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On-Demand Home Service Application using Machine Learning

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Abstract: *The on demand home service system using flutter is extremely beneficial for each and every individual by providing various services from variety of categories such as plumbing, gas repairing, cleaning, dusting, gardening, tailoring, car repairing etc. When an individual is migrating from one area to a different because now a day's everyone wants to save lots of time and shot out their problems within time with none problem. Therefore, online home services are very beneficial to everyone in need of a clean and hygienic house. To help people keep their home healthy and up to date we have come with a solution to help people with any issues they face at their home. May it be related to plumbing issues, cleaning house, gardening, pest control, electrician work, tailor, painter, maid and cooking food. We all have everything at one place. Our project also includes include time slot of particular worker to check their availability. Users can rate the worker based on his performance. They can also make online payments and Cash on Delivery (COD) with our rich and secure payment gateway. We will imply various technologies to make our app more dynamic and user- friendly. Users can get a rich UI/UX interface. Our project is to make everyone's home a cleaner, safer and healthier place to live. Allow everyone to breathe clean air at their home and make their home hygienic. In short keeping their home up to date and clean.*

Keywords: On Demand, Services, Interface, Dynamic, Hygienic.

I. INTRODUCTION

Day-to-day life of an individual requires various activities, office work, college work, home-work, cooking food everyday and many more daily hectic tasks. In this rush people not only forget to take care of themselves as well as the place where they live. So we have decided to give every individual an helping hand by helping to make their home a better cleaner and healthier place to live in. Our idea is to create an Home Service Application to allow everyone to maintain their house in proper condition. When things are not properly organized at our home it spoils our mood and for that reason home services app is there for timely maintenance of your homes making it beautiful and hygienic so that you can stay peacefully and relaxed at your home without the need to worry about various home related issues.

The main objective of the on demand home services is providing the house services by one click. This paper discusses about the home services mobile available through the mobile app, several services provided and therefore the method of ordering and delivery of services. On demand home services mobile app allows the user first register and create an account on our application then for assistance we have integrated a chatbot which will help the user to interact with our application and ask any query to it. Then the user can choose from wide range of services according to their interest and then choose where they want that service to be done choose the available time slot add their address and make the payment either online through upi or offline via cash on delivery. User will receive a confirmation regarding the booking.

II. LITERATURE SURVEY

2.1 Mobile App for the Promotion of Home Services.

Home services advertising presents difficulties to the worker who has as an obstacle the cost of the advertising use to promote his services so that a large amount of people can see it, as well as the deficient training in technological tools has brought as consequence the usage of traditional methods which made being located and hired in real time more difficult. We are creating a mobile app using flutter to get the user the service they need in minimal time and less hassle.

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2.2 Web Application Based On Demand Home Service System

The home service web application is useful for everyone as everyone needs their home to be neat and tidy. For that reason we have developed an web app for plumbing, water repair RO servicing, and any electrical appliance related issues. In our system there are only two users the first one namely the provider who provides ample of home services and the second one is the user itself.When an individual migrating from one place to a different reason now a day's everyone wishes to save lots of time and shot out their troubles within time with none problem. While the user can view a list of home services and contact them based on their needs, the user can learn more about them by providing their phone number. The web home service project consists of the many categories and services as mentioned before. People who are in need of services can sign up with this website and look out for service workers and corresponding service by specifying the scenario. The service worker's therein particular locations are listed to user with contact number and therefore the user can contact them and track the status of the worker. By this users can easily avail the needed home services in minimal time.

2.3 Android App for Household Services

Household services like plumbing, pest control, carpentry, electricity, gardening, tailoring, washing clothes, etc. is major problem where people are busy in their daily activities and forget to take care of their home. It is challenging because there aren't any service providers in a certain area, region. So, in such a situation developing an Android App is very useful which can provide all the basic household services at fingertip. As we all know, how mobile applications have impacted our lives in all aspects. An app is been developed taking this problem into consideration, which will provide all the basic household services like plumbing, carpentry, electricity, etc., which will help the users in all the areas. This app is developed using different programming languages like Java programming language, C language, etc. and using different approaches. After creating a profile, any user can search for any kind of household services. The user gets a list view of all the service providers of that particular service in their locality with all payment options.

III. SYSTEM DESIGN

To overcome the limitations proposed by the above systems we are designing an home service mobile application using flutter and machine learning.

Create an highly interactive and dynamic user interface with better and improved responsiveness Using machine learning and object detection features to provide the solution the user desires We will be creating our application by using Flutter or React Native and other technologies to provide good user interaction We will be using Firebase with flutter database to store and utilise and process user information and data in an efficient way.

3.1 User Module

- Can create an account and also visit the app as guest user.
- Specifying the location of the user to see available home services.
- Selecting the worker based on price details.
- Specifying the convenient date and time according to user.
- Providing offers for discounts.
- Tracking the workers status..
- Flexibility in payment with support for both online and offline payments. .

3.2 Admin Module

- Adding or deleting a service.
- Adding or deleting the workers.
- Maintaining he record of successful payments.
- Tracking the history of worker.
- Analyzing the behavior of customers to provide better availability of workers.

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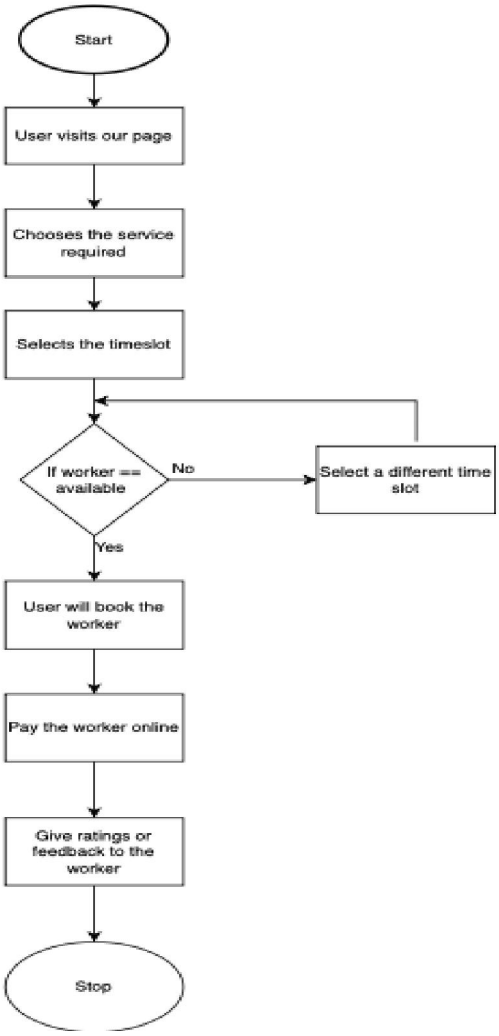

Figure 1: Flow Chart Diagram

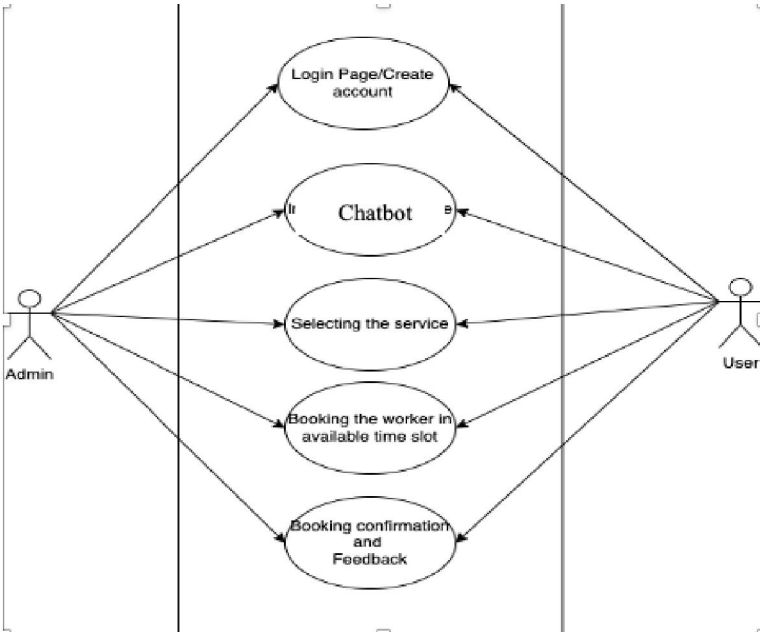

Figure 2: Use Case Diagram

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IV. SYSTEM IMPLEMENTATION

The proposed system has a main landing page with login details and the list of services for the user to choose from and then selecting a particular service based on the requirements of the user.

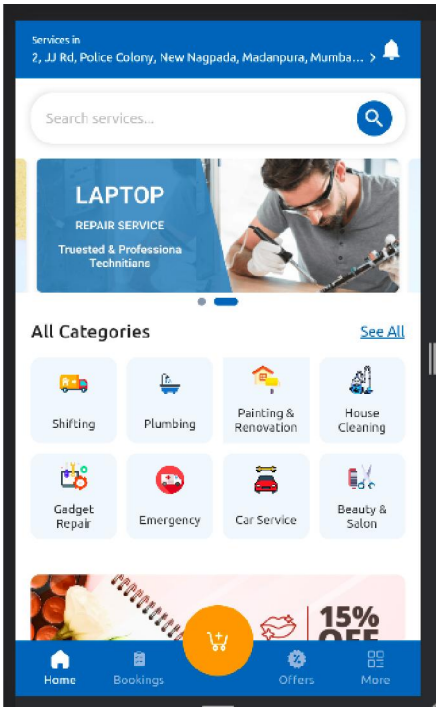

Figure 3: Landing page

Figure 4allows the user to select the date and time and book the service and do the payment and keep track of the worker and then provide feedback based on the work done by them.

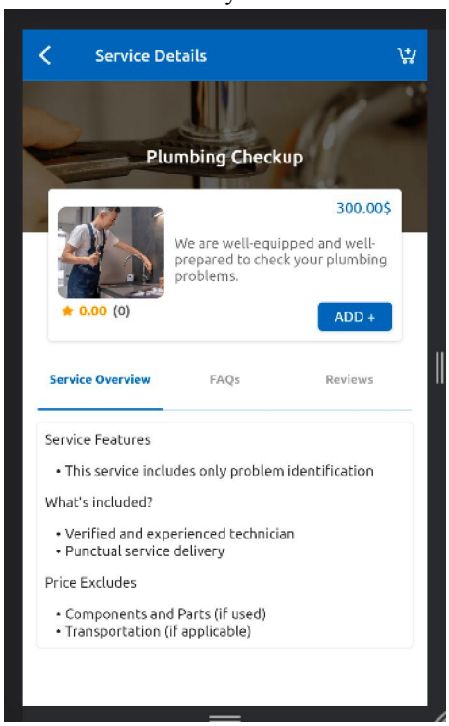

Figure 4: Worker selection

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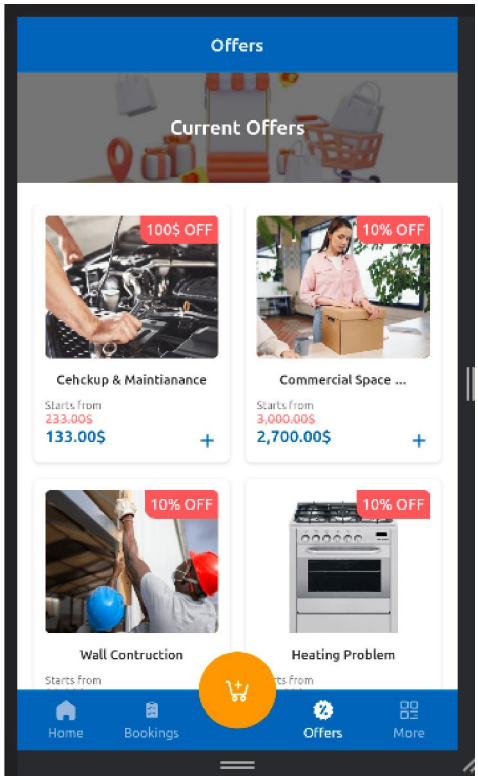

Figure 5: Offer page

V. FUTURE SCOPE

The future scope for this research is broad and not limited. There are certain areas where user experience can be more enhanced and uplifted by using machine learning techniques to create highly advanced chatbots with voice recognition feature to help users for problems in typing. To create more services based on the area and location of the user with added discounts, coupons and vouchers. Another area of concern is security of mobile application by adding multi factor authentication and (OTP) services with more secure payment gateways so that the system can't be breached.

Another scope would be creating an application for workers so that they can have the freedom of selecting the service and accepting the terms and conditions of users. Helping the admin to track and manage the workers and provide them feedback on how they are performing based on customer's feedback.

VI. CONCLUSION

The main objective for creating this project is to create an Home Service Mobile Application using Machine Learning techniques to allow users to get instant remedies and solutions for their problems just by uploading images and getting solutions. Users can book the service worker select the time slot feasible to the user and confirm the booking. Our main highlight is using Machine Learning and Deep Learning Image processing techniques to make the application dynamic and quick and responsive.

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REFERENCES

[1]. codiant.com, Top 10 On Demand Home Service Apps 2022 [Online] Available : www.codiant.com/blog/top-10-on-demand-home-service-apps[Accessed : 26 – 9 – 2022]
[2]. youtube.com, Flutter 100-day 2022 [Online] Available : https://www.youtube.com/playlist?list=PLf-j0Hs0PF3u5WSVX_x3GzU0sAP6oIwA5 [Accessed : 29 – 9 – 2022]
[3]. figma.com, Home Service App Ui Design 2022 [Online] Available : www.figma.com/community/file/1119440991825213768. [Accessed : 25 – 8 – 2022]
[4]. figma.com, Hamo Service App 2022 [Online] Available :
[5]. https://www.figma.com/community/file/1111338473512770566 [Accessed : 1 – 10 – 2022]
[6]. Naveen Pandit, "Research Paper Journal for Android Projects", Suscom, Mang. Household Services, PP- 345-187, Vol no.-23, 18/01/2020. [Accessed : 20-9-2022]