

A Mobile App for Empowering the Transgender Community

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Abstract- From olden days Transgenders face severe discrimination in our society, whether it is at work, schools, hospitals, and local communities. They are not getting equal opportunities and the freedom provided by our constitution. Most of the things related to transgender community, are related to social practices. Mobile phones revolutionize the societies now. As an example, social media is growing much faster than the main steam media. This happened because of the accessibility of the mobile phones to almost every adult of our nation. As citizens of this great nation, an attempt is being made to create an app on mobile phone to revolutionize and break the social stigma related to acceptance of transgender community. The proposed app can be accessible to educated and partially educated transgenders, to get help from the same community as well as the society in getting equal opportunities with no gender bias. The proposed app is provided with all the statutory, legal and constitutional rights provided to transgenders by the governments. The app also contains a home page providing motivational stories, social events, job opportunities, educational opportunities, scholarships, charities etc. The app also provides a personalized information by providing a user account. App also provide a forum to discuss social issues, to post questions, to answer questions, to post opportunities, to provide suggestions etc. App also provide a blog page where interested and able transgenders to post the success stories, to provide a path to fellow transgenders, to provide solutions for different discriminations etc. Technically the app contains a database to store the content and personalized information, a server to provide stored content.

Keywords: Android Studio, Firebase, Mobile Application, Queer ,Equality.

I. INTRODUCTION

From olden days Transgenders face severe discrimination in our society, whether it is at work, schools, hospitals, and local communities. They are not getting equal opportunities and the freedom provided by our constitution. Most of the things related to transgender community, are related to social practices. As citizens of this great nation, an attempt is being made to create an app on mobile phone to revolutionize and break the social stigma related to acceptance of transgender community. The app can be accessible to educated and partially educated transgenders, to get help from the same community as well as the society in getting equal opportunities with no gender bias. The app contains a database to store the content and personalized information, a server to provide stored content.

A. Literature Review

The widespread adoption of Android applications globally is truly remarkable. As people increasingly rely on technology to enhance their daily lives, the demand for innovative solutions continues to grow. In the realm of shopping, consumers often face challenges in locating items within stores and enduring long queues at the checkout. To address these issues, we have developed an Android application designed to provide a more seamless and efficient shopping experience, particularly when integrated into smart shopping carts. Our smart app focuses on two key features: automated product billing and item location navigation. Developed using the open-source Android Studio program, this paper delves into the design, implementation, and results achieved by the application.

Advantages: The model developed by this paper helpful for online application app. This system supports large number of database

Disadvantages: A limited set of tools and libraries, Massive file size, Weak iOS features support, Lack of password manager support.. [1].

In this work, we demonstrate an Android application built on the Google Firebase platform for cooperative mapping and awareness in emergency scenarios. The primary objective of the programme is to serve as a tool for firemen and other emergency personnel that enables them to graphically communicate the situation in the field by collectively generating a map and contributing multimedia content. The application was created using the Android framework, Firebase authentication, and a real-time database, all of which provide safe authentication and real-time

functionality while also drastically cutting down on development time.

Advantages:

- This paper supports the firebase connectivity for the application
- The method is very effective

Disadvantages: It is used for only Map based applications [2]. It is not a recent occurrence for lesbian, gay, bisexual, transgender, and queer (LGBTQ) people to face stigma. There is compelling evidence that stigmatisation of Lesbian, Gay, Bisexual, and Transgender (LGBT) people causes a number of health-related problems. The current study examines stigma and its related health effects among the LGBT population in India by conducting a systematic assessment of studies that have been published during the last ten years. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist was used to identify 50 studies, which were then examined to determine the presence of stigma among the Indian LGBT population and its effects on physical, mental, and sexual health as well as the intrapersonal and interpersonal factors that contribute to it..

Advantages:

- This paper gives about the social stigma those were faced by them.
- It also brings to the notice there are many communities which are facing such kind of issues

Disadvantages: There is no mobile app development for LGBT community till the date [3].

Article examines recent research on health disparities by gender and sexual orientation identity (e.g., Cahill and Makadon, 2013; Friedman et al., 2014; Gaither et al., 2017; Maragh-Bass et al., 2017; Martos, Wilson, and Meyer, 2017; Ruben et al., 2017; Veldhuis et al., 2017). I conducted analyses and made predictions using information from the Center for American Progress, the Centers for Disease Control and Prevention, The Henry J. Kaiser Family Foundation, and One Colorado about the availability of healthcare and health insurance, the influence of societal biases on physical health and well-being, health status indicators among women and men by sexual orientation, and increased health risks for LGBT adults. LGBT people, healthcare, prejudice, societal stigma, and mental/physical health

Advantages: This paper provides the awareness on LGBT community .It also raised the points like Mental health issues faced by them.

Disadvantages: There is no any Mobile Application related to them. [4].

The model that is suggested in this paper is a mobile application for tourist guiding that is built using the Android Application Development Technology. The application was made with offline use in mind. It employs advanced Java and JavaScript coding. The purpose of this project is to offer visitors a single interactive platform where they can quickly and easily access all the information about their chosen tourist destination. It is created with an offline mode, allowing users to view all the data without the need for Internet connectivity if there is ever a network connectivity issue. We attempted to create a speaking bot in this mobile application for tourist guiding without the use of any machine language, which can directly get into the app without even the most accurate internet result

Advantages:

- In this paper the model used the java and xml coding platforms.
 - It is also created with the offline mode
- Disadvantages:** The data is all set in the public mode, which may lead to the access to everyone. [5].

Broaden Participation in Computing initiatives have

placed a major emphasis on the gender gaps in computer science education (BPC). Even though it is now widely acknowledged how important it is to reach out to women and girls, many academics might not be aware of the requirements of students who identify in ways that are non-binary or cross-gender. Researchers and practitioners in computer science will need to comprehend how the demands of these pupils compare to and contrast with those of their cisgender peers as more teenagers and young people come to identify as transgender and/or nonbinary. In this position paper, we examine how existing BPC initiatives geared toward women and girls may unintentionally inhibit transgender and, in particular, nonbinary students from learning, and we demand that the RESPECT community broaden gender in computing by further study and advocacy..

Advantages: This paper provides the awareness on the equal amount of opportunities in the society It gives the Respect for the transgender non binary people.

Disadvantages: It gives the awareness but there is no related app to it. [6].

B. Algorithm

Step 1: Start

Step 2: User Login:

The user enters their phone number

The system sends an OTP (One-Time Password) to the user's phone

If OTP verification is successful, proceed to Step 3. executed or else step 11 will be executed

Step 3: User Dashboard:

Step 4: Select Functionality:

The user can select from various functionalities,

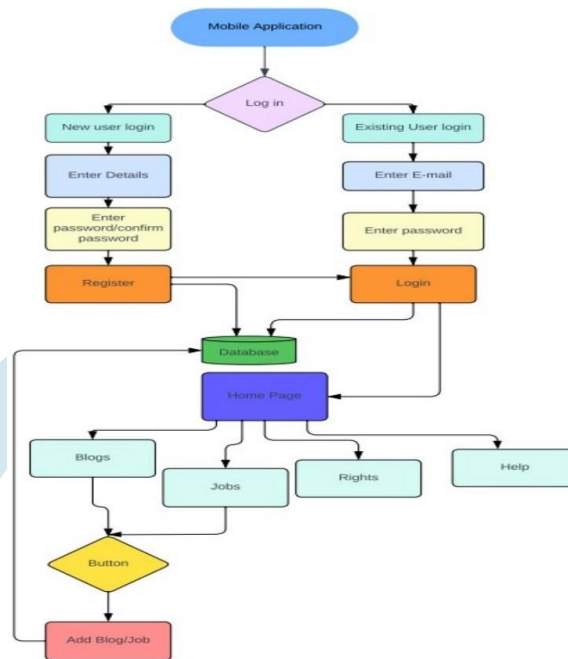


Fig. 1. Structure of the application

including Rights, Inspirational Stories, Help, Education, and Employment. Depending on their choice, proceed to the corresponding steps

Step 5: Rights Functionality:

If the user selects "Rights," provide brief information about their rights in various aspects

Step 6: If the user selects "Inspirational Stories," they have two options:

Watch static inspirational stories.

Post their own stories under the dynamic block.

Step 7: Help Functionality:

If the user selects "Help," provide details about: Available NGOs offering financial or other assistance.

Helpline numbers for support.

Information about potential donors and resources they can access to meet their daily needs.

Step 8: If the user is interested in education, provide information and guidance on various educational aspects, including:

Available resources for studying.

Step 9: Employment Functionality:

If the user is interested in employment, guide them through the process based on their requirements, such as software or hardware jobs. Provide a way to apply for relevant job opportunities.

step 10: End

Step 11: Error Handling:

If OTP verification fails, display an error message.

Refer to the above diagram for a better understanding of the algorithm used.

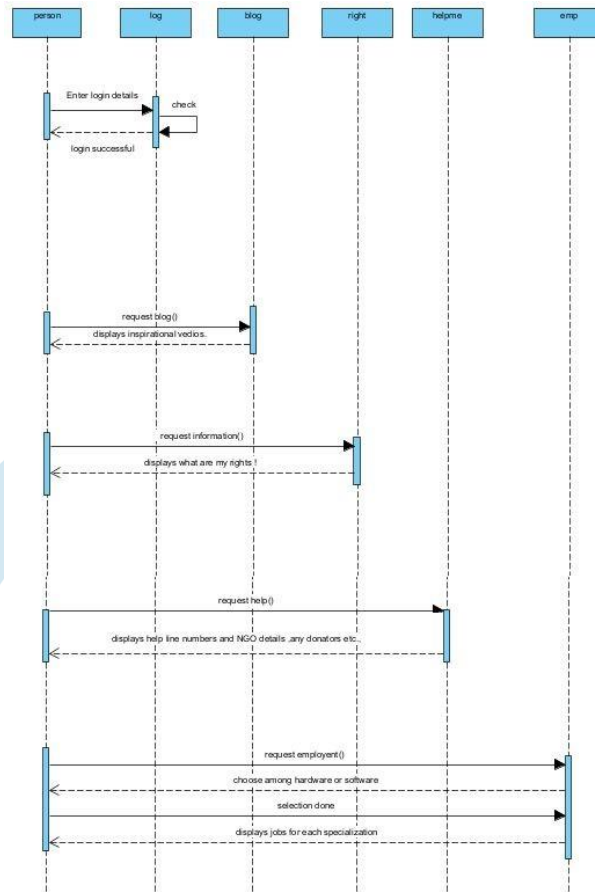


Fig. 2. Interaction with the application

C. Working

The app can be installed by any user. The application opens with a welcoming interface offering two primary avenues for users: login for those with existing accounts and signup for newcomers. The login page is designed for seamless user authentication, featuring input fields for email and password. Once verified, users are smoothly transitioned to the vibrant home page. This central hub boasts a multifaceted array of options, including Profile, Blog, Help, Jobs, Rights, and dynamic elements like scrolling videos displayed through an interactive slider. The Categories section is a dynamic space where users can engage in thoughtful discussions and professional opportunities. Clicking the "plus" icon here effortlessly guides users to dedicated pages for crafting and publishing blogs or job listings. In the Rights segment, users gain valuable insights into their legal entitlements within the LGBTQ+ community, aligning with Indian Government guidelines. The Help page extends a supportive hand, listing NGO resources dedicated to aiding the community when needed. For further information, users can delve deeper into specific NGOs through the "More" option. The User Profile section serves as a personalized dashboard, furnishing essential details such as username, phone number, and email address. Users retain control over their information, facilitated by an intuitive update feature. To ensure secure sessions, the top-right corner presents a prominent logout option. Activating this prompts a confirmation dialogue, enhancing the app's commitment to user security. Upon confirming, users are seamlessly redirected to the app's welcome page, ensuring their data and activities remain protected. In sum, this app serves as an invaluable platform, thoughtfully curated to address the unique needs and rights of the LGBTQ+ community. By seamlessly integrating features for social interaction, professional development, legal awareness, and user-friendly profile management, it strives to foster a supportive and inclusive environment for all users. [7] and interested people can install it and use it for their group of community with their specific domain.

II. DISCUSSION

It's a great idea to develop an LGBTQ app that will stand up for the rights and interests of the LGBTQ community. An app like this might be a great tool for community development, activism, education, and support. Developing an app to stand out for the rights of the LGBTQ community is a chance to provide a platform that encourages inclusivity, empowers people, and brings about good change. It is imperative to prioritise the demands and concerns of the LGBTQ community during the app's development and maintenance.

Figure 3 shows the Welcome page of the app it consists of two buttons i.e Login for existing user and the if new user they can sign up with sign up page.

Figure 4 and 5 shows about the login page of the app it contains the two Text Fields email and password and prompts the user to enter them. If the user gives the correct login, then the user is redirected to the home page. If the user is a new user then there is a Register Now button to register with their respective details. This login page also contains the forgot password button so that if a user forgotten their password, then an email is sent to their registered mail id and they can update their password and login again.



Fig. 3. Welcome page

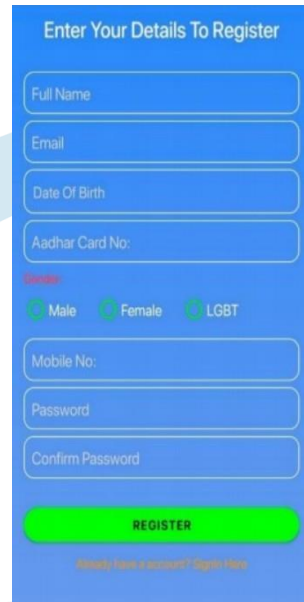


Fig. 4. New user page



Fig. 5. Existing user pages

Figure 6 and 7 is about the home page of app in which there are many options like profile, Blog, Help, Jobs, rights, Dynamic button and options. We have also Scrolling videos on the top of home image which are implemented by slider which is as shown in Figure 6 and 7.

Figure 8 displays the Video slider page of the app, it shows about the Stories of the transgenders. The video tells about their life journey, their struggles and hurdles they faced. This slider has the feature to pause, rewind and next video playing options.

Fig. 6. User home page

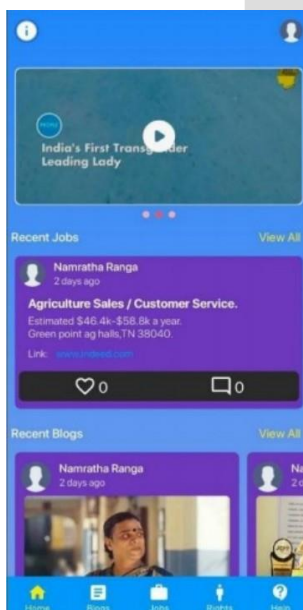


Fig. 7. Dynamic Buttons page

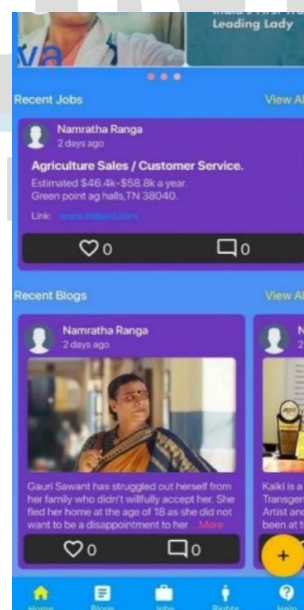


Fig. 8. Video slider page



In Figure 9 there is a "plus" button in the page when the user clicks on it, it redirects to the dynamic pages of the app which asks to post a Blog or job field and close button.

Figure 10 displays about Static pages of jobs, When the user click on the jobs item in Bottom navigation bar, there will be jobs that are posted by the other users. Whenever the job fields are posted the user can like and comment those posts. They can



Fig. 9. Dynamic Button page of the app

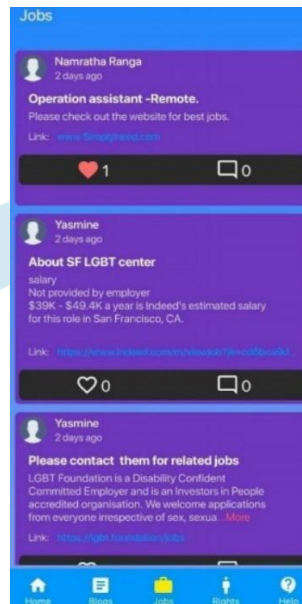


Fig. 10. Jobs page



Fig. 11. Rights and Help page

Apply to the jobs through the links provided in the page itself. Figure 11 is the Static pages of Rights and Help pages of the app. The Rights page has the information about the rights related to the LGBT community according to the Indian Government. The user can know the rights about them and share them. The Help page has the information about the NGO's related to LGBT community, which helps them whenever needed. It also has the more option where user can access the more info about them. The NGO's information is also included with the help-line numbers where the user can contact whenever there is need.

Figure 12 and 13 displays the user profile and logout pages



Fig. 12. User profile page

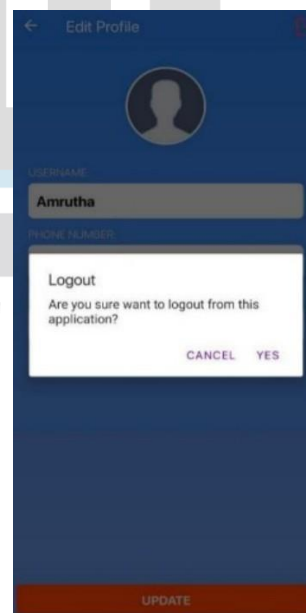


Fig. 13. Logout page

The user profile consists of the fields such as username ,phone number and e-mail,It also has the update option where user can update the information about their details whenever needed.On the top rights of user profile page there is a logout option when the user clicks on it ,it asks to confirm logout or not.If user clicks confirm logout then it redirects to the welcome page.

III. CONCLUSION

In India, almost seventeen percent of the population are queer people. So, a useful Mobile application for queer people consists of employment opportunities, posting their blogs, posting about job opportunities, about their rights, and the NGOs related to them. The app also comes with a video slider, which includes their story with struggles and hurdles they faced. Much further work is to be done on the location safety for them. This “mobile application for queer people” app further extended and could be given to organizations and NGOs related to them.

It aims to create a safe and supportive space for individuals to connect, share experiences, access resources, and stay informed about their legal rights. The dynamic elements such as blog and job posting pages facilitate meaningful interactions, while the Rights and Help sections empower users with crucial information and access to support networks. The user profile management and logout functionalities ensure privacy and security are prioritized. Overall, this app stands as a testament to the commitment towards inclusivity, respect, and empowerment within the LGBTQ+ community, bridging gaps and fostering a sense of belonging

In the future, we would like to extend this application to different locations. It also includes many categories with Enhanced Social Features which Introduce more interactive social networking features such as group chats, forums, and events to encourage greater community engagement and connection Also, Geolocation Services that Implement advanced geolocation features to help users discover local LGBTQ+ events, support groups, and safe spaces in their vicinity.Additionally Language Localization in Expanding language options and localization support to ensure accessibility for a broader global audience, catering to users who may prefer other languages.This “mobile application for queer people” app further extended and could be given to organizations and NGOs related to them

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