

"GRUH SAHYOG" Virtual Assistant-based Business Working Model.

Sakshi Dongre¹, Tarun Choudhary², Rahul Kumar³, Dr. K. T. Patil⁴

¹²³Computer Department, Smt. Indira Gandhi College of Engineering, Navi Mumbai. ⁴ Head of Computer Department, Smt. Indira Gandhi College of Engineering, Navi Mumbai, India.

Abstract - The on-demand application market's newest trend is the Home Services app. The app can be successful with adequate market analysis, key feature inclusion, and effective promotion. Demand for Home Services Application will increase. If we want to order some food online then we have popular apps like Zomato, Swiggy, uber eats etc. or if we want to do online shopping then we have popular apps like amazon, Flipkart. But if we want a helper or if we want to get some household work done then we do not know any centralized system which will be the interface between the employee and user. Also, in foreign countries working while studying is a normal lifestyle for students to be financially independent. But in India, students still struggle to get a temporary freelancing job or to generate income on a daily basis.so, building a centralized system to overcome these issues and to generate employment for underprivileged people is a need of the society. We are going to make a business working model named 'GRUH SAHYOG' which will generate revenue for our major project and, we will provide employment through our project to regulate this system.

Key Words: Services, Customers, domestic, cleaning, freelancing, virtual, assistant, elderly, chores, events, maids.

1. INTRODUCTION

Home Services apps are the newest trend in the market for on-demand applications with adequate market research, the addition of essential features, followed by effective marketing, the apps can be profitable. Home Services Application will see an increase in demand. Popular apps like Zomato, Swiggy, Uber Eats, and others are available if we want to order meals online and Flipkart and Amazon are available if we want to shop online. India's domestic service industry has a lot of potential and further research is required. The demand for domestic assistants must be able to keep up with supply.[10][11]

In other countries, working while being a student is a common way for them to be financially independent, but in India, students still find it difficult to get a temporary job as a freelancer or to make money every day.[12] Thus, the society needs to create a centralized structure to address these problems and provide jobs for those who are less fortunate. When someone needs help with simple but skilled chores, the problem emerges when qualified individuals are not available or reliable service providers are difficult to locate who continuously provide faultless service on demand. skilled professionals can be hired with a simple click and your service will be completed promptly. The anticipation that feedback-based services will be

superior and the conviction that it is ethical to "pay for what you receive" are strongly and favorably connected with customer's overall willingness to pay.so here we have made a centralized application for domestic help and freelancing for students. As it will also help us to stick to our humanitarian values that is why our business model's motto is 'Share your care.' [2]

2. OBJECTIVES

- A Centralized app in India to daily help people in need to do household work.
- To Build an Interface between employee and users.
- To generate daily income.
- Affiliate with NGOS to generate freelance.
- One day employment for college students to build values and daily income.
- Our Company ensures trust between employee and the customer.
- We ensure employee safety and verified users.
- Enabled Rating and Review system to employee for further improvement.
- Our company will take responsibility for the efficient working of employees.
- Beneficial for elderly and working women as they need more support in terms of completing household chores.

3. LITERATURE SURVEY

1) BookMyBai -

The largest domestic worker agency in India, Bookmybai, has more than 5 lakh maids enrolled in Mumbai, Bengaluru, Pune, and other cities. You can easily search and employ part-time, full-time, and 24-hour maids using this app. There are no expenses associated with hiring a part-time or full-time employee through an agency. You may easily get in touch with any number of maids by purchasing a direct-contact pack. You can immediately connect with the top-rated, recognized maid companies to hire a maid through them if you need a maid who works full-time. [3] One of the biggest flaws of this system is that it assumes no accountability for its employees. [4] They do not accept any accountability or perform any background checks on the employees they hire from outside agencies. In order to hire a part-time employee, you must pay a significant sum as a part of a subscription. This means that even if you only need to hire a worker for a single day, you must purchase a subscription and pay the employee in accordance with its requirements, which is an expensive and unnecessary use of funds. This application serves only as a liaison between the agency and the users; it is not a centralized system.



International Journal of Scientific Research in Engineering and Management (IJSREM)

Volume: 07 Issue: 04 | April - 2023 | Impact Factor: 8.176 | ISSN: 2582-3930

2) My Didi -

One of the biggest flaw of this system is that it assumes no accountability for its employees. They don't accept any accountability or perform any background checks on the employees they hire from outside agencies. [5] In order to hire a part-time employee, you must pay a significant sum as a part of a subscription. This means that even if you only need to hire a worker for a single day, you must purchase a subscription and pay the employee in accordance with its requirements, which is an expensive and unnecessary use of funds. This application serves only as a liaison between the agency and the users; it is not a centralized system. Due to company protocol, even if an employee misses a month of work or fails to show up regularly, the firm is still required to pay them their entire compensation, which is not in the best interest of the business and will ultimately result in a loss. The biggest flaw with this operating paradigm, though, is that it spends far more on the employee than they receive in compensation.

3) WorkIndia -

A website called WorkIndia connects employers with blue- and grey-collar workers online. The company's platform is used to list jobs in the blue-collar and grey-collar categories including driver, technician, housekeeping, and many more. It links companies and potential employees, allowing job seekers to find suitable positions and recruiters to identify and screen applicants for open positions. [6] Significant flaws that were discovered during the evaluation of these organizations were their inability to maintain a firm grip on any of their services due to the abundance of features. This organization charges a costly fee to access even the most basic feature, such as an overview of resumes. Although if this business has more than 10 million consumers, its fundamental problem is trustworthiness. Over the years, numerous frauds involving phoney interviews conducted using this system have been documented. [7]

4.SYSTEM REQUIREMENTS

4.1 Software Requirements

Server side	Operating system	Windows
	Application software	Android studio (Kotlin,XML)
	Database	Firebase

Table 1: Software Requirements

4.2 Hardware Requirements

SERVER SIDE	A hosting service based on cloud	
CLIENT SIDE	processor	Any processor supportive to software required.

Table 2: Hardware Requirements

5. SYSTEM DESIGN

5.1 System Tools: Major Tools used in our system.

5.1.1 Android Studio

The Google Android Development IDE, Android Studio, was introduced on May 16, 2013, during the Google I/O 2013 conference. All the Android tools you need to create, test, debug, and profile your application are included in Android Studio. The build automation tool Gradle is used by the Android Studio to manage your project. You must download Android Studio for your choice operating system (Windows®, Mac OS X, or Linux) from the Android developer's website in order to create your first app. Your application may be created and tested in Android Studio on either a real device or an emulator.[8]

5.1.2 Firebase

It is a Google mobile application development platform with strong tools for creating, managing, and upgrading apps. A backend platform for creating online and mobile applications is called Firebase. Fundamentally, Firebase is a set of tools that developers can use to build applications and scale them in response to demand. Building an app quickly is one of Firebase's three key goals for developers. Release an app with assurance, keep track of it, and include users. By using this platform, developers can access services that they otherwise would have to create themselves and can instead concentrate on providing engaging application experiences. Databases, authorization, push messages, analytics, storage of files, and other noteworthy Google Firebase platform features are just a few examples. Since the services are hosted in the cloud, developers can easily perform on-demand scalability. Developers across the world utilize Firebase, one of the top platforms for building mobile applications. [9]

5.2 Service Modules5.2.1 Registration Module

Customers that are interested in our services are invited to sign up for a free account in our portal by completing a few simple steps and providing valid login information. Customers are then asked to confirm the creation of their accounts. With OTP



Volume: 07 Issue: 04 | April - 2023 | Impact Factor: 8.176 | ISSN: 2582-3930

verification, the customer's mobile number is used. Once account verification is complete, a customer is now free to access our services.

5.2.2 Service Module

Customers may access their accounts at any moment to arrange services. The site is specialised with an engaging user interface that offers a convenient approach to make a service reservation. We provide a wide range of services, such as child care, elderly care, housekeeping, and household cleaning. We have listed the maid's name, qualifications, profile, daily and monthly rates, and photo. Using the voice assistant included in our app, you can also look up these services. When you locate a helper that meets your needs, you must click the "Book" button. This submits your request, and you can now see the booked services in your "My Bookings" section.

5.2.3 Freelancing Module

Here we have provided manpower requirements from various events to cut out the charges of all the coordinators and to make this area more transparent. Event's line has not been explored much and there is so much potential in this line to expand in the market because of the high paying rate of hostesses and helper boys. Here we have provided the name of the company, location, date, and time of event. Simply click the apply button to submit your application for any event. The vendor will contact you to confirm the event later.

5.2.4 My Bookings

You can see all the bookings of helpers done by you in 'my bookings.' Also, you can go through the events you have applied for in 'My bookings.' Basically, you can view your history in 'My bookings.'

5.2.5 Voice Assistant

Voice assistant will help you to find services according to your needs. On the top right corner of the main screen, you will find this service.

5.3 Workflow of the model

After installing app in your mobile device, you can start it. First step includes user registration, during the registration mobile number verification is done in order to authenticate the user. Once the registration is done the next step is login. After login, you can see first fragment as a main screen which is book services. Here you will get 4 services such as baby care, elder care, domestic cleaning, and house chores. You can choose services based on your requirements. 2nd fragment is freelance where all the events are listed who need manpower. The details of these events are also given in the description. You can apply for events according to your need and convenience. Third fragment is my booking, here you will get the history of your bookings. 4th fragment is my profile, from here you can update

your personal profile and photo. Most important feature of this application is voice assistant. It can help you find services according to your needs.

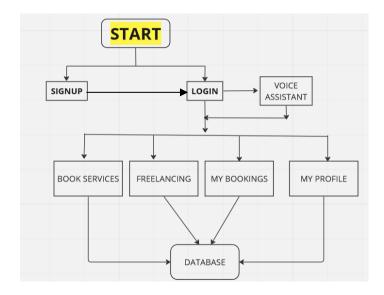


Fig 1: Workflow of the model

6. RESULT

Below are the results of the project. After all the research and surveys, we were able to build a dynamic voice recognition application which is shown in the figure.

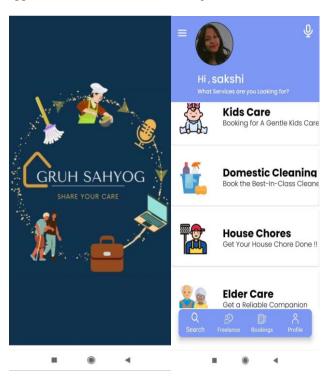


Fig 2: Logo and main page of 'Gruh Sahyog' App

International Journal of Scientific Research in Engineering and Management (IJSREM)

Volume: 07 Issue: 04 | April - 2023 | Impact Factor: 8.176 | ISSN: 2582-3930

Domestic Cleaning My Bookings Event Name: DomesticCleaning Service Provider: Name: dnamkfase dnamkfase Skills: Domestic Time: tasime Date: dafdte Date: dafdte Time: tasime Price(Monthly): asperM Event Name: Price(Hourly): perasH Photography Service Provider: famkfaseee Time: huu Date: taasdfssime Name: dnamkfaseee Skills: Domestic Date: dafdasdfte

Fig 3: My bookings and domestic cleaning fragment of 'Gruh Sahyog' App

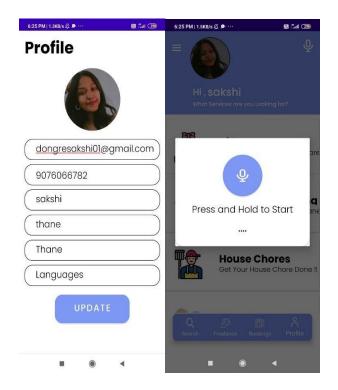


Fig 4: my profile and voice assistant of 'Gruh Sahyog'
App

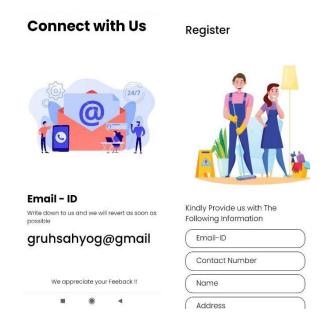


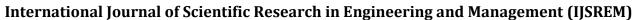
Fig 5: connect with us and registration module of 'Gruh Sahyog' App

7. CONCLUSION

The suggested approach provides a variety of services by delivering service specialists to your door with a single click, reducing the burden of obtaining internal solutions for the services. System users can use our services more conveniently and comfortably in an organized mobile environment. We make all your home cleaning, baby care, elder care, house chores to be done in a click from anywhere as easy as available. Also, we have found a solution to be independent for students as per our second fragment which is freelancing events. Events not only make them financially independent but also help to build a strong network and build humanitarian values. Because of this, the guiding principle of our company model is "share your care."

8. SCOPE

A system that ensures confidence between users and workers should be developed. The proper verification should be carried out to safeguard the security of both users and staff. It's important to have a centralized system for freelancing so that young people can earn money in a single day. The system should take the proper precautions to prevent the occurrence of any fraud or accident. In order for the System's functions to be utilised by an increasing number of users, a system that is affordable should be created. We can also incorporate features like speech recognition to help consumers find services within the app. To improve the lives of maids and their families, these systems should be designed to give them a better source of income and security. Indeed, this would improve the lives of domestic workers and those seeking independence.



USREM I

Volume: 07 Issue: 04 | April - 2023 | Impact Factor: 8.176 | ISSN: 2582-3930

ACKNOWLEDGEMENT

It is a pleasant task to express gratitude to all those who contributed in many ways to this project and made it an unforgettable experience for us. First, we would like to thank our department major project coordinator Prof. Deepti Vijay Chandran. This work would not have been possible without her guidance, support, and encouragement. Also, our internal guide Dr. K. T. Patil sir has helped us to reach our maximum potential. And he has been guiding and motivating us throughout the project to reach our maximum capabilities. We are highly indebted to Dr. Sunil Chavan, Principal, Smt. Indira Gandhi College of Engineering, Dr. K.T Patil, Head of the Department, Computer Department and also all the faculty members.

REFERENCES

- 1. https://www.ijert.org/research/an-online-system-for-household-services-IJERTCONV6IS13012.pdf
- 2.https://richestsoft.com/blog/on-demand-home-services-apps-the-upcoming-big-trend/
- 3.https://www.bookmybai.com/About-us.aspx
- 4.<u>https://www.mouthshut.com/websites/Bookmybai-com-reviews-925855208</u>
- 5. https://www.thebetterindia.com/62277/didi-mobile-appfor-domestic-helpers/
- 6.https://www.workindia.in/1/?
- 7. https://www.mouthshut.com/websites/Workindia-in-reviews-925981926
- 8.https://en.wikipedia.org/wiki/Android Studio
- 9.https://en.wikipedia.org/wiki/Firebase
- 10.https://www.researchgate.net/publication/326261005 A
 Study on Domestic Help Workers and Factors Affecting
 Realisation of their Rights in the State of Punjab
- 11.https://ndwm.org/domestic-workers/
- 12.https://razorpay.com/learn/scope-and-challenges-of-freelancers/