

## **PR1103: Minor Project**



Institute of Engineering & Technology (IET)

JK Lakshmipat University, Jaipur

### **Samarth App**

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## ACKNOWLEDGEMENT

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I have completed this Project under the guidance and supervision of Prof. Amit Sinhal (**Associate Professor of Computer Science Engineering, Institute of Engineering and Technology JK Lakshmipat University, Jaipur**). We will be failed in our duty if we do not acknowledge the esteemed scholarly guidance, assistance, and knowledge. We have received from them towards fruitful and timely completion of this work.

We also thank our colleagues who have helped in successful completion of the project.

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## ABSTRACT

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A person's mobility and dexterity will naturally decline as they age, which makes completing everyday tasks more difficult. This can gradually cause people to care for themselves and prevents them from being social, pursuing interests, or taking part in activities they enjoy. More support is needed to enable elderly people not only to live independently through products and programs which focus on safety, balance, fitness, and mobility but also to ensure they can continue to thrive as an individual.

Samarth is a Flutter Application mainly for elderly person, this app helps them manage their medications hospitals, emergency contacts and by joining the community they can access many facilities provided by the company.

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# CHAPTER 1

## INTRODUCTION

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### Frontend

**Flutter** is an open-source UI software development kit created by Google. It is used to develop cross-platform applications for Android, iOS, Linux, macOS, Windows, Google Fuchsia, and the web from a single codebase.

Flutter apps are written in the Dart language and make use of many of the language's more advanced features.

While writing and debugging an application, Flutter runs in the Dart virtual machine, which features a just-in-time execution engine. This allows for fast compilation times as well as "hot reload", with which modifications to source files can be injected into a running application. Flutter extends this further with support for stateful hot reload, where in most cases changes to source code are reflected immediately in the running app without requiring a restart or any loss of state.

For better performance, release versions of Flutter apps on all platforms use ahead-of-time (AOT) compilation, except for on the Web where code is transpiled to JavaScript.

Flutter inherits Dart's Pub package manager and software repository, which allows users to publish and use custom packages as well as Flutter-specific plugins.

**PHP** code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside the web context, such as standalone graphical applications and robotic drone control. PHP code can also be directly executed from the command line.

### Backend

**Firebase** is a set of hosting services for any type of application (Android, iOS, Javascript, Node.js, Java, Unity, PHP, C++ ...). It offers NoSQL and real-time hosting of databases, content, social authentication (Google, Facebook, Twitter and Github), and notifications, or services, such as a real-time communication server.

Firebase provides the tools and infrastructure you need to develop, grow, and earn money from your app. This package supports web (browser), mobile-web, and server (Node.js) clients.

## Database

**MySQL** is currently the most popular database management system software used for managing the relational database. It is open-source database software, which is supported by Oracle Company. It is fast, scalable, and easy to use database management system in comparison with Microsoft SQL Server and Oracle Database. It is commonly used in conjunction with PHP scripts for creating powerful and dynamic server-side or web-based enterprise applications.

### Basic Idea of the App

- Interactive UI using Flutter SDK
- Login and Registration for users using Firebase Authentication
- Uses MySQL to store data entered by user

## CHAPTER 2

### LITERATURE REVIEW

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1. Ali. M. A. Z. (2014) has focused on the adjustment problems of oldest people. Author has stated that there is a need for preserving the Indian joint family system. There should be cooperation and understanding between new and old generations. In the opinion of author, the situation of oldest people in India calls for concerted efforts of the government, NGOs, religious institutions et cetera not only to understand but also to solve the problems resulting from a greying society so that the old age people can leave a dignified and quality of life. Through the study author has focused on the emotional adjustment, social adjustment, and marital adjustment of oldest people. Author has observed that, old age people staying in old age homes feel more emotional problems than those who are staying with the families.
2. Hemavathi U. & Rani. B. S, (2014), have focused on the problems faced by old age people based on age, gender and types of stay, that his institution and non-institution of Tirupati town and Mannurapalli village in Andhra Pradesh State. Through the study authors have found that, there were most old age people who admitted in institution where from nuclear families. Institutionalised old age it will be facing many social problems such as I'd just mental problems compared with non-institutionalised old age people. Authors have also observed that, institutionalised old age people facing many psychological problems compared non-institutionalised were as non-institutionalised old age people were facing high financial problems.
3. Singh. R. (2015) has given insight into the socio-economic condition of the oldest people along with the social and health problems faced by old age people. Through the study author has focused on the factors contributing to problems of old age people in India. Author has focused on the fact that, due to urbanisation family nuclearisation, rapid growth of industrialisation and rise of individual philosophy, diminished the Indian traditional values that earlier had a vested authority with old age people. Author has suggested that there should be efforts to prevent the problems of elders and this can be carried out through awareness generation in families and social work intervention. Problems Faced by Old Age People © The International Journal of Indian Psychology, ISSN 2348-5396 (e)| ISSN: 2349-3429 (p) | 54 Author has concluded that, as far as India is concerned social security schemes should be coupled antipoverty programs.
4. Raju, S. S. (2011), has focused on the research on ageing India and provides an analysis in terms of social, financial, psychological, and physical and health aspects and elder abuse. Author has also discussed the issues upon which models of care for old age people can be framed and argues that factors like place of accommodation, social class and gender among others tamed to influence such models of care. In the opinion of author, the institution of the family needs to be protected and standard and social work intervention or through professional welfare services, including economical support, counselling to old age people and their family members also. Author has concluded that, not all aspects of ageing have been uniformly steady and majority of them are microlevel localised studies.
5. Kumar, Y., & Bhargava, A. (2014), have attempted to bring out the abusive behaviour towards old age people by their family members. Through the study author

have discussed on the types of abuse prevalent towards the oldest people and studied the impact of abusive behaviour of family members. To the study authors have also examine the day adequacy of social security measures to safeguard the position of the old age people in the families is common rich insights the depletion of human values among the modern and new generations. Authors have opined that timely intervention of social work government policies and imperatives majors should give an utmost importance to overcome the problem of old age people.



## **CHAPTER 3**

### **PROBLEM DESCRIPTION**

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Many elderly people are able and more than willing to work past the standard retirement age, but the opportunities are not there. In addition, managing day to day finances and planning for later life can be challenging for older generations as much is now done online or remotely. This can also leave them more vulnerable to fraud and scams. A person's mobility and dexterity will naturally decline as they age, which makes completing everyday tasks more difficult. This can gradually cause people to care for themselves and prevents them from being social, pursuing interests, or taking part in activities they enjoy. Healthcare can be complicated and disjointed for elderly people, especially for those struggling with long term conditions.

#### **Solution**

There are lots of outdated stereotypes about elderly people, which can lead to isolation and marginalization in a lot of communities. By coming up with innovative ways to involve older people in the community through "THE SAMARTH APP", we can not only help them to maintain a sense of identity and self-esteem but also tap into the wealth of knowledge and experience they have, which is so vital for the development of society.

## CHAPTER 4

### IMPLEMENTATIONS

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There are several features in this project as mentioned below:

1. Welcome Page: It will be the first page of the app which will give user introduction about app.
2. Login Screen: In this screen, the user will be required to fill in the phone number to login
3. Wrong OTP/Phone Number (Error Handling): If the credentials entered are incorrect then you will be navigated to this page. You must re-enter your details here.
4. Sign Up Screen: If someone does not have account then they can register themselves here. It requires basic user information to be filled in.
5. Home Page: After login/signup, the user can access all the home page features of our app. It includes basic tools like magnifier and other features which are linked with website.
6. Card: user can avail his personalised card which can be used to access features provided by company.
7. Edit Profile Screen: This screen consists of the user to add their profile if they wish to.
8. Create Profile Screen: In the create profile screen, the user can add their details.
9. Profile Screen: It will display the user information.
10. Drawer: Drawer is the menu of the food blog platform. It will contain tabs which can redirect you to home page, settings or enable a user to logout their account.
11. Emergency Information: This screen enables user to add emergency information with other details in it.
12. Magnifier: This screen allows users to magnify any object by a slider.

Technologies Stack:

1. Backend: Firebase, PHP
2. Flutter for App Development
3. WordPress for Website
  - a. Rest API Development: Getting data from the database and showing it to the front-end
  - b. Taking data from front-end and storing it to the database
  - c. PHP for the Rest-API development
4. Database: MySQL

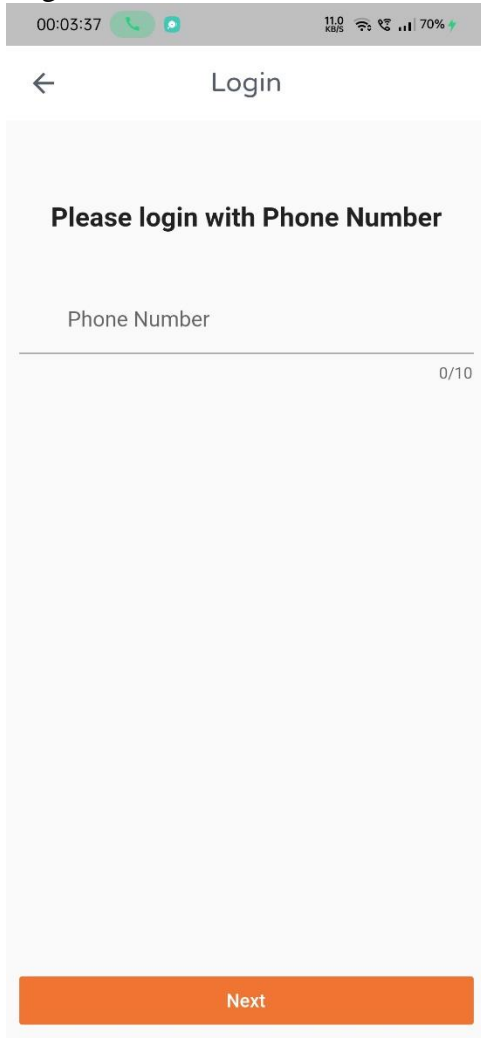
## CHAPTER 5

### RESULTS

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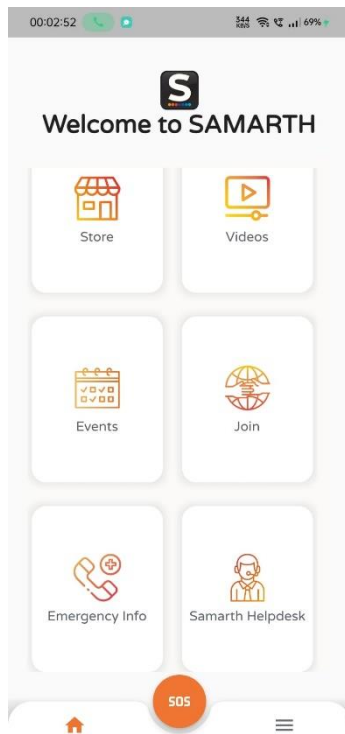
#### SCREENSHOTS

##### 1. Login Screen

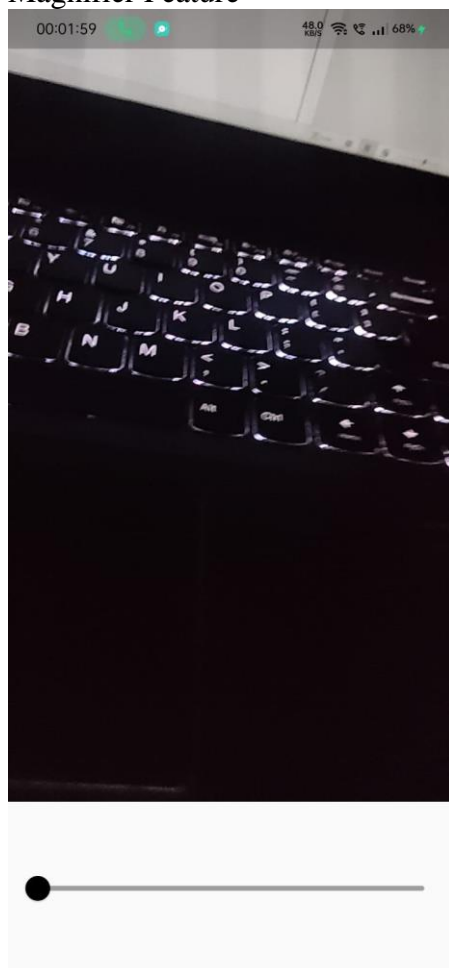


The screenshot shows a mobile application's login screen. At the top, there is a status bar with the time 00:03:37, a green phone icon, a green WhatsApp icon, a signal strength indicator, and a battery level of 70%. Below the status bar is a navigation bar with a back arrow on the left and the word "Login" in the center. The main content area has a light gray background. It features the text "Please login with Phone Number" in bold. Below this text is a text input field with the placeholder "Phone Number". To the right of the input field, there is a character count "0/10". At the bottom of the screen, there is an orange button with the text "Next".

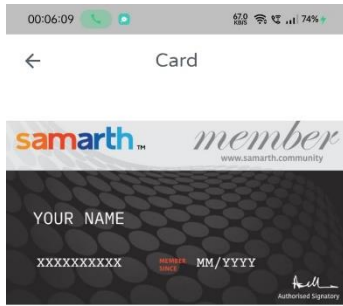
##### 2. Home Screen



### 3. Magnifier Feature



### 4. Card Feature



← Menu

Login

Card

Help

Privacy Policy

Terms & Condition

## CHAPTER 7

### CONCLUSION AND FUTURE SCOPE

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#### Future Scope

1. Connect the app's remaining feature with the website services.
2. Deploy
3. Creating a better UI

#### Conclusion

I can conclude that I made a proper working successful app which can be used by elderly people. It is a platform for urban elders that acts like a 'support group' for emotional well-being, engagement, and 'trusted' information. It provides comprehensive support to age at home, as a flagship service for elderly and their children. Filling the biggest gap to establish trust. It curates, develops, and offers products and services against identified need gaps and opportunities through proprietary & open channels. It enables wide access, blend tech with touch, support positive unit economics.

By doing this project, I got a very strong understanding and hands on knowledge about mobile app development using Flutter and database management using Firebase and MySQL.

## CHAPTER 8

### REFERENCES

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[https://www.researchgate.net/publication/326785466\\_Problems\\_faced\\_by\\_old\\_age\\_people](https://www.researchgate.net/publication/326785466_Problems_faced_by_old_age_people)

## APPENDIX

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1. App Link: <https://play.google.com/store/apps/details?id=org.sama>
2. Website Link: <https://samarth.community/>
3. Github Link to the project: <https://github.com/arpitgits/flutterSAMARTH>