python, even for commercial use.
- **Easy to learn** - Python has a very simple and elegant syntax. It's much easier to read and write Python programs compared to other languages like C++, Java, C#.

- **Portable** - You can move Python programs from one platform to another, and run it without any changes.

Why Learn Python?

- Python is easy to learn. Its syntax is easy and code is very readable.
- Python has a lot of applications. It's used for developing web applications, data science, rapid application development, and so on.
- Python allows you to write programs in fewer lines of code than most of the programming languages.
- The popularity of Python is growing rapidly. Now it's one of the most popular programming languages.

MySQL:

MySQL tutorial provides basic and advanced concepts of MySQL. Our MySQL tutorial is designed for beginners and professionals.

MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software under the GNU license. It is supported by **Oracle Company**.

Our MySQL tutorial includes all topics of MySQL database that provides for how to manage database and to manipulate data with the help of various SQL queries. These queries are: insert records, update records, delete records, select records, create tables, drop tables, etc. There are also given MySQL interview questions to help you better understand the MySQL database.

RDBMS:

RDBMS is the collection of programs and capabilities that enables the user to interact with a relation database. A relation database management system (RDBMS) is a type of DBMS with row-based table structure. Most commercial RDBMS use SQL. The most basic RDBMS functions are related to create, read, update, delete operations, collectively known as the CRUD cycle.

FEATURES OF XML

XML is widely used in the era of web development. It is used to simplify data storage and data sharing.

The main features or advantages of XML are given below.

1. XML separates data from HTML

- If we need to display dynamic data in html document, it will take a lot of work to edit the HTML each time the data changes
- With XML, data can be stored in separate XML files. This way we can focus on using HTML/CSS for display and be sure that changes in the underlying data will not require any changes to the HTML.
- With a few lines of JavaScript code, we can read an external XML file and update the data content of were web page.

2. XML simplifies data sharing

- In the real world, computer systems and databases contain data in incompatible formats.
- XML data is stored in plain text format. This provides a software- and hardware- independent way of storing data. □ This makes it much easier to create data that can be shared by different applications

3. XML simplifies data transport

- One of the most time-consuming challenges for developers is to exchange data between incompatible systems over the Internet
- Exchanging data as XML greatly reduces this complexity, since the data can be read by different incompatible applications.

4. XML simplifies Platform change

- Upgrading to new systems (hardware or software platforms), is always time consuming.
- Large amounts of data must be converted and incompatible data is often lost.
- XML data is stored in text format.

- This makes it easier to expand or upgrade to new operating systems, new applications, or new browsers, without losing data.
5. XML increases data availability
- Different applications can access the data, not only in HTML pages, but also from XML data sources
 - With XML, the data can be available to all kinds of "reading machines" (Handheld computers, voice machines, news feeds, etc), and make it more available for blind people, or people with other disabilities.
6. XML can be used to create new internet languages
- A lot of new Internet languages are created with XML
 - **SMIL** for describing multimedia for the web

JAVA

This project uses java technology along with android libraires for app development. Java is a basic platform that is used to develop the android mobile operating system. It has also the following rich features for develop the android libraries. Features of java. There is given many features of java. They are also known as java buzzwords. The features given below are simple and easy to understand.

- Simple
- Object-Oriented
- Platform independent
- Secured
- Robust
- Architecture neutral
- Portable
- Dynamic
- Interpreted
- High Performance
- Multithreaded
- Distributed

SIMPLE:

According to Sun, Java language is simple because:

- Syntax is based on C++ (so easier for programmers to learn it after C++).
- Removed many confusing and/or rarely-used features e.g., explicit pointers, operator overloading etc.
- No need to remove unreferenced objects because there is Automatic Garbage Collection in java

OBJECT-ORIENTED:

- Object-oriented means we organize our software as a combination of different types of objects that incorporates both data and behaviour
- Object-oriented programming (OOPs) is a methodology that simplify software development and maintenance by providing some rules.

Basic concepts of OOPs are:

- Object
- Class
- Inheritance
- Polymorphism ² Abstraction
- Encapsulation

PLATFORM INDEPENDENT:

- A platform is the hardware or software environment in which a program runs. There are two types of platforms software-based and hardware-based.
- Java provides software-based platform. The Java platform differs from most other platforms in the sense that it's a software-based platform that runs on top of other hardware-based platforms. It has two components:
 - Runtime Environment

- API(Application Programming Interface)
- Java is platform independent Java code can be run on multiple platforms e.g. Windows, Linux, Sun Solaris, Mac/OS etc.
- Java code is compiled by the compiler and converted into byte code.
- This bytecode is a platform independent code because it can be run on multiple platforms i.e. Write Once and Run Anywhere (WORA)

SECURED:

Java is secured because:

- No explicit pointer
- Programs run inside virtual machine sandbox.
- Class loader- adds security by separating the package for the classes of the local file system from those that are imported from network sources.
- Bytecode Verifier- checks the code fragments for illegal code that can violate access right to objects.
- Security Manager- determines what resources a class can access such as reading and writing to the local disk.

ROBUST:

- Robust simply means strong. Java uses strong memory management.
- There are lack of pointers that avoids security problem.
- There is automatic garbage collection in java.
- There is exception handling and type checking mechanism in java.
- All these points make java robust.

ARCHITECTURE-NEUTRAL

There is no implementation dependent feature e.g. size of primitive types is set.

PORTABLE:

We may carry the java bytecode to any platform.

HIGH-PERFORMANCE:

Java is faster than traditional interpretation since byte code is "close" to native code still somewhat slower than a compiled language (e.g., C++)

DISTRIBUTED:

- We can create distributed applications in java.
- RMI and EJB are used for creating distributed applications.
- We may access files by calling the methods from any machine on the internet.

MULTI-THREADED

- A thread is like a separate program, executing concurrently.
- We can write Java programs that deal with many tasks at once by defining multiple threads.
- The main advantage of multi-threading is that it shares the same memory.
- Threads are important for multi-media, Web applications etc.

FLASK FRAMEWORK:

If you're developing a web app in Python, chances are you're leveraging a framework. A framework "is a code library that makes a developer's life easier when building reliable, scalable and maintainable web applications" by providing reusable code or extensions for common operations. There are a number of frameworks for Python, including Flask, Tornado, Pyramid and Django. New Python developers often ask: Which framework should I use? Flask is a relatively new framework that has taken the Python web development community by storm: in a short time it became one of the most popular frameworks around. It offers a lot of flexibility and clean code with a lot of extensibility. You won't feel dragged down by a huge framework that tells you what to do; You won't feel dragged down by a huge framework that tells you what to do; instead you'll feel free, productive and creative!

Advantages of using Flask framework are:

- There is a built-in development server and a fast debugger provided.
- Lightweight.
- Secure cookies are supported.
- Templating using Jinja2.
- Request dispatching using REST.
- Support for unit testing in built-in.

MySQL Database:

- MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:
- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you

can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

HTML:

HTML stands for Hyper Text Markup Language which describes the structure of web pages using markup. HTML elements are building blocks of web pages which are hard coded with PHP.

- HTML describes the structure of a Web page.
- HTML consists of a series of elements.
- HTML elements tell the browser how to display the content.
- HTML elements are represented by tags.
- HTML tags label pieces of content such as “heading”, “paragraph”, “table”, and so on.

CSS:

It stands for cascading style sheets describes how HTML elements are to be displayed on screen, paper or in other media. It can control the layout of multiple web pages all at one.

- CSS describes how HTML elements are to be displayed on the screen, paper, or in other media.
- CSS saves a lot of work.
- It can control the layout of multiple web pages all at once.
- External style sheets are stored in CSS files.

4.SYSTEM DESIGN

4.1 INPUT DESIGN:

The input design is the link between the information system and the user. It comprises the developing specification and procedures for the preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or print document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy.

4.2 OUTPUT DESIGN:

A quality output is one which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other systems through output. In output design it is determined how the information is to be displayed for immediate need and also the hard copy output. It is most important and direct source information to user. Output design generally refers to the results generated by the system.

4.3 DATABASE DESIGN:

Database design is the organization of data according to a database model. The designer determines what data must be stored and how the data elements interrelate with this information, they can begin to fit the data to the database model. Database design manages the data accordingly.

Database is to make information access easy, quick, inexpensive and flexible for the user. The accuracy and database ensures that data quality content remain constant integrity controls detect data inaccuracies where they occurred.

5.TESTING AND IMPLEMENTATION

5.1 VALIDATION TESTING:

Validation testing is the process of testing the output of various inputs. The inputs are classified into string inputs, Integer inputs, and decimal inputs. All the inputs were tested for all these three inputs and their behaviours were tested. The behaviours lead to the effecting error handling coding. The error handling coding includes a message box for all types of errors. This testing includes the testing of several of values. The validation testing is tested for all adding and modification functions. The modifications of primary key values were also tested. While modification the testing was done whether the system accepts duplicate values for primary key and the errors displayed there in. The validation testing leads to the final system testing. This includes testing of various conditions and removing all standard values and providing actual output.

5.2 SYSTEM TESTING:

System testing specifically goes after behaviours and bugs that are properties of the entire system as distinct from properties attributable to components (unless, of course, the component in question is the entire system). Examples of system testing are Recourse loss bugs, throughput Bugs, performance security, recovery, transaction synchronization bugs (often misnamed “timing bugs”)

5.3 IMPLEMENTATION:

This is easy generalized for Object Oriented languages by using the equivalent constructs for message passing. In the following, “the word call” is to be understood in the most general sense of a data flow and is not restricted to just formal subroutine calls and returns. In integration testing the high level control routines are tested first, possibly with the middle level control structures presents only as **stubs**. Subprogram stubs are incomplete subprograms which are only present to allow the high level menu driver to be tested. The user interface testing is important since the user has to declare that the arrangements made in the frames are convenient and it is satisfied. When the frames are the test, the end user gave suggestion since they were much to do the work manually

6. CONCLUSION

To reduce burden in finding in-house solutions for the services, the proposed system provides several services by providing service specialists at your doorstep in one click. A systematic mobile environment to system clients offers. Easy in accessing our services in a more comfortable way. With well qualified and background demonstrated professionals we make all your home cleaning, plumbing, furniture maintenance, electrical works, appliance repair, house painting, vehicle service and many other services to be done in a click anytime from anywhere as easy as available.

7. FUTURE ENHANCEMENT

- ☐ The above project was designed to store confidential data generated from cash on delivery payment. In future, the above concepts can be applied for online transaction also.
- ☐ In future, the above concepts can be applied for 24/7 customer support.
- ☐ In future, the above concepts can be applied for 1 hour service provides time.

8.BIBLIOGRAPHY

BOOK REFERENCE:

- Pressman. R, “Software Engineering”, 5th edition, McGraw-Hill, New York, 2001.
- Ross D. T., and Irvine C. A., “Software engineering: Process, Principals and goals”, MAY 1975

Online Reference:

- www.wikipedia.com
- www.w3schools.com
- <http://www.pythonreferencebook.com>

9. APPENDICES

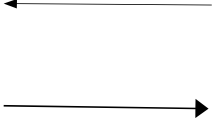
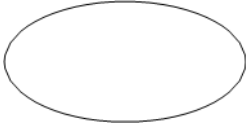

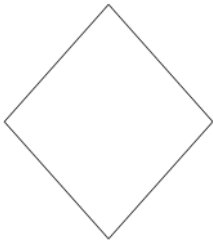
9.1 DATA FLOW DIAGRAM:

A data flow diagram is graphical tool used to describe and analyze movement of data through a system. These are the central tool and the basis from which the other components are developed. The transformation of data from input to output, through processed, may be described logically and independently of physical components associated with the system. These are known as the logical data flow diagrams. The physical data flow diagrams show the actual implements and movement of data between people, departments and workstations. A full description of a system actually consists of a set of data flow diagrams. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams. Each component in a DFD is label with a descriptive name. Process is further identified with a number that will be used for identification purpose. The development of DFD's is done in several levels. Each process in lower level diagrams can be broken down into a more detailed DFD in the next level. The top-level diagram is often called the context diagram. It consists of a single process bit, which plays vital role in studying the current system. The process in the context level diagram is exploded into other process at the first level DFD.

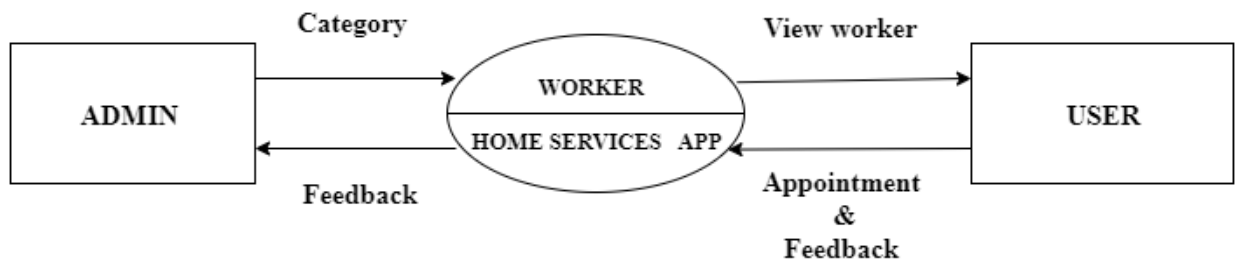
DFD SYMBOLS:

In the DFD, there are four symbols.

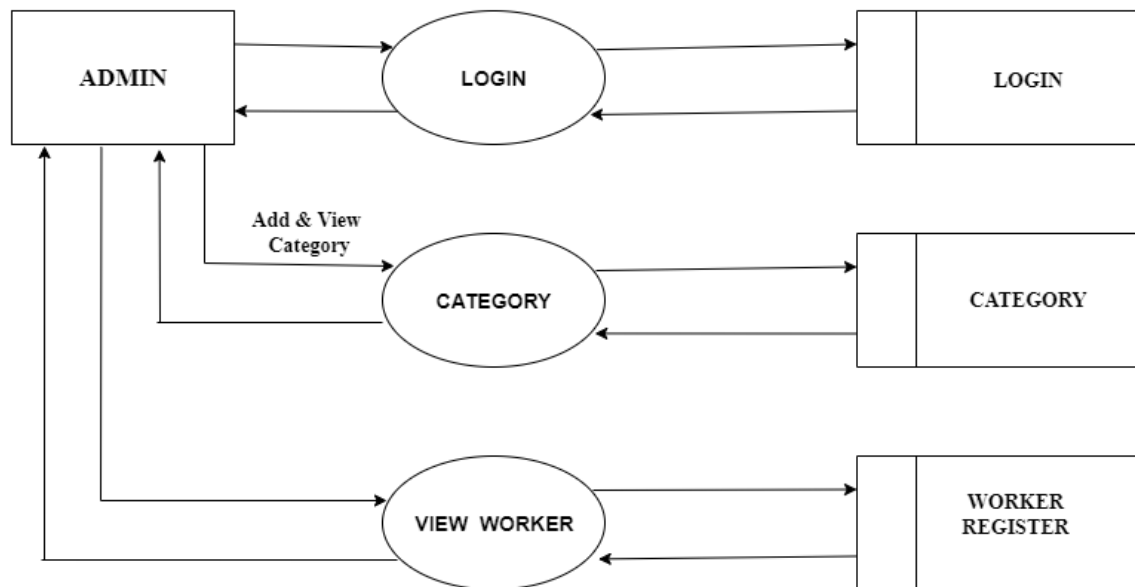
- A square defines a source(originator) or destination of system data
- An arrow identifies data flow. It is the pipeline through which the information flows
- A circle or a bubble represents a process that transforms incoming data flow into outgoing data flows.
- An open rectangle is a data store, data at rest or a temporary repository of data

SYMBOLS	SYMBOLS NAME	DESCRIPTION
	Flow lines	Flow lines are used to connect symbols used in flowcharts and indicate direction of flow.
	Terminal (start/stop)	This is used to represent start and end of the flow chart.
	Processing	Any process is represented by this symbol.
	Decision	This symbol is used to check any condition or take decision for which are two answers. Yes (true) or No (False).

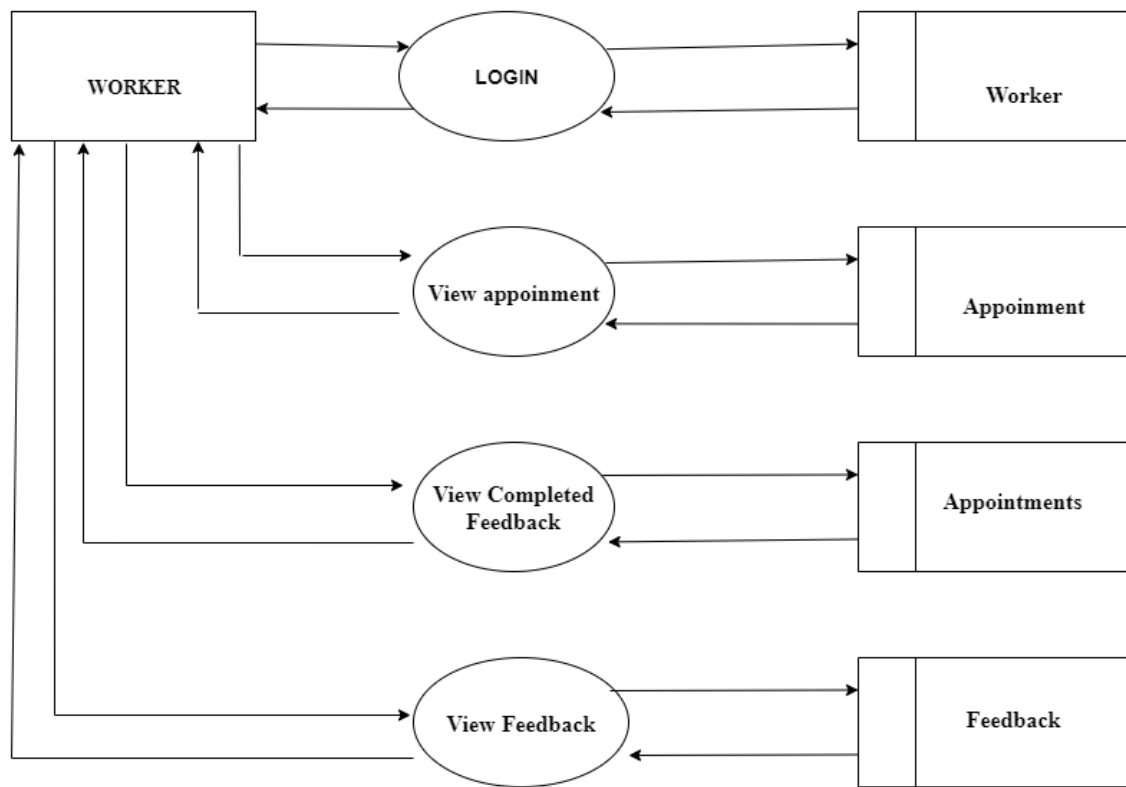
9.1.1 Level 0:



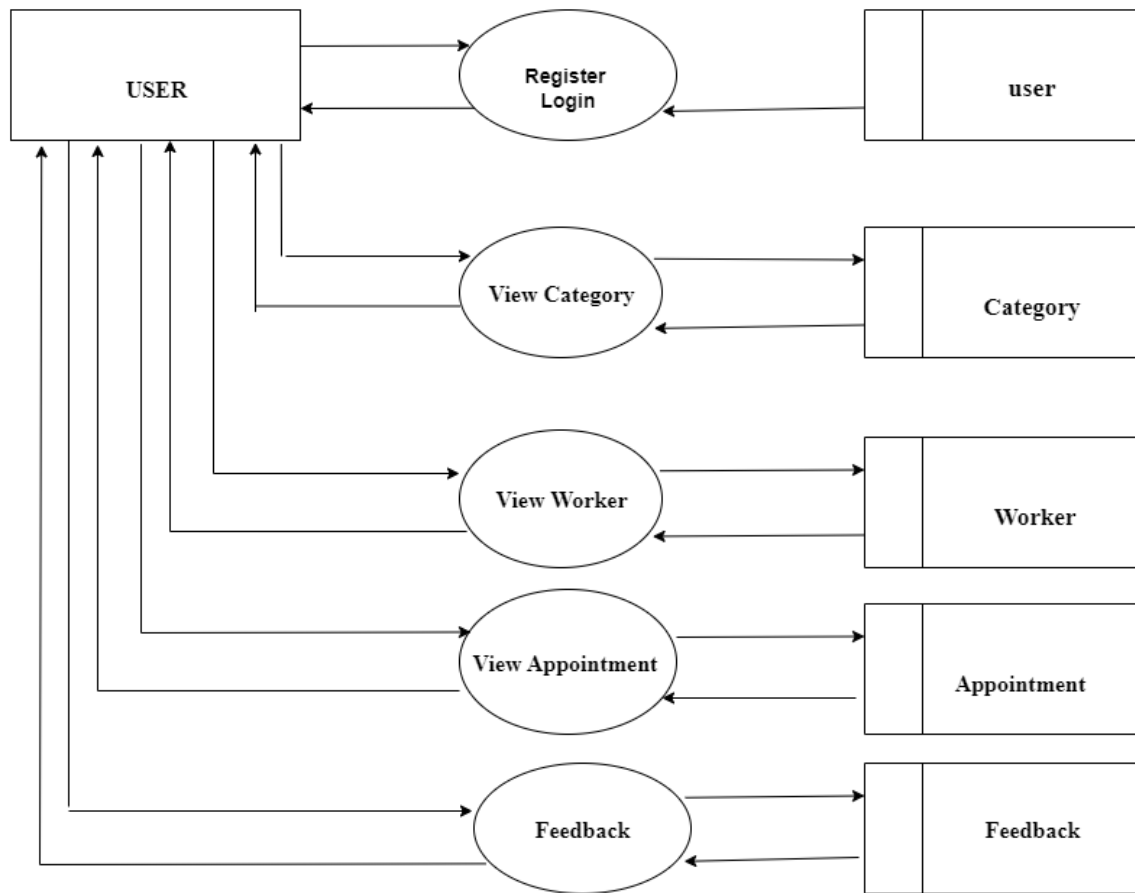
9.1.2 Level 1:



9.1.3 Level 2:



9.1.4 Level 3:



9.2 TABLE DESIGN:

Table: Category

Primary key: id

Fields	Types	Size
Id	Int	3
category	Varchar	20
status	Varchar	30

Table: Appointment

Primary key: id

Fields	Types	Size
Id	Int	3
User id	Int	5
Category id	Int	5
Worker id	Int	5
Product description	Varchar	50
Book date	Date	-
Book time	Time	-
Appointment date	Date	-
Appointment time	Time	-
Name	Varchar	20
Email id	Varchar	30
Phone no	Int	12
Address	Varchar	100
Location	Varchar	20
Status	Varchar	30

Table: Feedback

Primary key: id

Fields	Types	Size
Id	Int	3
User id	Int	5
Category id	Int	5
Worker id	Int	5
Feedback	Varchar	100
Ratings	Float	5

Table: User Register

Primary key: id

Fields	Types	Size
Id	Int	3
Name	Varchar	20
Email id	Varchar	30
Phone No	Number	12
Password	Number	10
Registration date	Date	-

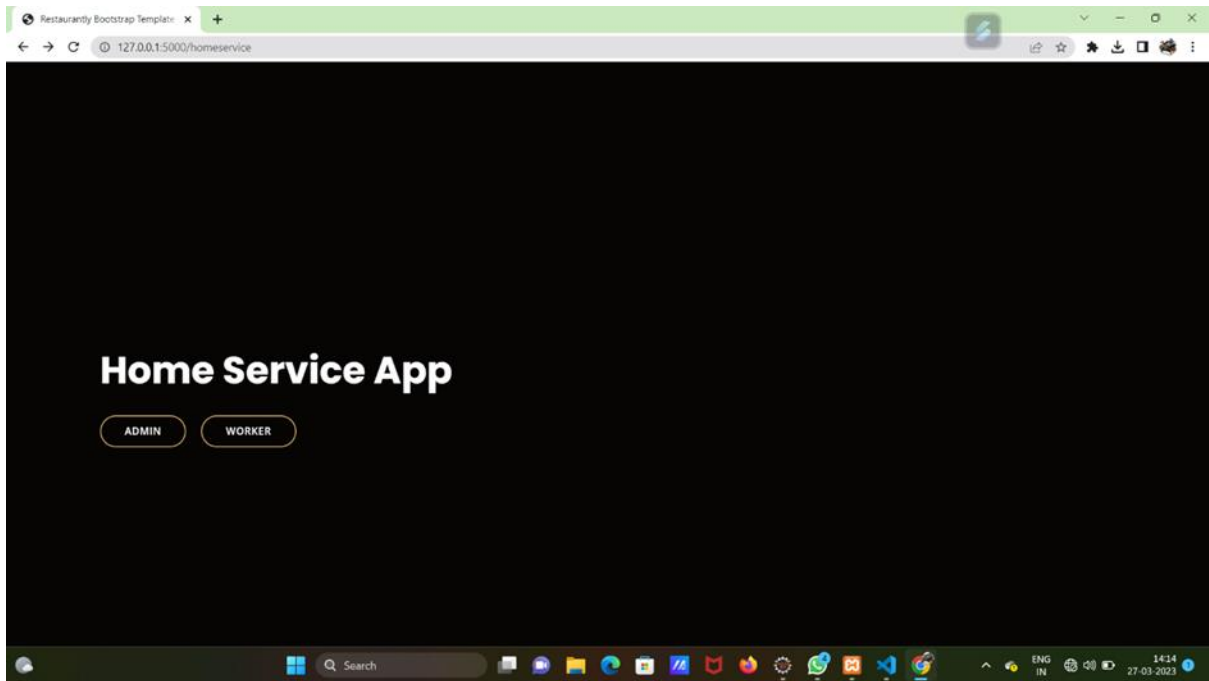
Table: Worker register

Primary key: id

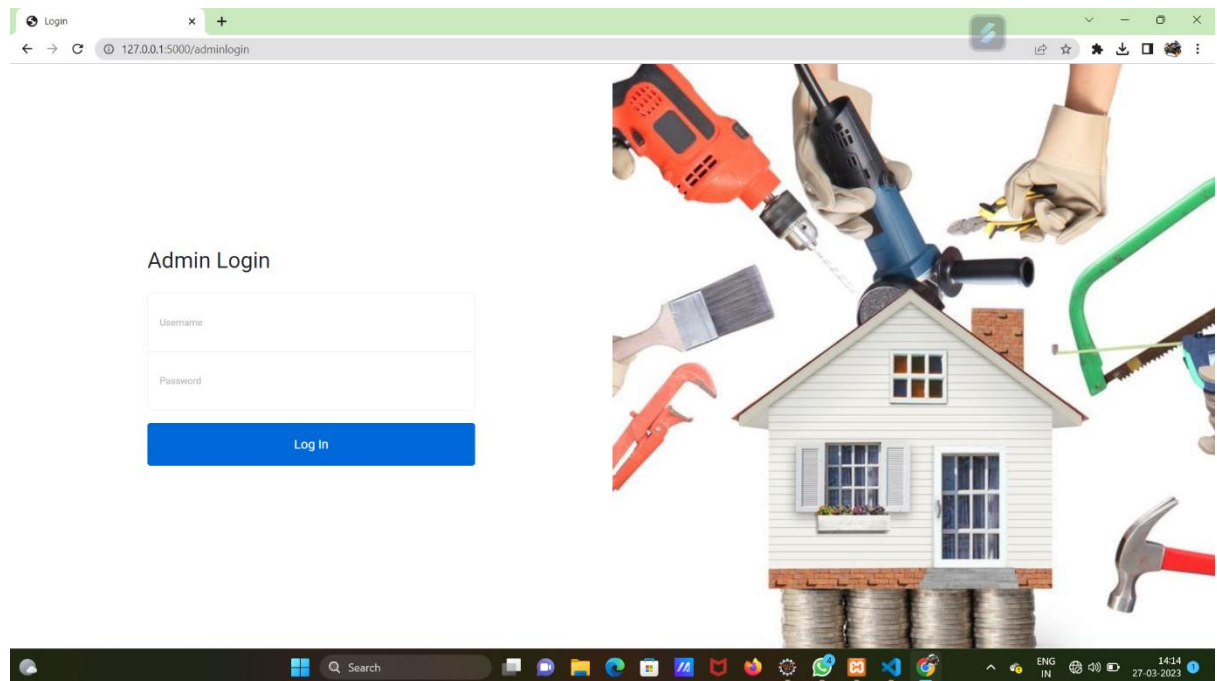
Fields	Types	Size
Id	Int	3
Name	Varchar	20
Phone no	Number	12
Email id	Varchar	30
Password	Int	10
Address	Varchar	100
Category id	Int	5
Category	Varchar	30
Latitude	Float	40
Longitude	Float	40
Registration date	Date	-
Status	Varchar	100

9.3 FORM DESIGN:

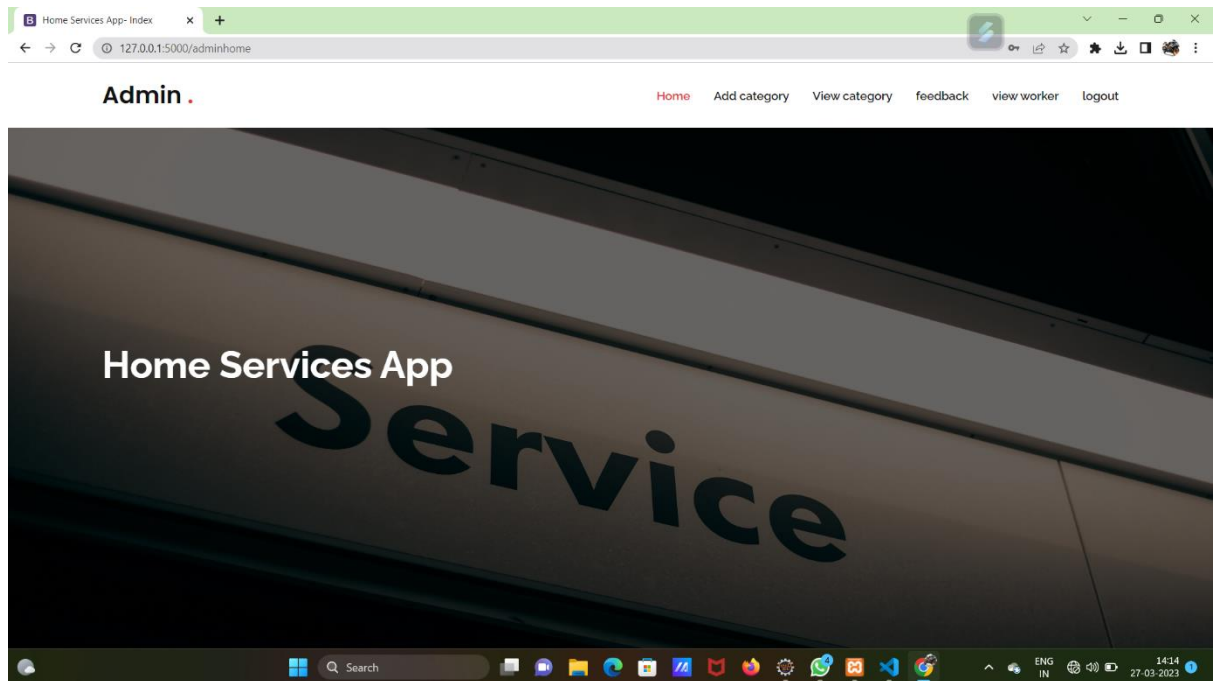
Home page:



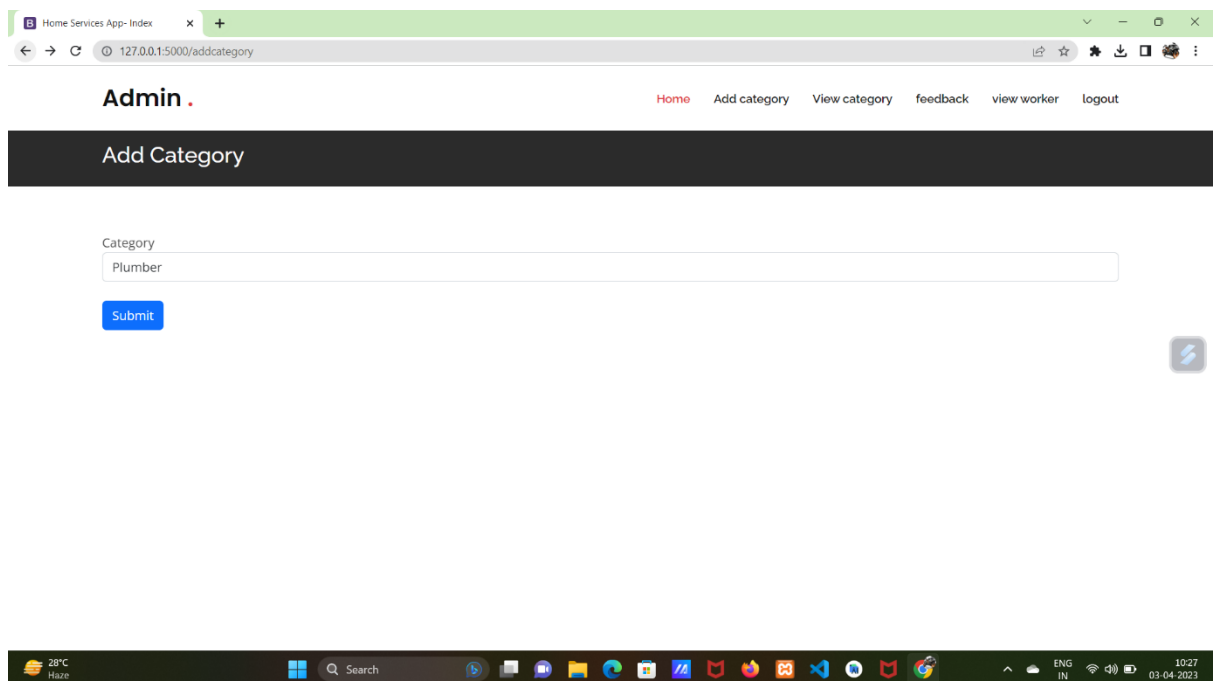
Admin login



Admin home page:



Add category



View category

Category	Status
Carpentor	active
Mechanic	active
Plumber	active
Home Plaint	active
Electronic	active
Pest Control	active


View worker

Name	Email id	Phone No	Category	Address	Reg Date
prassanna	prassannna000@gmail.com	8956342390	Plumber	kerala	2023-04-03
monika	monika234@gmail.com	9908076542	Electronic	chennai	2023-04-03
Ajay	ajay5555@gmail.com	88780006789	Pest Control	Karamadai	2023-04-03
Abirami	abirami1234@gmail.com	9876456780	Home Plaint	Sai Baba colony	2023-04-03
Pavithra	pavithraarusamycs@gmail.com	8838861146	Mechanic	thudiyalur	2023-04-01
Hari	hari123@gmail.com	9791220378	Mechanic	E.B.Colony Ganapathy	2023-03-21
Kamalesh	sandycsekar@gmail.com	9791220378	Carpentor	E.B.Colony Ganapathy	2022-12-12

Worker register

Sign Up Form by Colorlib

127.0.0.1:5000/workerregister



Register From Your Work Place

Your name
Pavithra

Your phone number
8838881146

Your Email Id
pavithraasamyas@gmail.com

Your password
pavi@2002

Your Address
thudiyalur

Your Latitude
11.023155

Your Longitude
78.9785858

Mechanic

Book now

Already Register Login Here


30°C Partly sunny

14:23 27-03-2023

Worker login

Login

127.0.0.1:5000/workerlogin



Worker Login

USERNAME
Email Id

PASSWORD
Password

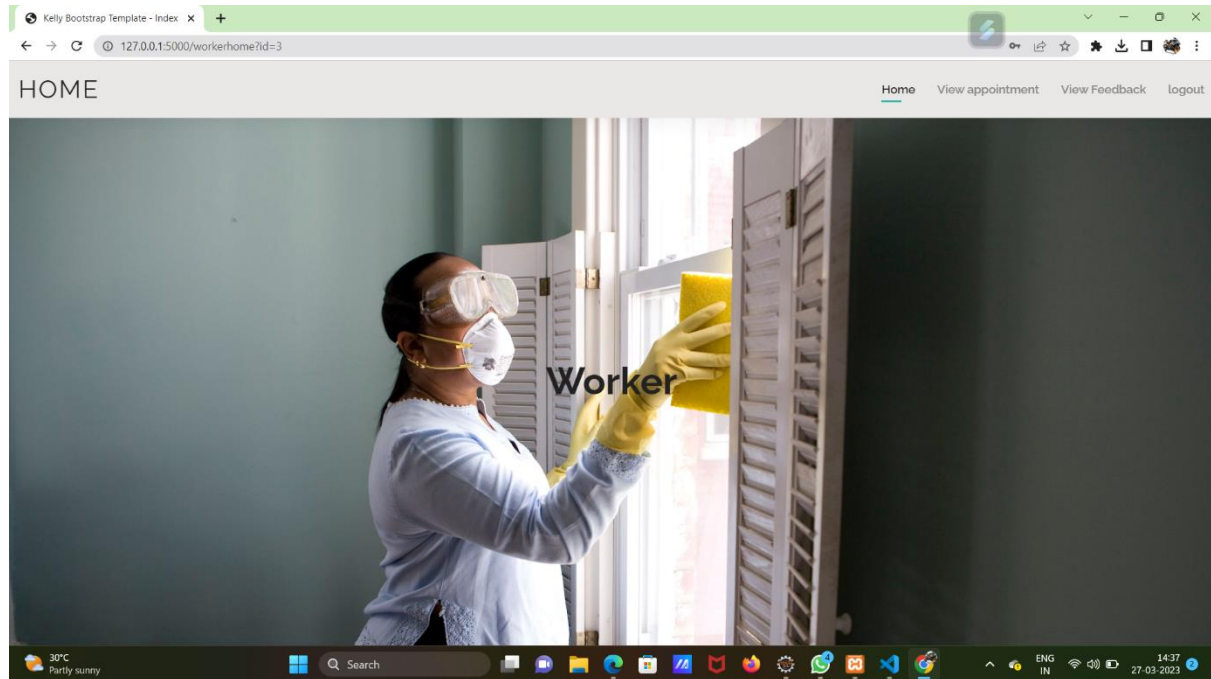
Sign In

New User Register Here

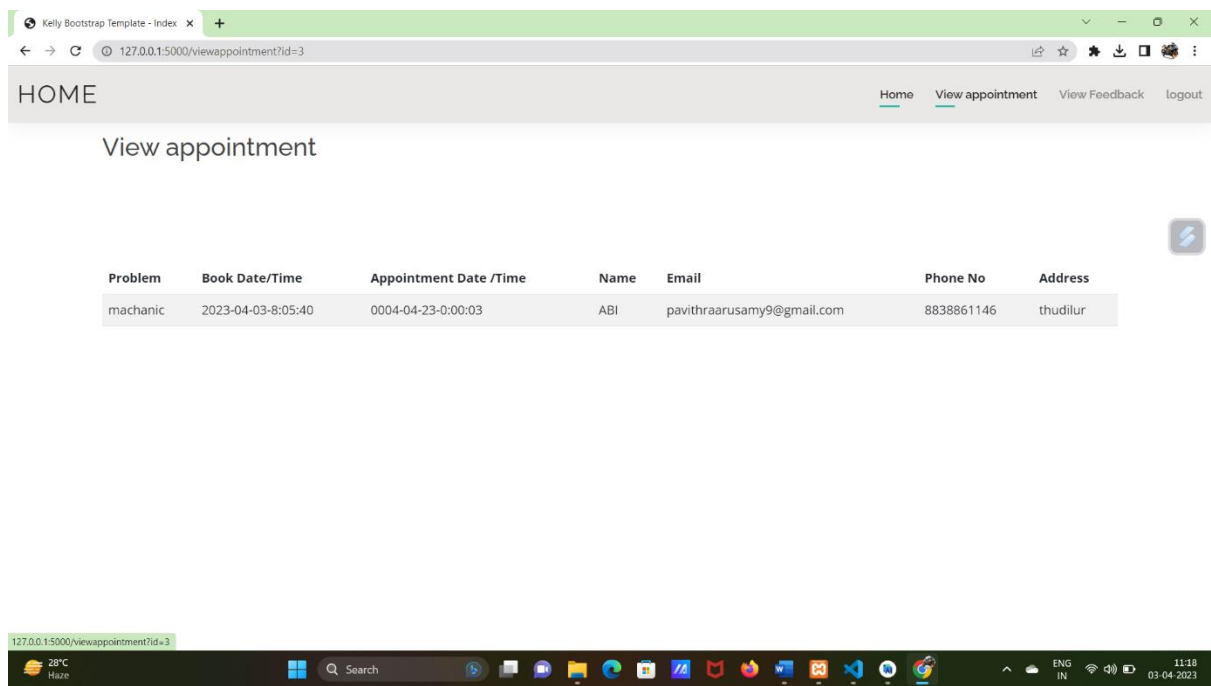
30°C Partly sunny

15:11 27-03-2023

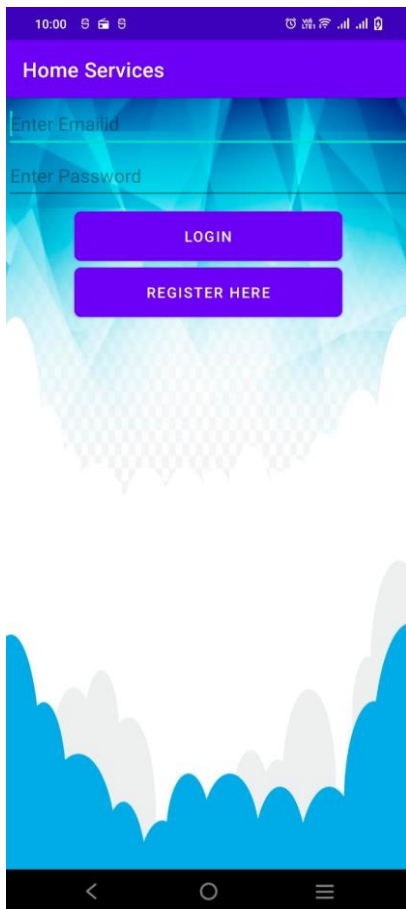
Worker home page



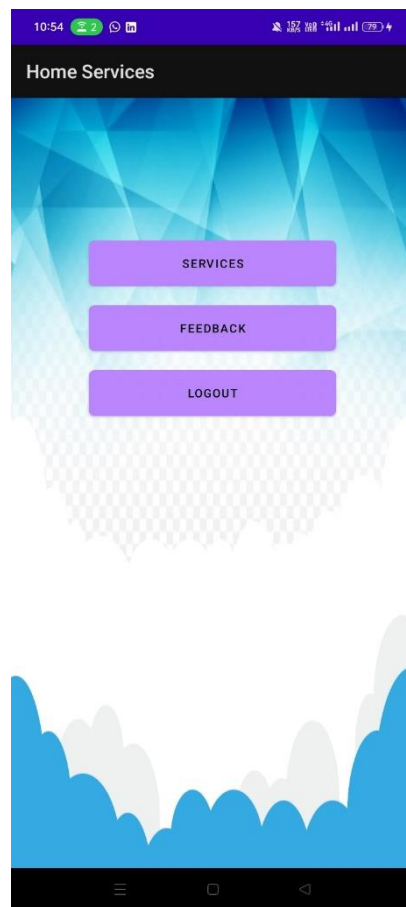
View appointment



Customer login page



Homepage



10:46 2

Home Services

CARPENTOR

MECHANIC

PLUMBER

HOME PLANT

ELECTRONIC

PEST CONTROL

Feedback

