



Seniority Safety App

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ABSTRACT:

Older people are very important part of our society, who owes equal amount of respect and attention just like how the kids or adults of this society gets. But there come some changes in family structures or in our lives where certain situation arises and things don't go as planned. Elderly people are facing challenges while living their lives. they feel as if they getting very less importance, attention, they feel lonely. Due to ageing and health issues and lack of treatment they are facing a lot of issues alone. There are more than 200 old age homes in Maharashtra. Changing lifestyle, availability, accessibility and affordability of health care, increased life expectancy, rapid urbanization and economic dependency have led to an emergence of varied problems for the elderly in India. And hence we thought of proposing a idea of building a old age home application with safety application to identify these needs and provide the elderly with required support.

INTRODUCTION:

- ❑ People ageing has brought a lot of concerns on how to keep living at home as long as possible. While a person is in his/her ageing process they cannot process things properly, as how to cope with the everyday life, how to not forget things and whatnot. Meeting the demands become just as personal than before. Looking from the old persons perspective or point of view the decreased ability and suffering from various health complaints which also means depending on others for carrying out activities out their daily activities while living their lives, which is more or less hard to live with.
 1. Drastic Change in Family Structure.
 2. Lack of Social and their loved one's support.
 3. Availability, Access to the treatment and Affordability of Health Care
 4. Economic Dependency and support from the family.

❑ By developing this seniority safety app, we will keep a track of the elderly, the Activities held in the old age homes. We will also keep a track of their health. By building this app it will easier for the adults who work far away from their parents, to keep a track on them and their activities and be relieved. There also will be an alert section in need of any emergencies.

Literature Survey:

- CarePro: A Complete Arduino and Android-based Elderly Care Health and Security Monitoring System- (Rohan Sarkar; Rohan Roy; Bipasha Pal; Rijit Chakraborti; Antara Mukherjee; Shankhadeep Ghosh; Sovan Saha):-The principal objective of this project is to build a device to keep track of health and security factors for everyone, especially elderly persons.
- An Updated Watch-Over System Using an IoT Device, for Elderly People Living by Themselves-(Hideo Suzuki; Yuya Kiyonobu; Takato Mogi; Kotaro Matsushita; Masaki Hanada):- Therefore, in this paper, we update our previously

developed system to enable it to switch modes between “idling mode” and “watch over mode.” The system will be able to treat any combinations of the categories “Elderly family,” “Other families,” “Guest” entering and being in the house.

- Cloud-assisted tracking medical mobile robot for indoor elderly(Huiru Cao; Runjie Chen; Yucheng Gu; Huiyi Xu):- In this paper, we present a design for a cloud-assisted medical robot with mobility, which can remotely monitor and collect the parameters of human body.
- Raspberry Pi Assisted Safety System for Elderly People: An Application of Smart Home:(Habab Jan; Hikmat Yar; Javed Iqbal; Haleem Farman; Zahid Khan; Anis Koubaa):- The primary purpose of the proposed system is to provide a reliable, cost-effective, and efficient method for the safety of the elderly population.
- Mobile app development and usability research to help dementia and Alzheimer patients:-(Christina Yamagata; Jean F. Coppola; Marc Kowtko; Shannon Joyce):- This study focuses on innovative devices such as iPads and tablets, which are mainstream and easy to use, cannot only help determine stage of dementia, but also provide stimulation to improve cognitive functioning.
- Mobile follow-up system for elderly and disabled people:(Pablo Martín Vera; Mariano Kaimakamian Carrau; Rocío Andrea Rodríguez):- This paper presents a mobile app prototype for planned care and follow-up of elderly or disabled people. The app uses the sensors in devices such as GPSs, accelerometers, barometers, etc, and enables a noninvasive control and follow-up system.
- Smart Monitoring Service through Self Sufficient Healthcare Gadget for Elderly:(Rowshni Tasneem Usha; Fariha Sazid Sejuti; Samiul Islam):- The core purpose of the paper is to build a low budget monitoring system for elderly health care, developed focusing on user compatibility and reliability.
- Activity Tracker and Elderly;(Peter Rasche; Matthias Wille; Sabine Theis; Katharina Schaefer; Christopher M. Schlick; Alexander Mertens):- In this paper results of a study about elderlies’ attitude towards activity tracker and daily activity are presented.
- The research of elderly care system based on video image processing technology;(Dongwei Lu; Zhiwei He; Xiao Li; Mingyu Gao; Yun Li; Ke Yin):- Against lack of time and energy for children to care for the elderly, a monitoring system for elderly people which is based on multi-information fusion technology including video image, sound, infrared and pulse is designed in this essay.

PROBLEM STATEMENT:

Ageing in india is something which is exponentially increasing day by day because of the impressive gains that society made in terms of increased life expectancy. With the increasing number of elderly people or population, the demand for the elderly care tends to grow. ageing people increases the budget on the resources of a country ,this has raised alot of concerns at many levels for the government. The ageing people are facing both Sociological and medical problems. Care for the elderly is fast emerging as a critical element of both the public and private concern. It is expected that the population of elderly will be increasing qith time who might need care and extra attention. There are certain applications related to the old age home but htey are not tht reliable and have very few functionalities. for example some application have just an option for donation to tht certain old age home. but we are making an application which would overcome all these.

There is not proper management for old age people.

These includes:

- 1.) Safety
- 2.) Care
- 3.) Mental health
- 4.) Donation system
- 5.) Tracking.

METHODOLOGY / IMPLEMENTATION DETAILS:

After Brainstorming the requirement of our project ,my team decided to make a elderly friemdly application with much simple features and elderly friendly features which they can easily use. Hence these are the features of our android applications.

1] Medicine Reminders: Medicine reminders can be set by the caretakers to remind the elder person of their medicine. The reminders can be set by the caretaker which is assigned to that elder.

Old people tend to forget things often and medicines are the one thing they shouldn't skip.

2] Location monitoring: 24/7 live location tracking system. The caretaker can track their elder's location all the time and keep an eye on their activity. This feature is essential where some people have Alzheimer's and especially old people tend to forget things.

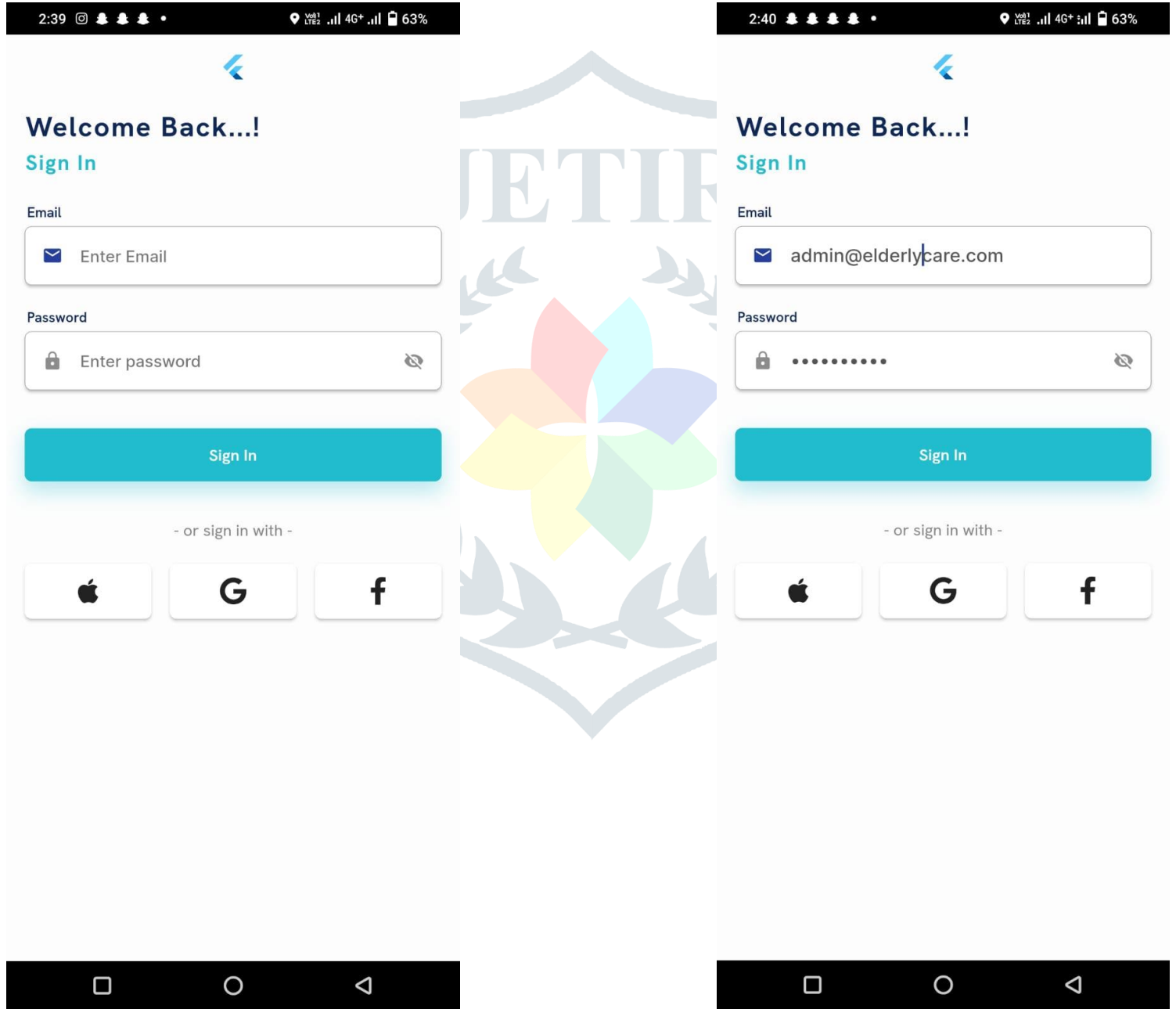
3] Donation system: This application also contains a donation system where the caretakers can donate to any old age homes irrespective of the old age home assigned to them. This feature is helpful where the old age home is located in the remote area and it is hard to go physically to donate to the old age home.

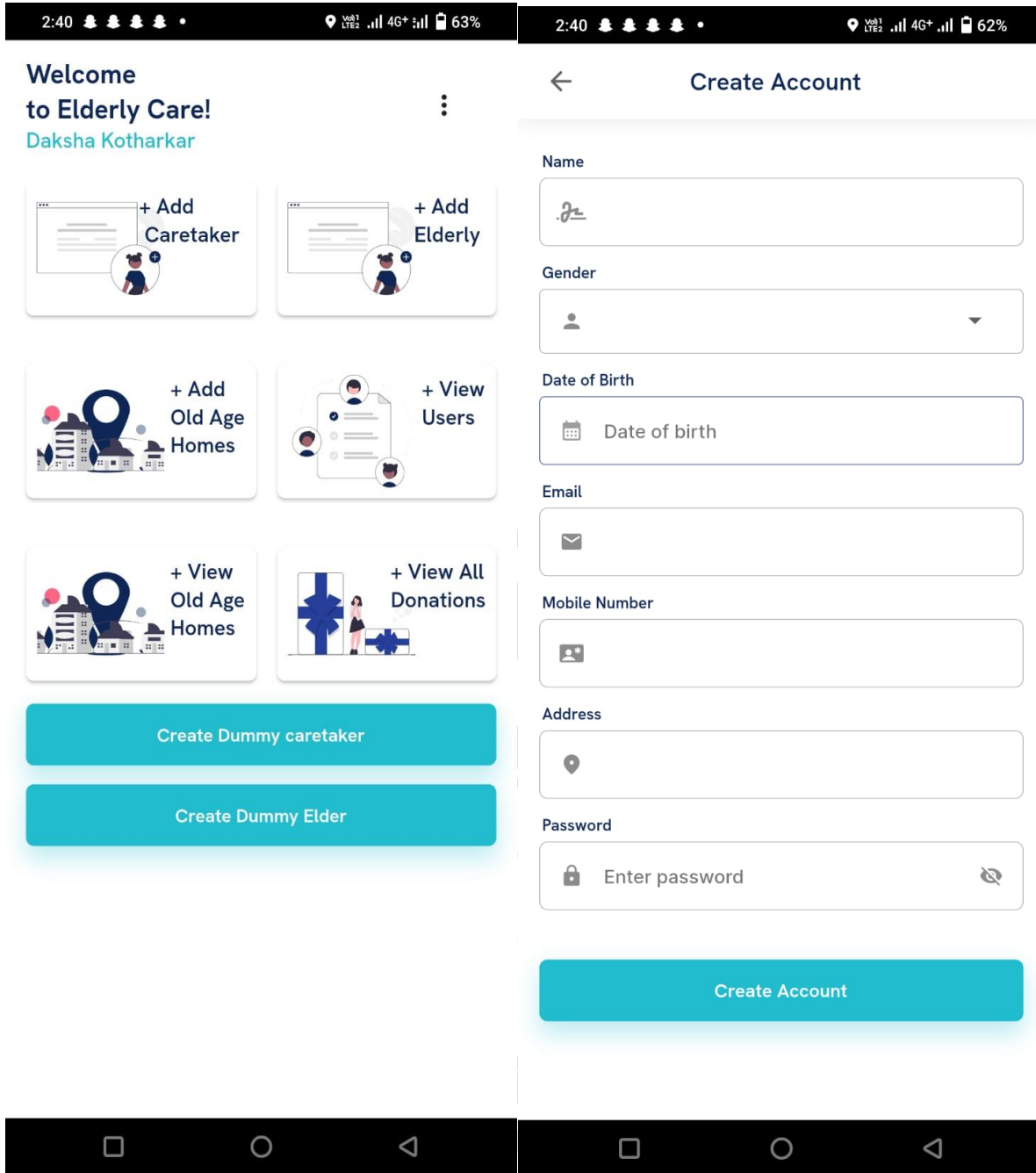
4]Doctor Appointment Reminder: Our Application also contains a Doctor Appointment Reminder Where a caretaker can set a reminder for their elderly, as elderly tend to forget appointments, so the reminder set by the caretaker will remind the elderly of there following appointment.

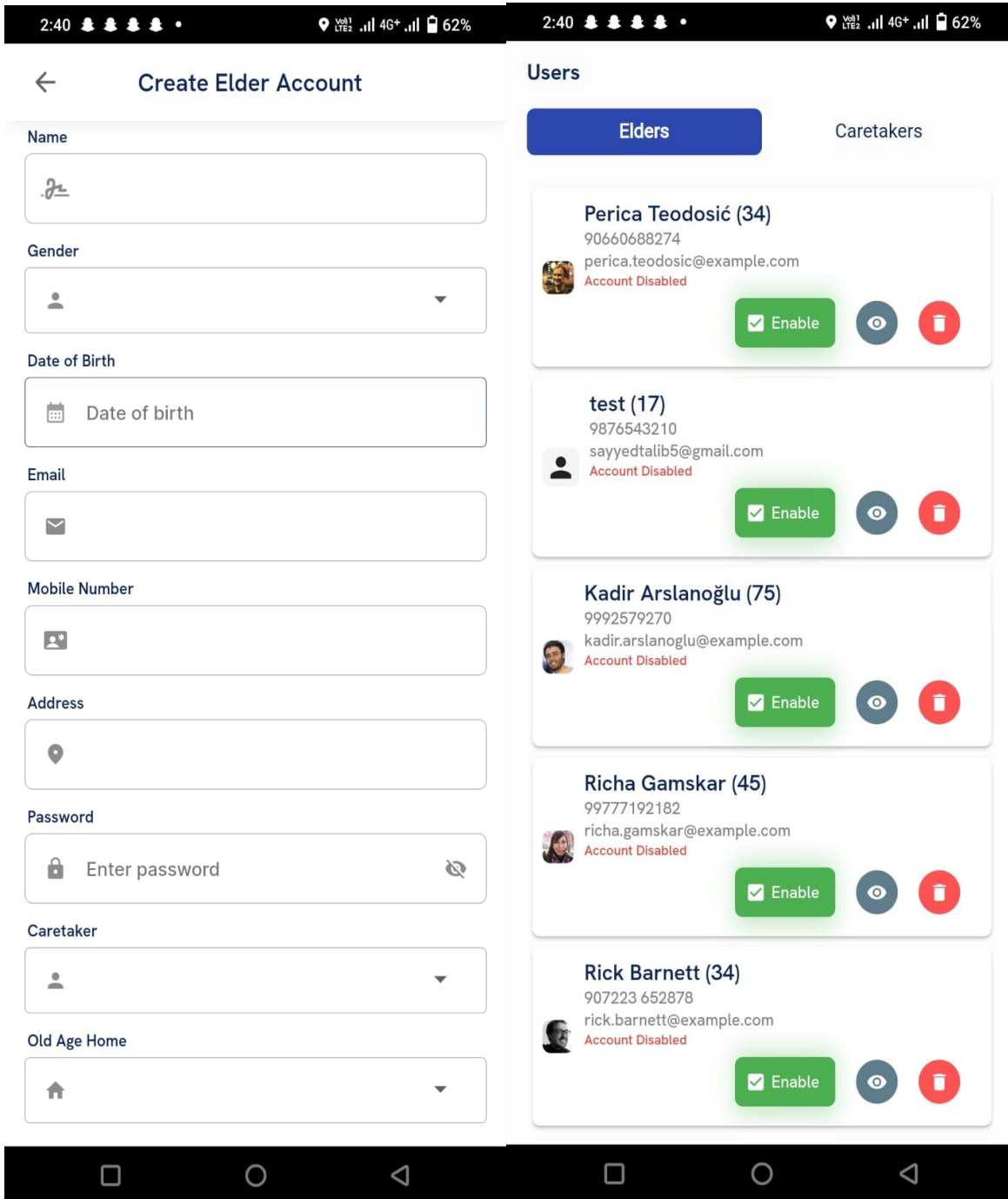
5]Audio notes: Our application contains a feature of audio notes, where elderly and there caretaker can send audio notes to each other, which would appear in there audio note section.

6]Emergency Call Button: our application also contains an emergency call button where if the elderly person clicks on the caretakers contact then it would directly redirect the caretakers contact number to the call log and they can make a call.

RESULTS:









Users

Elders

Caretakers

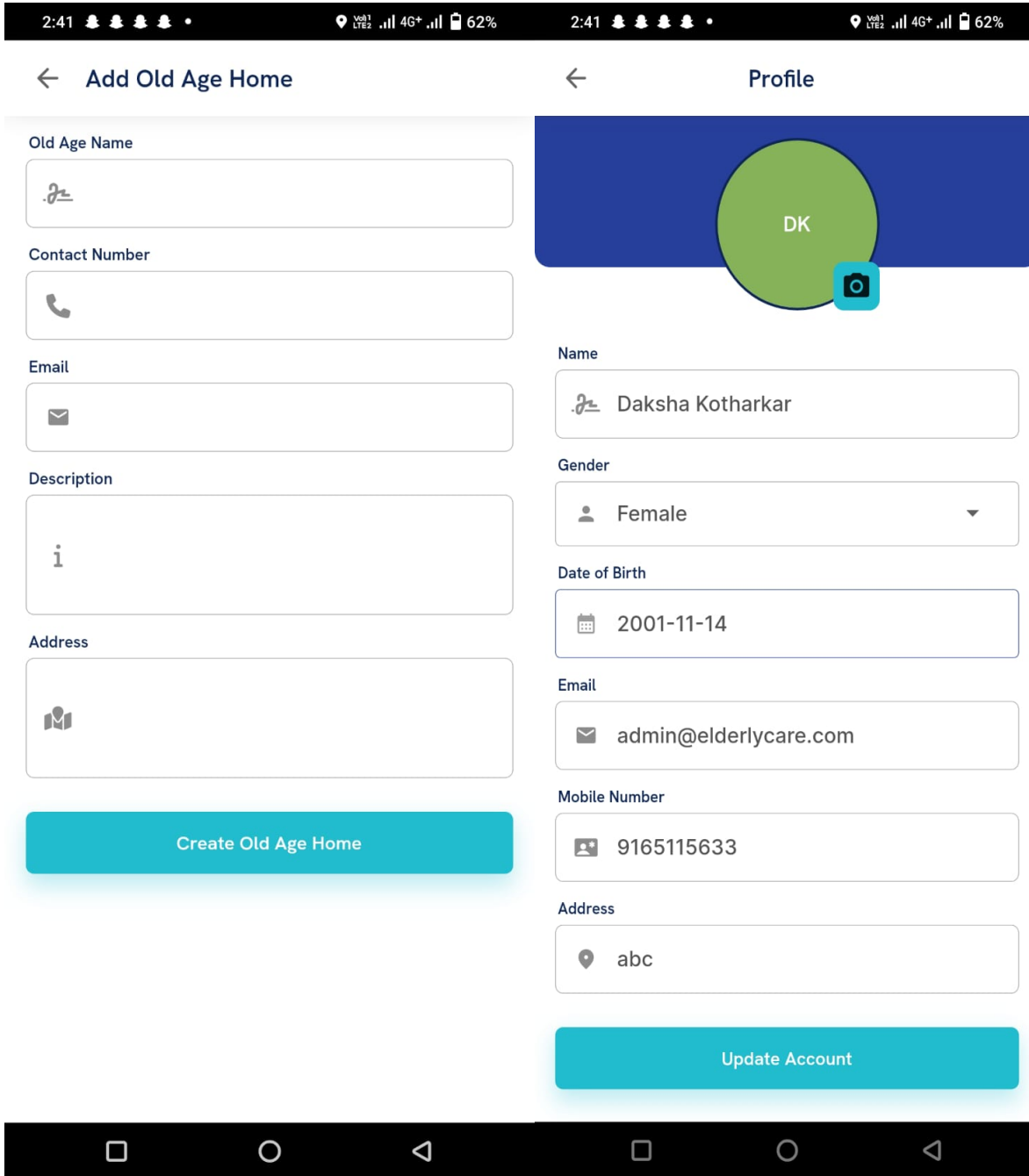
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← Old Age Homes

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- test old age home**
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CONCLUSION:

The application or the uses of our android application has different contexts and is associated an impact in the people that are involved with them. This is especially very evident in other people while maintaining their health, adapting and keeping contact with the family and friends etc. If we do a review of the different aspects related with usability of the mobile, the mobile and the mobile apps for older people are very less than they should be. Hence we built a application which has tools to satisfy elderly people needs and there are repositories which are specially built for them. There can be different usability of the android application which we have built. However it can be used by the elderly plus the caretaker. It is important to take into consideration if the application is solving needs and welfare of old people. Hence we built this application where both elderly and caretaker can communicate and use the features of application and elderly can get the attention and caretakers can take care of their wellbeing and health.



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