

Virtual Care Takers for Senior Citizens

Aparna K S, Sreevidya P R, Spandana Bai, Ramya N, Rohini G R, Umakanth N

Department of Computer Science and Engineering

Rao Bahadur Y Mahabaleswarappa Engineering College, Bellary, Karnataka, India

Abstract: Aged care is a significant issue which concerns all governments. In order to aid and provide quality of life to senior citizens, enormous resources are invested by the government each year. A substantial proportion of the asset is used to provide a range of services for senior citizens who stay at home autonomously. Although modern information technology products are changing the lifestyle of younger generations, they have much less impact on old people. According to the World Health Organization (WHO), an elderly person is someone who has entered the age of 60 years and over. The retired have a set of activities consisting of daily habits such as eating schedules, sports, telephone calls, or activities such as therapy to seeing a doctor. Therefore, seniors need to schedule activities for themselves. In this digital era, there are already activity scheduling applications that have been developed in other nations, but most are designed for the public and not for the elderly. Our target is to make available action for helping our senior citizen in quotidian. Our aim is to provide service to golden aged in term of medical, outing, domestic service. To carry out process we are building a special app it is exclusively for our senior citizens. Here the login and registration can be done by senior citizen or people related to them. Service are booked based on senior citizen requirement we send service provider who is locally available we act as a third party agent. In short we describe our project as ‘Providing virtual child for senior citizen based on the requirement of client’.

Keywords: Senior Citizens

I. INTRODUCTION

In this ever-evolving world, we are so absorbed in our daily lives that we often forget to take care of our parents and senior citizens. According to the latest update of the United Nations World Population Ageing Report, India's ageing population (those aged 60 and above) is expected to reach nearly 20% by 2050, up from 8% currently. In order to meet the needs of our elderly population, we must take steps to ensure they are well taken care of. This can be done by providing them with adequate resources, such as affordable healthcare and sufficient support, as well as creating better opportunities for them to lead an active and social life. Additionally, providing them with an environment that is safe and inclusive of their needs is also essential. Furthermore, we must ensure that the elderly in our society have access to the latest technologies and services, in order to ensure that they can still lead a dignified life. So we are working on developing mobile applications by considering content below. It is common for existing Smartphone's to have complex user interfaces and to be developed with an emphasis on attracting young people rather than elders. Elderly users are neglected in the design phase of smart phone applications, and designers do not pay attention to the needs and requirements of elderly users. Due to this, the reasons for different issues are discussed from two different perspectives. Their age-related problems, including cognitive, physical, memory, mental model, and sensory functions, make it more difficult for them to interact with new technologies. The second problem is software design; the designers do not carefully design applications based on the needs and requirements of elderly users. There should be a concrete solution that can assist elderly people in interacting with smart phone applications. So we have designed our KarunaMithra in such a way that any member of the family can use our app without age restriction. Our app is simple and has its own unique features for user convenience. Our app describes about 3 main services that is healthcare, outing and domestic services. User can book any of the above mentioned services by logging with their credentials and we believe that “Walking stick is not symbol of weakness, it the symbol that you can independently”.

II. LITERATURE SURVEY

In this paper we have focused completely on senior citizens needs which are physical, mental and emotional needs these will be provided by the trusted third-party agents using technological interface. This interface provides a platform for registering and rendering the services to these end users using human resources. Registering in the application, which can be done by the child of a senior citizen or relative or by himself Human resources possess GPRS enabled units which help with security purposes. The main technological modules are: Android app module: is used as an interface for registering the various services and these services are paid online or offline after completion of the assigned task.

GPRS-enabled module: Reliability is ensured by providing human resources with GPRS enabled kit.

III. METHODOLOGY

We are committed to providing the highest level of service to our senior citizens. To ensure that their needs are met, we are creating a special app for them. The app will provide access for both family members, children, and senior citizens to register and log in. Once logged in, users can view the range of services available to senior citizens, including medical, outing, and domestic services. All services are individually tailored to the needs of each senior citizen, and are physically and manually attended. In addition to providing access to these services, the app also provides a range of other features, such as access to health records, medication reminders, and tips for staying healthy. We hope that our app will be able to provide a comprehensive range of services to our senior citizens and make their lives easier and more comfortable. We are committed to providing the highest level of care and support to ensure that their needs are met. These services will be provided by local workers who will be monitored using GPRS to ensure the highest quality of care. We are confident that this app will ensure that senior citizens get the best possible service.

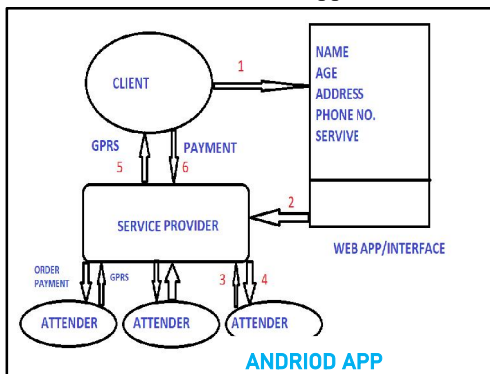


FIG 3.1: Architecture of Karuna Mithra

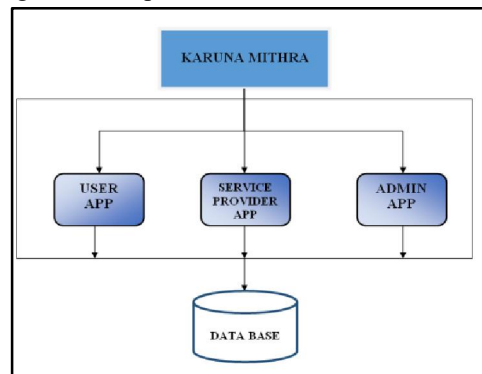


FIG 3.2: System Architecture of Karun Mithra

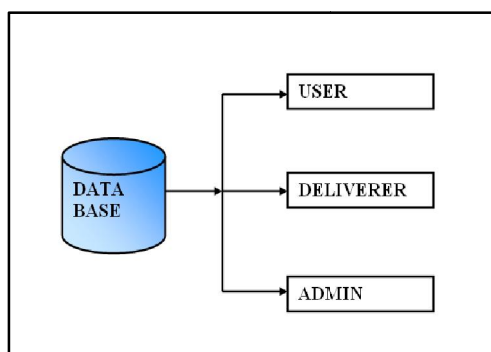


FIG 3.3: Data Base

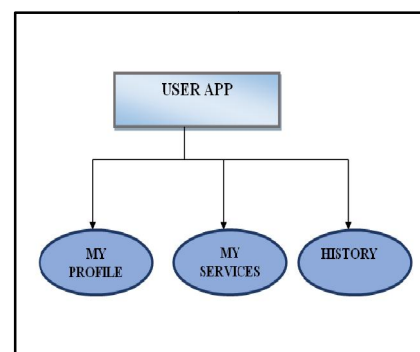


FIG 3.4: User home page architecture

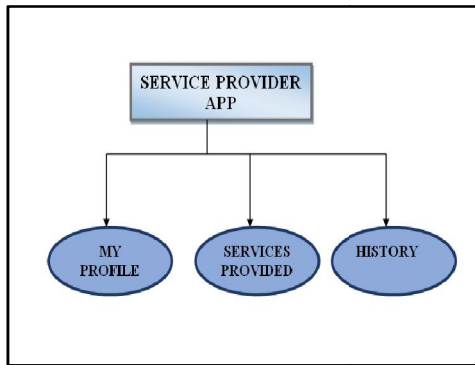


FIG 3.4: Service provide home page Architecture

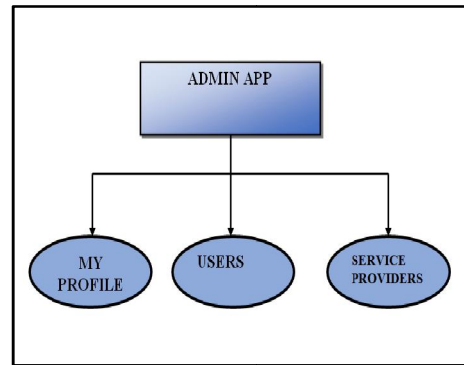


FIG 3.5: Admin home page architecture

IV. EXPERIMENTAL RESULT



FIG 4.1: Logo of the App



FIG 4.2: Home Page

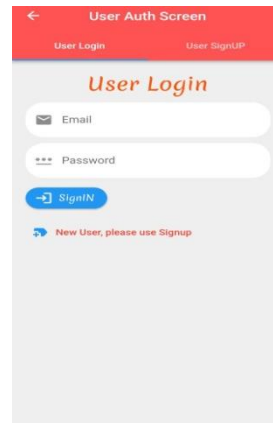


FIG 4.3: User Login

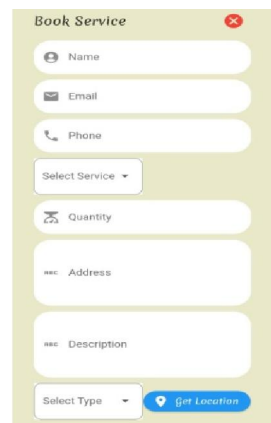


FIG 4.4: Book Services

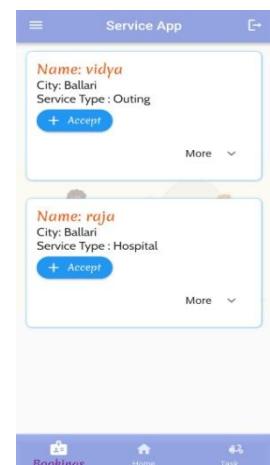
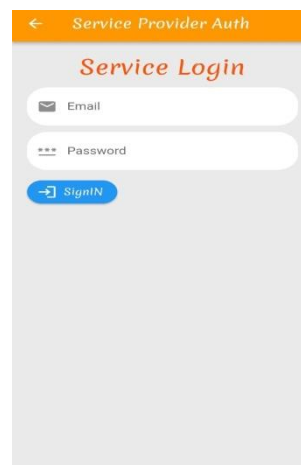
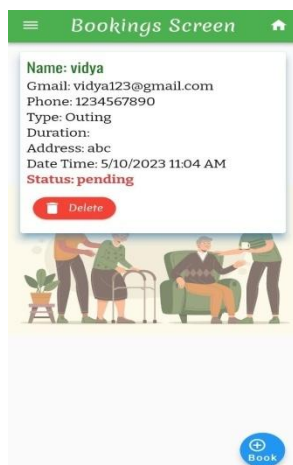


FIG 4.5: Status of booked services FIG 4.6: Reminder page FIG 4.7: Service provider login FIG 4.8: Bookings of users page

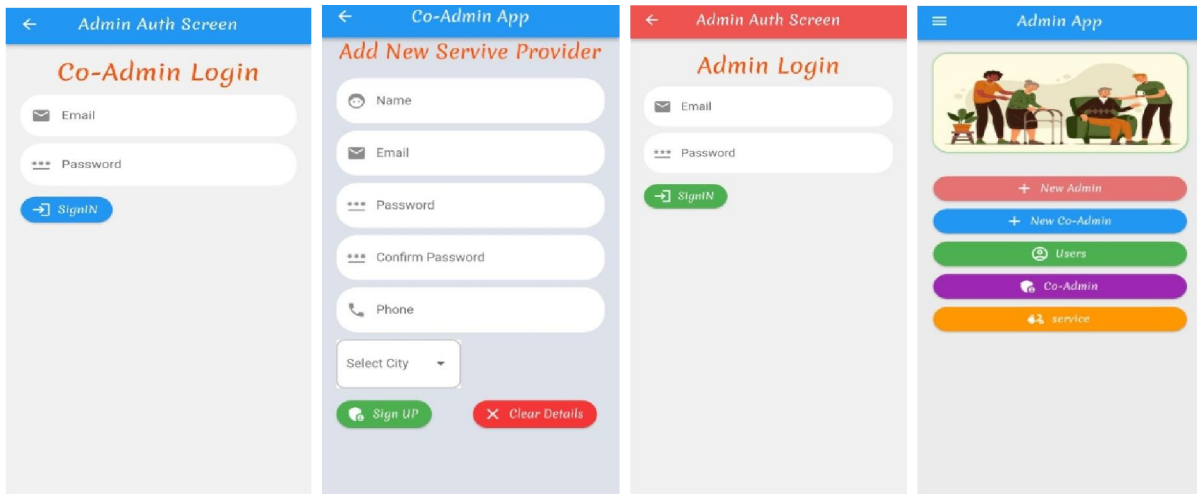


FIG 4.9: Coadmin login FIG 4.10: Add new service Provider FIG 4.11: Admin Login FIG 4.12: Admin home page

V. CONCLUSION

We are proud to introduce KARUNA MITHRA, an innovative service designed to make life easier and more comfortable for senior citizens. Through our services, we make it easy for seniors to access the help they need, right in their own homes.

KARUNA MITHRA makes it easy for seniors to book services they need, such as health care, outing and domestic services. Once booked, services are immediately notified to the service provider, and admins are able to monitor the entire process between users and service providers.

We are committed to providing seniors with a protective and supportive environment. We strive to ensure that our services are reliable, efficient, and tailored to meet their individual needs. With KARUNA MITHRA, we strive to make life comfortable and safe for our senior citizens

REFERENCES

- [1].Stutzel, M. C., Filippo, M. P., Sztajnberg, A., da Costa, R. M. E., da Silva Brites, A., da Motta, L. B., & Caldas, C. P. (2019). Multi-part quality evaluation of a customized mobile application for monitoring elderly patients with functional loss and helping caregivers. *BMC medical informatics and decision making*, 19(1), 1-18.
- [2].Tun, S. Y. Y., Madanian, S., & Mirza, F. (2021). Internet of things (IoT) applications for elderly care: a reflective review. *Aging clinical and experimental research*, 33(4), 855-867.
- [3].Stutzel, M. C., Filippo, M. P., Sztajnberg, A., da Costa, R. M. E., da Silva Brites, A., da Motta, L. B., & Caldas, C. P. (2019). Multi-part quality evaluation of a customized mobile application for monitoring elderly patients with functional loss and helping caregivers. *BMC medical informatics and decision making*, 19(1), 1-18.
- [4].Saraubon, K., Anurugsa, K., &Kongsakpaibul, A. (2018, December). A smart system for elderly care using iot and mobile technologies. In *Proceedings of the 2018 2nd International Conference on Software and e Business* (pp. 59-63).
- [5].Kruse CS, Mileski M, Moreno J. Mobile health solutions for the aging population: a systematic narrative analysis. *J Telemed Telecare*. 2021;23(4):439–51.
- [6].Wang J, Wang Y, Wei C, Yao N, Yuan A, Shan Y, et al. Smartphone interventions for long-term health management of chronic diseases: an integrative review. *Telemedicine and e-Health*. 2022;20(6):570–83.
- [7].Whitehead L, Seaton P. The effectiveness of self-management mobile phone and tablet apps in long-term condition management: a systematic review. *J Med Internet Res*. 2020;18(5):e97.