

HOPE AND CARE APP

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Abstract: Orphanages are needed to approve by Government, to provide services to poor orphans. Orphanage in general refers to the provide services to orphan's who are unable to study or feed, Orphanages need to maintain orphan educational information like academic details, attendance, etc, and orphanages need to provide medical services to orphans. Orphanages need to track the day-to-day activities of orphans to provide better services. The application we are developing is helpful to computerize orphans data. It helps to maintain, tack orphans information easily. It also helps orphanages to raise fund request for donation, it helps to provide better services. This app is an android application which is mainly meant for elimination of maintains orphans information manually. The application avoids delay in providing services, and loss of orphan's data. This application also helps orphanages to raise fund request to government and helps to process requests immediately.

1. Introduction

The scope of Hope and Care App is to allow the administrator of any organization to edit and find out the personal details of an orphan and allows the guardian to keep up to date his profile. It will also facilitate keeping all the records of orphans, such as their personal id, name, mailing address, phone number, DOB, medical reports etc. So, all the information about them will be available.

Existing System

In the existing system, we need to search for the orphanage manually. If the orphanage founded, we need to check for the vacancies, if available its well and good else if there is no vacancy found the work made for searching is wasted and time for making the work is also wasted. For this reason, people who tends to help also regret due to time and work waste.

Problems in Existing System

- Option for the adopter is limited. And it increases the delay of adoption and time consuming.
- The government has introduced a website named CARA (Central Adoption Resource Authority) to help orphans but there is no option for searching for orphanages through online.

Proposed System

Motive of our project is to eliminate the drawback of previous application and to help orphans to the full extend. For this we are going to develop an Android application. Initial step of the application will be login. It has two ways of login; one is user login and other is admin's login. In case of user login, they will be having two options: they are searching orphanage details and finding details of orphanage through messages. Then the



application searches for the nearest orphanage. In case for admin login whole pattern will be different. Whenever new orphan is admitted the can enrol the details of that child in this portal. In our application we have planned to display list of orphanage region wise. Since the process of adoption undergoes many legal processes, we are not including that in our application. We will only provide child details and where they belong to.

2. DESIGN

Project architecture represents number of components we are using as a part of our project and the flow of request processing i.e. what components in processing the request and in which order. An architecture description is a formal description and representation of a system organized in a way that supports reasoning about the structure of the system. Architecture is of two types. They are

- (1) Software Architecture
- (2) Technical Architecture

3.1.1 Software Architecture

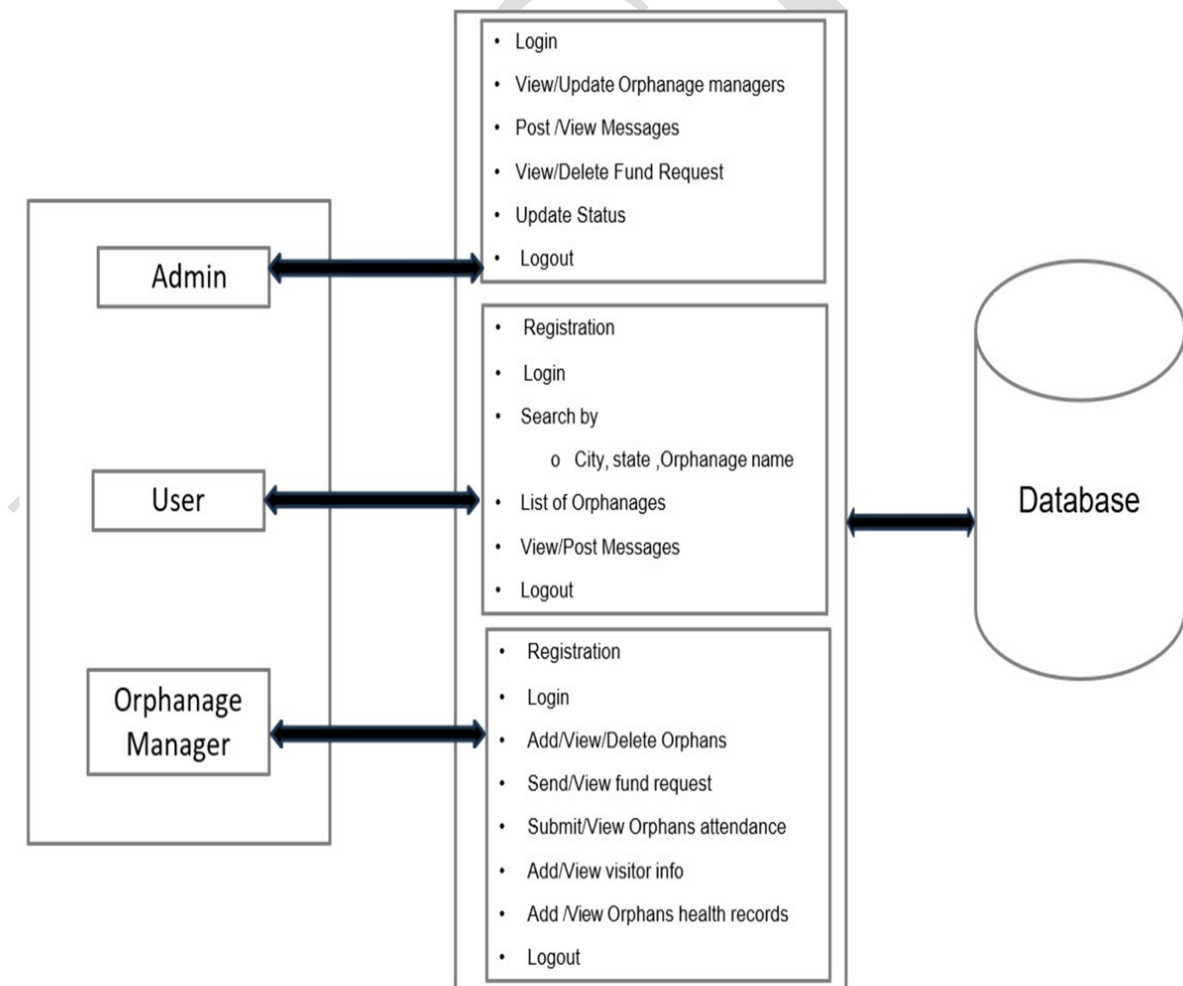


Fig 3.1 Software Architecture

Technical Architecture

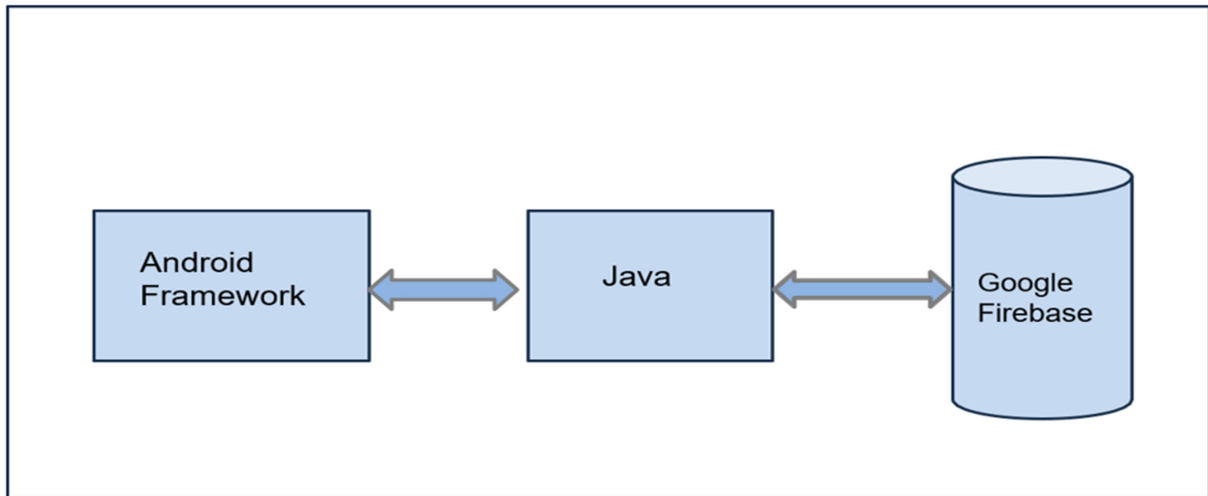


Fig 3.2 Technical Architecture

Implementation

- Java is an object-oriented programming language which gives a clear structure to programs and allows code to be reused, lowering development costs. Java is portable and can be used to develop applications that can be adapted to multiple platforms. Building Hope and Care App using Java involves technologies working together to create a comprehensive and user-friendly application.
- Android Studio is the official integrated development environment (IDE) for Android app development. Android Studio provides a complete IDE, including an advanced code editor and app templates. It also contains tools for development, debugging, testing, and performance that make it faster and easier to develop apps. Android Studio is tailored for Android app development with extensive support for Java.
- Firebase is a mobile platform that helps us to quickly develop high-quality apps, grow our user base. Firebase Authentication is used for user authentication. The Firebase Realtime Database can be accessed directly from a mobile device or web browser; there's no need for an application server. Benefits of using Firebase Realtime Database for Hope and Care App :
 1. Real-time Database: Firebase provides a real-time database that allows instant updates to data, which is crucial for managing dynamic information in an orphanage.
 2. Scalability: Firebase scales automatically to accommodate growing data and user loads, ensuring that the system remains responsive as the orphanage expands or experiences fluctuations

in usage.

3. Authentication and Security: Firebase offers robust authentication and security features, including user authentication, data validation, and secure access rules, safeguarding sensitive information about the children and staff.

4. Offline Support: Firebase enables offline data storage and synchronization, ensuring that orphanage management tasks can continue even when internet connectivity is intermittent or unavailable.

TESTCASES

Admin:

Testid	Test name	Inputs	Process	Expected Output	Actual output	Status
1	Login Credentials	Usernameand Password	Validate Usernameand Password	Need to redirect to home page	It is redirected to home page	Success
2	Invalid Credentials	Invalid Usernameand Password	Validate Usernameand Password	It will not accept the credentials	It will not redirect to the home page	Success
3	View/Update Orphanage managers Test	Usernameand Password	Validate Usernameand Password	Need to redirect to admin home page	It is redirected to admin home page	Success

Table 5.1 Admin Test Cases

User:

Test Id	Test name	Inputs	Process	Expected Output	Actual Output	Status
1	User Registration Test	Username, Password, email, Password	Validate Details	Need to approve andstore details	Registration Successful	Success



2	Login Credentials	Usernameand Password	Validate Usernameand Password	Need to redirect to home page	It is redirectedto home page	Success
3	Orphanage Searching Test	City, State, Orphanage name	Validate Details	Need to display thenearer orphanages	Displays nearer orphanages	Success
4	InvalidDetails	InvalidDetails	Validate Details	It will not accept theDetails	Failed to Search Orphanages	Success

Table 5.2 User Test Cases

Orphanage Manager:

TestId	Test name	Inputs	Process	Expected Output	Actual Output	Status
1	Orphanage Manager RegistrationTest	Username, Password, email, Password	Validate Details	Need to approve and storedetails	Registration Successful	Success
2	InvalidDetails	InvalidDetails	Validate Details	It will not accept the Credentials	Invalid Credentials, registrationnot completed	Success
3	Login Credentials	Usernameand Password	Validate Username and Password	Need to redirect to home page	It is redirected to home page	Success
4	Adding orphans Test	Personal Details and description	Validate Details	Store and approve the details	Orphans added successfully	Success
5	InvalidDetails	InvalidDetails	Validate Details	It will not accept the Details	Failed to add Orphans	Success

Table 5.3 Orphanage Manager Test Cases

RESULTS

Home Page

4G 8:31 52% 52%



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VoLTE

4G 8:32 52% 52% Hope and Care

ORPHANAGE MANAGER
REGISTRATION

USER REGISTRATION

USER/ADMIN LOGIN

ORPHANAGE/ADMIN LOGIN

Screenshot 6.1: App Icon

4G 8:32 52% 52%

VoLTE

Hope and Care

Enter Orphanage Name

Enter password

Retype Password

Enter Name

Enter Email

Enter Mobile

Enter Address

TAKE PHOTO

REGISTER

Screenshot 6.2: Home Page

4G 4:45 63% 63%

VoLTE

Hope and Care

Care Warriors Foundation

care warriors

carewarriors@gmail.com

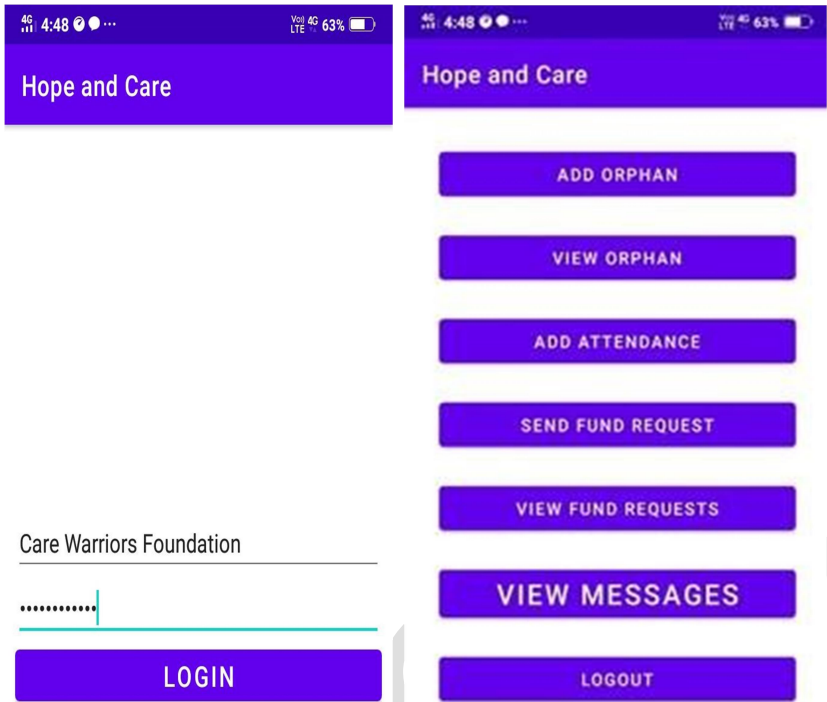
9440603060

Hayatnagar

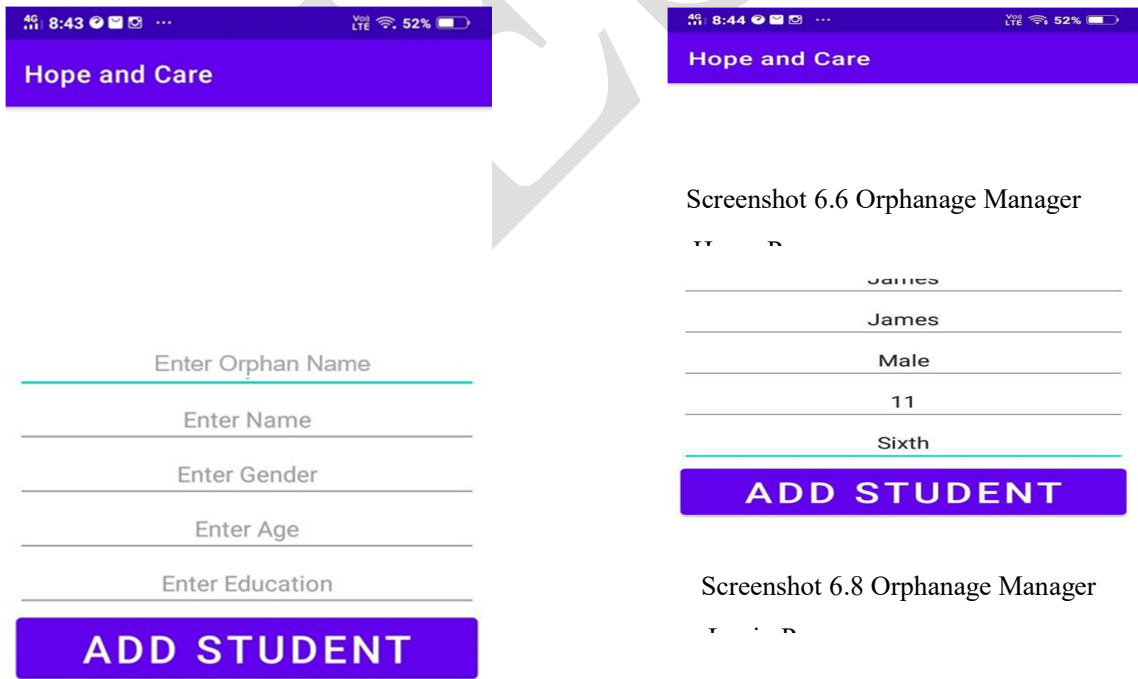
TAKE PHOTO

REGISTER

Screenshot 6.3: Orphanage ManagerRegistration page



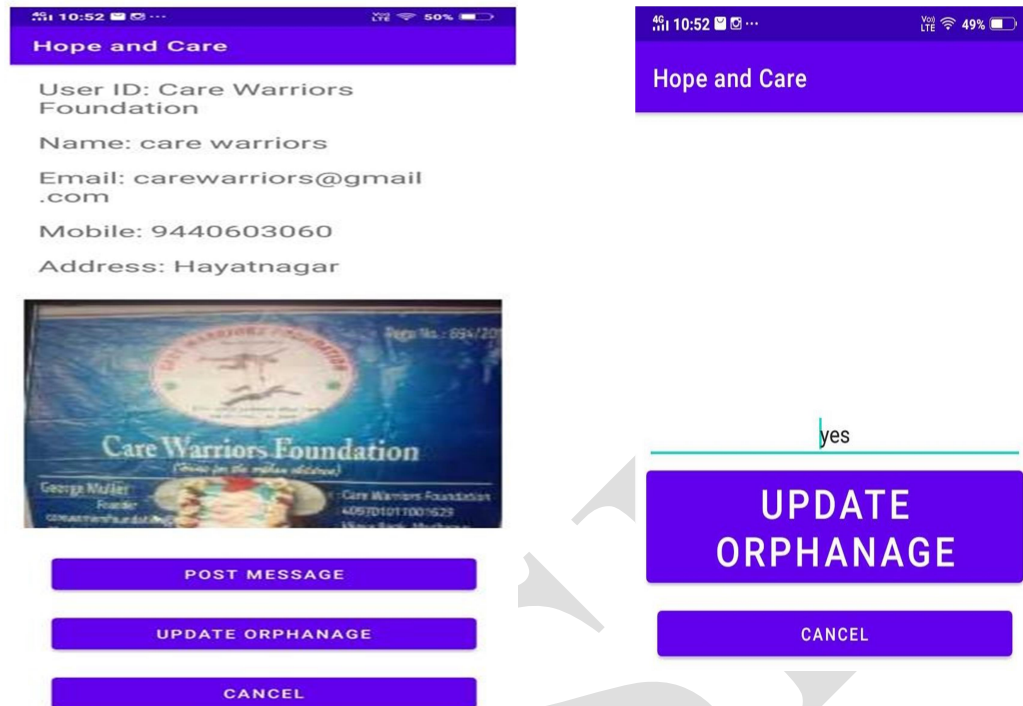
Screenshot 6.4:Registration Pageafter Entering Details



Screenshot 6.6 Orphanage Manager

Screenshot 6.8 Orphanage Manager

Screenshot 6.5 Orphanage ManagerLogin



CONCLUSION & FUTURE SCOPE

The Hope and Care app is not just a tool for administrative tasks but a means to empower staff, improve donor relations, and provide a nurturing environment for the orphans and responsive to the needs of the orphans and the institution. And digital migration is better than the paper work. So, by using this application we can able to meet the needs of the orphans and keep them happy.

Future Scope

- Optimizing the system to handle a larger number of orphanages, children, and staff efficiently while maintaining performance.
- Collaborating with government agencies or non-profit organizations to integrate the system with social services like education, healthcare, or vocational training.
- Adapting the system to support multiple languages and cultural nuances to cater to orphanages in different regions.

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