

A
Mini-Project Report on

Searching NGO using Flutter

Submitted in partial fulfillment of the requirements
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BACHELOR OF ENGINEERING
IN
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Artificial Intelligence & Machine Learning

by

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CERTIFICATE

This is to certify that the project entitled “**Searching NGO using Flutter**” is a bonafide work of Tanisha Chitnis (21106003), Abhishek Bapat (21106008), Shlok Dalvi (21106012), Avantika Aher (21106047) submitted to the University of Mumbai in partial fulfillment of the requirement for the award of **Bachelor of Engineering in Computer Science & Engineering (Artificial Intelligence & Machine Learning)**.

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Project Report Approval

This Mini project report entitled “**Searching NGO using Flutter**” by **Tanisha Chitnis, Abhishek Bapat, Shlok Dalvi, and Avantika Aher** is approved for the degree of *Bachelor of Engineering in Computer Science & Engineering*, (AIML) 2022-23.

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ABSTRACT

NGO stands for non-governmental organization, which is a non-profit organization that operates independently of any government. NGOs are usually established to address a specific social or environmental issue, such as poverty, human rights, education, healthcare, or the environment.

NGOs may be funded by donations, grants, or other sources of private funding, and they typically rely on volunteers to carry out their mission. They often work in partnership with government agencies, other NGOs, or local communities to achieve their goals.

The NGO Finder app is a powerful tool that enables users to easily find and connect with non-governmental organizations (NGOs) around the world. This app offers a comprehensive database of NGOs, categorized by location, sector, and other relevant criteria, making it easy for users to find organizations that align with their values and goals.

Through the NGO Finder app, users can discover new organizations, connect with like-minded individuals, and make a positive impact on the world. By leveraging technology to facilitate meaningful connections and promote social good, this app is helping to build a more just and equitable global community.

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CHAPTER 1

INTRODUCTION

1. INTRODUCTION

NGO stands for non-governmental organization, which is a non-profit organization that operates independently of any government. NGOs are usually established to address a specific social or environmental issue, such as poverty, human rights, education, healthcare, or the environment.

NGOs may be funded by donations, grants, or other sources of private funding, and they typically rely on volunteers to carry out their mission. They often work in partnership with government agencies, other NGOs, or local communities to achieve their goals[3].

Some of the functions of NGOs include advocacy, service provision, research, and community mobilization. They often focus on marginalized or vulnerable populations, and their work may involve lobbying governments to enact policies or provide funding for specific programs[1].

NGOs can operate at the local, national, or international level, and they may have a wide range of structures and governance models. Some examples of well-known NGOs include Oxfam, Amnesty International, Greenpeace, and Doctors Without Borders.

The NGO Finder App is a mobile application designed to help users locate non-governmental organizations (NGOs) in their area or around the world. The app provides a comprehensive database of NGOs, allowing users to search for organizations by location, mission, focus area, and other criteria.

The NGO Finder App is designed to make it easier for individuals and organizations to connect with NGOs and support their work. Users can browse profiles of NGOs, learn about their mission and activities, and find contact information to get involved or offer support.

The app also features a mapping function that allows users to locate NGOs on a map and get directions to their offices or events. Users can also share information about NGOs on social media or through other channels, helping to raise awareness of their work and attract support.

The NGO Finder App is a valuable resource for anyone interested in supporting the work of NGOs, including volunteers, donors, and activists. It provides a convenient and user-friendly

way to find and connect with organizations working to make a positive impact on society and the environment.

The work of NGOs is essential because they fill gaps in services that may be overlooked or underfunded by governments. They also bring attention to issues that may not receive widespread attention and advocate for marginalized communities. NGOs work to build sustainable solutions that address the root causes of social, economic, and environmental problems.

However, finding the right NGO to support can be challenging. With so many organizations working on similar causes, it can be overwhelming to determine which NGOs align with your values and are making a significant impact. This is where the NGO Finder App comes in.

The NGO Finder App is a mobile application designed to help people find and connect with NGOs in their local communities or around the world. The app provides a comprehensive database of NGOs, their mission, history, programs, and events, making it easier for users to find and support the causes they care about.

The NGO Finder App is intended to be a user-friendly platform that helps individuals become more engaged and active in supporting social causes that matter to them. By facilitating connections between people and NGOs, the app aims to inspire greater participation in charitable activities and promote positive change in communities worldwide.

The NGO Finder App has several benefits for both NGOs and individuals looking to support social causes. Some of the key benefits include:

Increased visibility: NGOs can increase their visibility by listing their organization on the app. This can help them reach a wider audience and connect with individuals who may not have known about their work otherwise.

Increased support: The app makes it easier for individuals to find and support NGOs that align with their values. This can lead to increased support for NGOs.

CHAPTER 2

LITERATURE SURVEY

2. LITERATURE SURVEY

2.1-HISTORY

The history of NGOs (non-governmental organizations) dates back to the 19th century when the first wave of NGOs emerged in response to various social and political issues of the time. These organizations were often founded by philanthropists, social activists, and reformers who sought to address the problems of poverty, inequality, and injustice.

One of the earliest NGOs was the Anti-Slavery Society, which was established in the UK in 1839 with the goal of abolishing slavery worldwide. The Society was successful in pushing the British government to abolish slavery in its colonies in 1833, and it continued to campaign against slavery and other forms of human rights abuses around the world.

In the late 19th and early 20th centuries, the growth of industrialization and urbanization led to the emergence of many new NGOs focused on issues such as workers' rights, public health, and the environment. One notable example was the settlement house movement, which began in the US in the 1880s and aimed to provide education, healthcare, and social services to immigrant communities in urban areas.

The post-World War II era saw a significant expansion of the NGO sector, with many new organizations established to address the challenges of post-war reconstruction, economic development, and the fight against poverty. The United Nations played a key role in supporting the growth of NGOs, and many NGOs today work closely with the UN on issues such as human rights, peacebuilding, and environmental protection.

In recent decades, the role of NGOs has continued to evolve, with many organizations now focused on advocacy and campaigning rather than direct service provision. NGOs are increasingly seen as important actors in shaping public policy and holding governments and corporations accountable for their actions. Today, there are thousands of NGOs operating around the world, working on a wide range of issues from health and education to climate change and women's rights.

2.2-LITERATURE REVIEW

Going to Scale: A Case Study of an Indian Educational NGO

(Springer) Panchali Guha [1]

Effective programmes introduced by NGOs in developing countries have the potential to benefit a large number of people if they are scaled up, but instances of successful scaling-up are relatively rare. This paper uses a case study of an Indian educational NGO that has scaled up rapidly and effectively in order to explore the reasons for choice of scaling-up strategy, the particular barriers to scaling-up in the education sector, and how these barriers can be overcome. It finds that, while a high-functioning NGO can successfully overcome many of the internal organisational challenges posed by scaling-up, external barriers such as the difficulty of building relationships with key stakeholders like government officials and school teachers pose significant challenges. While these difficulties could in principle be mitigated by moving from an expansion-based to collaboration-based model of scaling-up, low accountability and governance of the NGO sector make it difficult to detect the quality of potential partners. The case also shows that India's recent law mandating CSR has increased funding availability for scaling-up, but its requirement for corporate donors to preferentially support local projects has also created some challenges by constraining NGO ability to harness economies of scale during scaling.

Growth of an NGO: The Indian Institute of Cerebral Palsy from 1974 to 2006

(Wiley online Library) Reena Sen, Juliet Goldbart, Sudha Kaul[2]

The Indian Institute for Cerebral Palsy (IICP) has been providing education and other services in Kolkata, Eastern India, for children and young adults with cerebral palsy and related disabilities for over 30 years. IICP started by providing education for just two children, and was highly dependent on western expertise. Described is the history of the IICP and the strategy this organization used to develop itself into a primary service provider in Eastern India. Developments in recent years have demonstrated that IICP has moved from a small regional service, focusing on education of children with multiple disabilities to a large and complex organization. This has been possible because of the long-standing commitment of its founding members, a close working relationship with partner organizations, mobilization of governmental support, and accessing financial aid from Indian and international donors. Throughout, the organization has set its own goals based on careful needs assessments and has used culturally appropriate methods in attaining them. It has established model projects and placed particular emphasis on education and provision, from parent education to degree level programs. It has fostered research and international dissemination, been in the forefront in

informing and influencing government policy, and has supported self-advocacy for people with disabilities to represent themselves. This case study approach is reflective of the manner that nongovernmental organizations—with local or regional responsibility to develop model services—can organize services and provides a “lesson's learned” model for organizations to undertake similar development.

The NGO sector in India: historical context and current discourse (Springer) D.L.Sheth, Harsh Sethi[3]

The last two decades have witnessed a veritable mushrooming of NGOs in India. What, however, is inadequately appreciated is that the conversion of voluntarism into primarily a favoured instrumentality for developmental intervention has changed what was once an organic part of civil society into merely a sector — an appendage of the developmental apparatus of the state. Further, this process of instrumental appropriation has resulted in these agencies of self-activity losing both their autonomy and political-transformative edge. What is required, therefore, is to reorientate voluntarism from a framework of subserving the needs of delivery to one promoting self-governance in the widest sense.

Converting Android Native Apps to Flutter Cross-Platform Apps (IEEE XPLORE) Yoonsik Cheon, Carlos Chavez[4]

Flutter is a development framework for building applications for mobile, web, and desktop platforms from a single codebase. Since its first official release by Google less than a few years ago, it is gaining so much popularity among mobile application developers, even being regarded as a game-changer. There are, however, millions of existing native apps in use that meet the requirements of a particular operating system by using its SDK. Thus, one natural question to ask is about rewriting an existing native app in Flutter. In this paper, we look at the technical side of this question by considering Android apps written in Java. In a small case study, we create a Flutter version of our existing Android app written in Java to support both Android and iOS by rewriting the entire app in Flutter. We share our development experience by discussing technical issues, problems, and challenges associated with such a rewriting effort. We describe our approach as well as the lessons that we learned.

Performance and stability Comparison of React and Flutter: Cross-platform Application Development (IEEE XPLORE) Kamal Kishore, Shanu Khare, Vaibhav Uniyal, Sahil Verma[5]

Application development is a very important aspect when it comes to business. From small-scale companies to Fortune Companies everyone has an application through which they are running their business whether it is a web-based application or Mobile Application. Now the Mobile market is majorly captured by two Operating systems Android and iOS. Initially, to develop an application for a single project for both Systems separately, companies need to hire separate developers. But ReactJs is a Cross-Platform Application development library and is used to create a frontend for applications. It is majorly used by Facebook, Instagram, Pinterest, etc. It is JavaScript Library. Now Google has also launched its pure cross-platform framework called Flutter. Flutter uses Dart programming language to run. An open-source framework created by Google in 2017 to create applications from a single codebase. This research paper presents the study and comparison of the two most famous cross-platform application development technologies. It starts by discussing the basic functions of the application development methodologies. Followed by, it contains a comparison of the performance of the applications developed by these technologies. After that Stability of applications made by the flutter and React Native is checked on different parameters. There is an implementation of an application using Flutter and React Native which will be used for performance analysis between two applications running Android and Web platforms.

CHAPTER 3

Problem Statement

3.PROBLEM STATEMENT

- People often struggle to find reliable and trustworthy non-governmental organizations (NGOs) With so many NGOs out there, it can be overwhelming and time-consuming to sift through the information and determine which ones are legitimate and effective.
- An NGO finder app can streamline this process by providing a user-friendly platform that connects individuals with reputable NGOs that match their values and priorities, making it easier for people to contribute to causes they care about.
- NGO finder app must also address the issue of avoiding fake NGO volunteers. Unfortunately, there have been instances of individuals posing as volunteers for fake NGOs in order to scam people out of their money or personal information. This can damage the reputation of legitimate NGOs and deter people from contributing to important causes.
- The chat interface makes sure that people observing social issues and NGO's come together for helping the needy.

CHAPTER 4

Experimental Setup

4. EXPERIMENTAL SETUP

4.1 Hardware Setup

- Operating System: Android.
- Android Version: 10 and above.

4.2 Software Setup

- Android studio (2021.3.1)
- Flutter SDK (3.7.10)
- Dart (2.19.6)
- Firebase

CHAPTER 5

Proposed System & Implementation

5. Proposed system & Implementation

5.1 Block diagram of proposed system

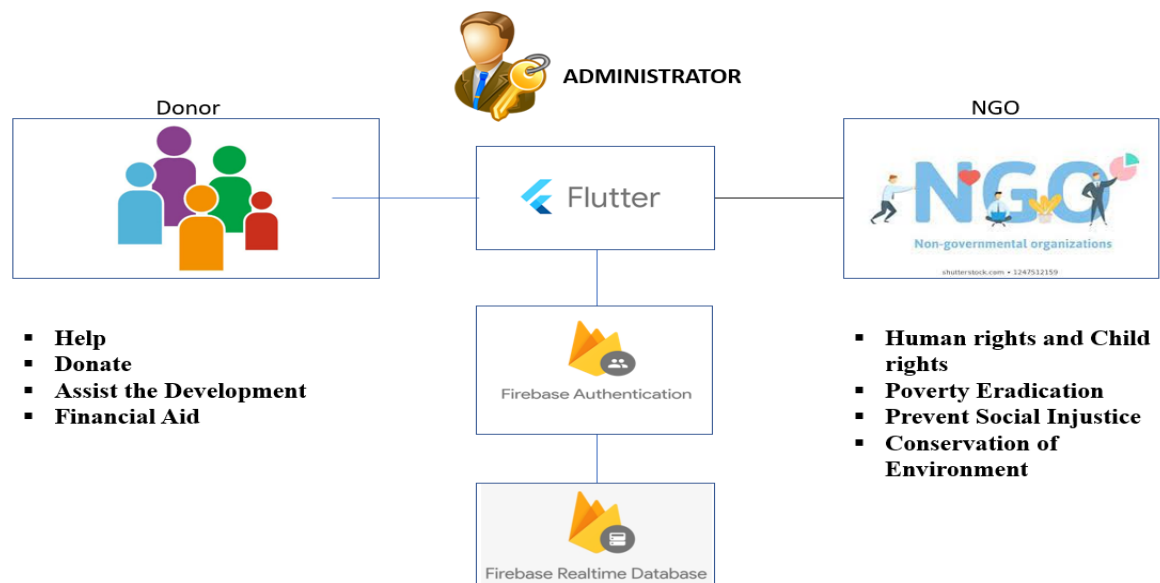


Fig 5.1 Block Diagram of KhojNGO

5.2 Description of block diagram

The above block diagram represents the NGO finder App. The donors are common public who observe social problems and wish to seek help from NGO's. In often cases, when common people reach out to NGO's for help they face problems of third person interference who deceives them for money. In this case our app KhojNGO comes into picture which establishes a direct connection between the public and the NGO's. The app is developed in Flutter SDK which uses Dart language and firebase authentication services.

5.3 Implementation

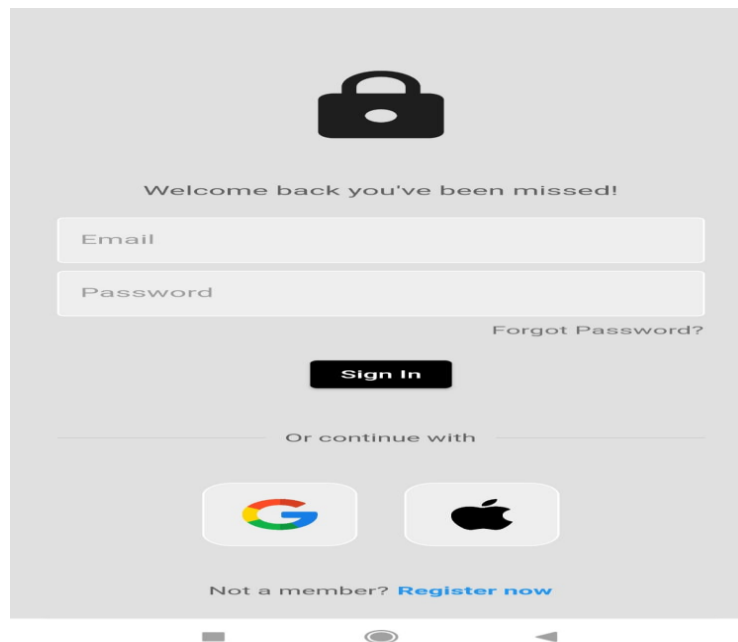


Fig 5.2 Login Page

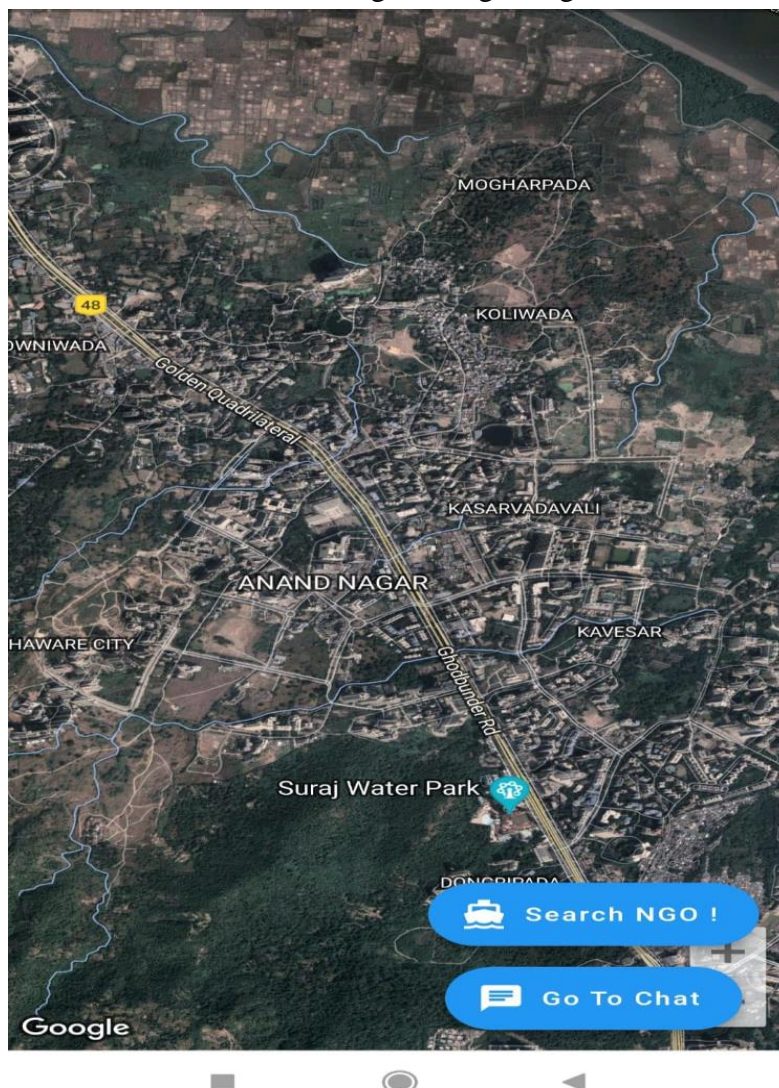


Fig 5.3 Maps Page

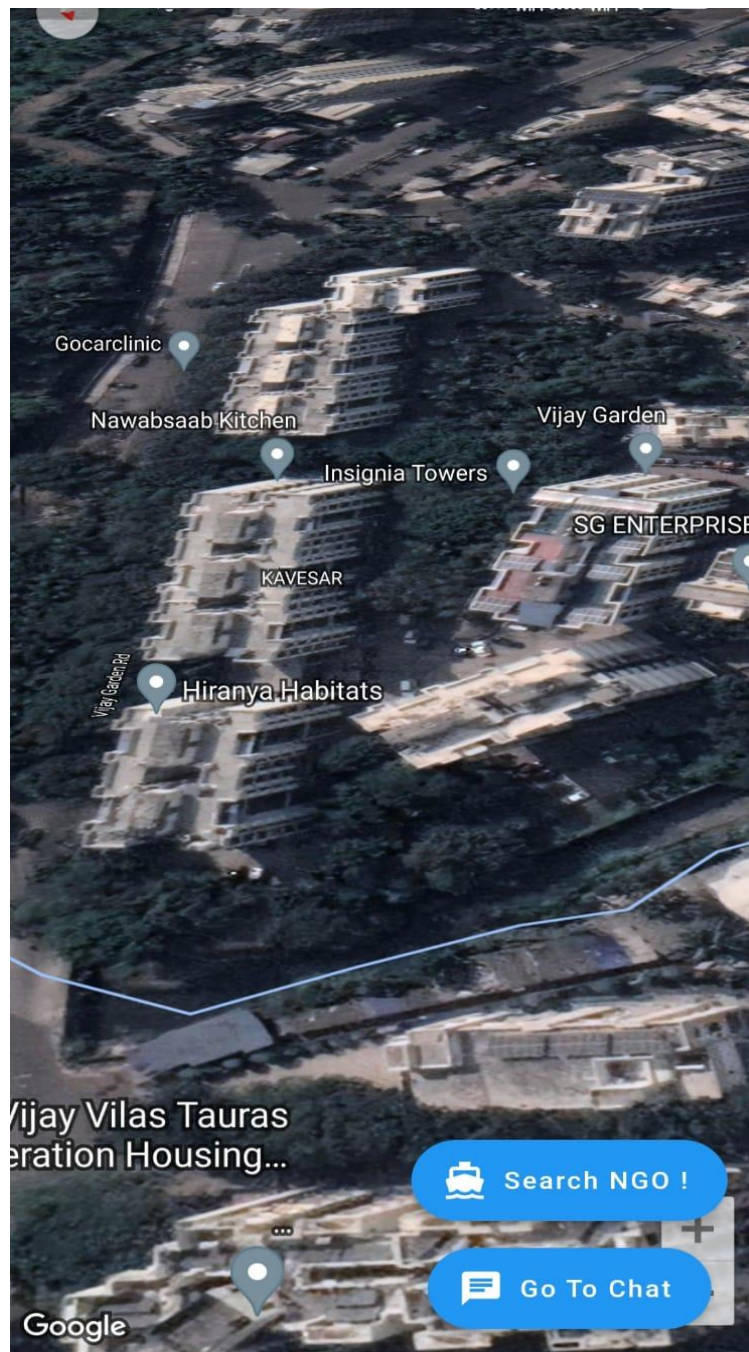


Fig 5.4 NGO page(After Searching NGO)

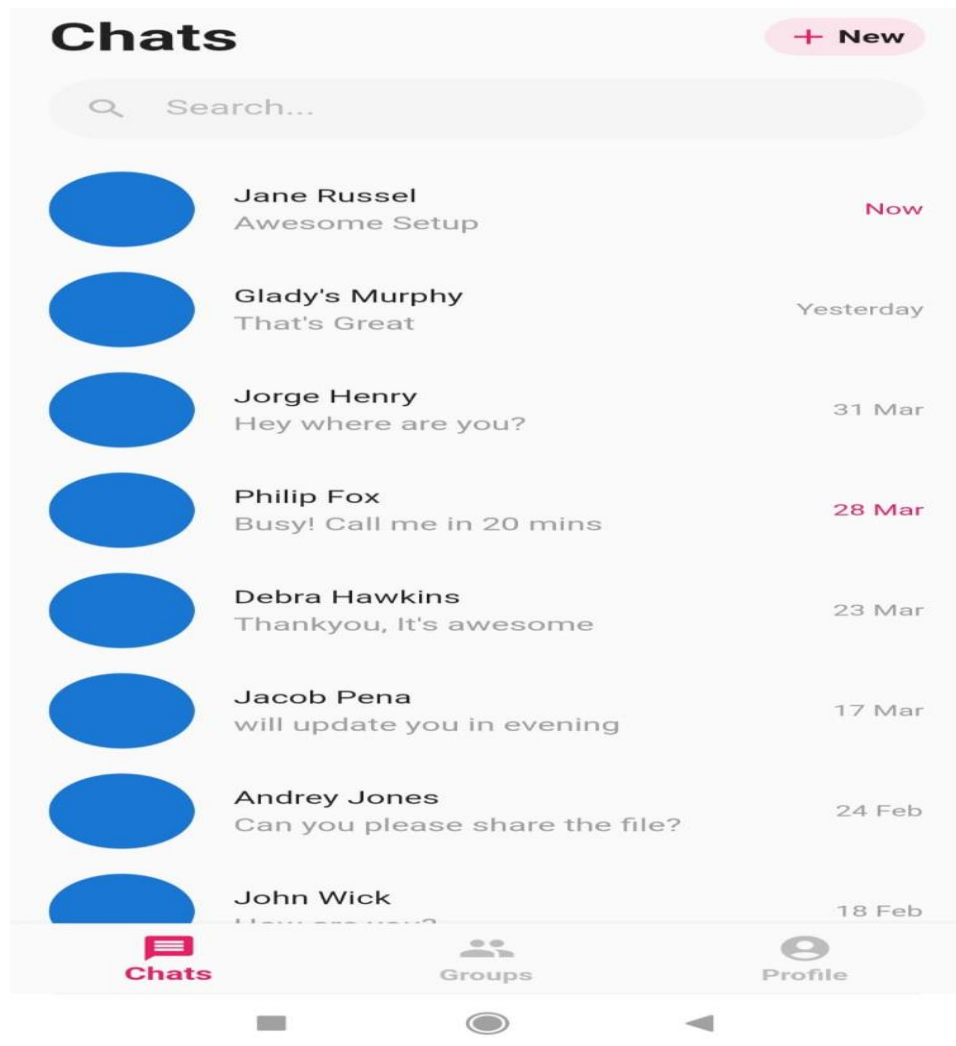


Fig 5.5 Chat Interface

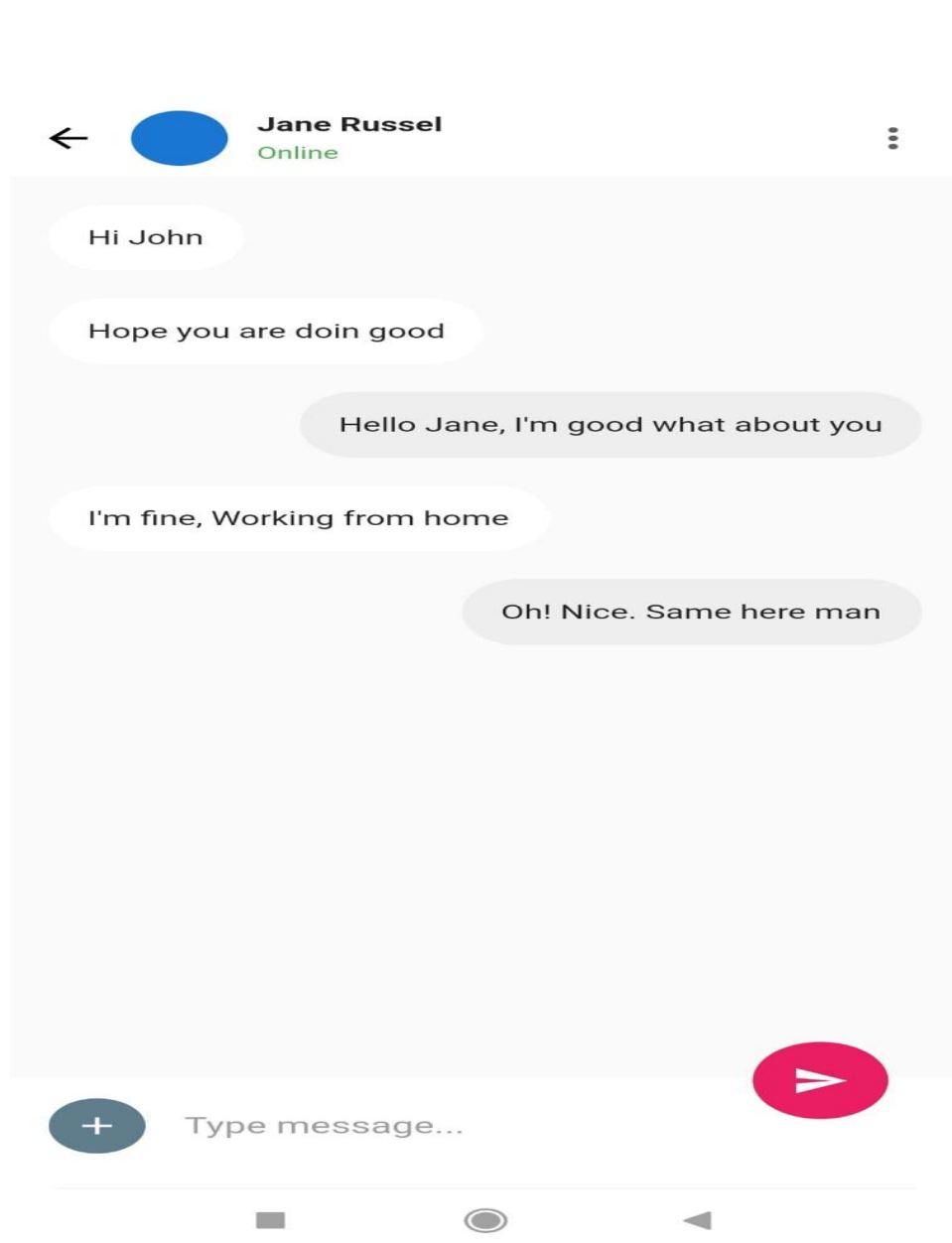


Fig 5.6 Chat Interface

5.4 Advantages

- To enable transparency between common people and NGO's
- It provides easy access to our NGO's.
- This resolves various social issues without the intervention of third person.
- This in turn prevents deception of the needy people and the person who is helping.

CHAPTER 6

Conclusion

6. Conclusion

A successful real-time NGO finder app KhojNGO is built which rightly serves the purpose of people who wish to help in social issues thus contacting the NGO directly through our app.

Google map help the user to locate the nearest NGO and chat interface helps the user to communicate with the NGO.

6.1 Future Scope

- To establish a robust client-server connection.
- Feature of validating the NGO's
- Payment portal to provide monetary help.
- Integrating the paid official Google Maps SDK

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