KarmikConnect: Revolutionizing the Daily Wage Labor Market

Vidya Myageri[1], Namratha Shetty[2], Ananya G Adyanthaya[3], Swasthik Achar[4], C A Prajwal[5]

A. J Institute of Engineering and Technology, Mangalore, India[1-5]

Abstract: KarmikConnect is a new app that makes it easier for daily wage workers to find jobs. It acts like a simple and clear meeting place for workers and employers. Employers can post detailed job ads, and workers can show interest easily. This app helps bridge the gap between workers and employers, making the whole process more transparent and efficient. It even has a document verification so the employer can build trust over the worker. Plus, it's handy for contractors too, helping them manage their workers better. Overall, KarmikConnect aims to make finding work simpler and help businesses run more smoothly. This app is easy to process and also user friendly.

Keywords: KarmikConnect, daily wages worker, streamlined interface, contractor, user friendly.

I. INTRODUCTION

KarmikConnect is a super helpful app that makes it easy for people who work day-to-day jobs to find the perfect job for them. It's like a big notice board where bosses can put up detailed job ads, saying exactly what they need, and workers can quickly show their interest. This app is changing the way workers and bosses connect, making it simpler and faster for everyone. One cool thing about KarmikConnect is that it's all about being fair and clear.

It cuts out the waiting and confusion that often happens when looking for work. And it's not just for people looking for work; If you're a boss who hires lots of workers, KarmikConnect helps you too. You can easily manage all your workers and find new ones when you need them. KarmikConnect is here to make finding work easier for everyone involved. It's all about being user-friendly, honest, and making sure everyone gets the job that's right for them.

II. MOTIVATION

Currently, laborers often struggle to find job opportunities due to limited visibility and access, especially in the case of short-term or casual work in order to overcome the above problem we found a solution called KarmikConnect. This lack of visibility leads to unfair compensation, delays in payment, and even discrimination or exploitation in the labor market.

Similarly, employers face hurdles in efficiently reaching out to potential workers, leading to difficulties in finding reliable and skilled labor. Moreover, there's a notable absence of trust and credibility in the unskilled labor market, making it challenging for both parties to assess the reliability and performance of each other.

In light of these pressing issues, the motivation behind KarmikConnect is clear: to address the inherent complexities in connecting daily wage workers with suitable job opportunities while simultaneously facilitating efficient communication between laborers and employers. By bridging these gaps and prioritizing transparency, fairness, and accessibility, KarmikConnect aims to revolutionize the labor market, empowering both workers and employers alike.

III. OBJECTIVES

KarmikConnect aims to offer a enchanced security, comprehensive array of features, each accompanied by concise descriptions to ensure user clarity and understanding. Additionally, offer diverse options for accessing job postings, viewing detailed job descriptions, and requesting or applying for jobs to ensure accessibility for all users.

Furthermore, KarmikConnect is a cross platform functionality application enable seamless access to the platform across different operating systems and devices, including Android, iOS, and web browsers, to maximize user reach and engagement. Implement a robust notification system to keep users informed about important events such as job postings, job acceptance or rejection, ensuring timely communication and updates. Implement robust security measures to safeguard user data and ensure privacy and confidentiality throughout the platform.

To facilitate seamless functionality and optimal utilization of the complete feature set, the platform also offers the option to download the application. Moreover, KarmikConnect is committed to ensuring an intuitive and user-friendly interface, enhancing user experience and easing navigation throughout the platform.

IV.   PROBLEM STATEMENT

Labourer looking for employment often lack visibility and access to job opportunities. Employers, on the other hand, face difficulties in reaching out to potential workers efficiently. There's often a lack of trust and credibility in the unskilled labor market, with little or no information available to assess the reliability and performance of either workers or employers. Labourers may face issues related to fair compensation and timely payments, and employers may encounter difficulties in accurately tracking and disbursing wages.

Labourers may encounter discrimination or exploitation in the labor market, and employers may face accusations of unfair hiring practices. Existing job matching apps like Naukri.com, Mytat, and Indeed provide platforms for connecting job seekers and employers. However, they primarily focus on long-term employment rather than daily wage or casual labor.

The workersdepending only on the contactors leads to getting less salaries for their work. Many unskilleddaily wage laborers, particularly those in rural areas, face geographical challenges in finding nearby job opportunities. Overcoming these geographical barriers is essential to improving their employment prospects. The traditional daily wage labor market is plagued by inefficiencies, disparities, and a lack of centralized platforms, leading to challenges for both workers and employers.

Daily wage workers often struggle to find suitable job opportunities due to fragmented information and limited access to reliable job listings. Conversely, employers face difficulties in sourcing skilled labor efficiently and transparently, leading to delays, uncertainties, and productivity losses.

V.   EXISTING SYSTEM

In the current market, there is a lack of a central framework to link workers' daily wages to available jobs. Most recruitment sites are not designed for the needs of casual workers and lack features such as detailed job postings and effective communication channels. These portals often suffer from delays, uncertainty and lack of transparency in hiring and interaction between employees and employers.

They also don't typically provide contractors with specialized tools to manage their employee networks. In contrast, KarmikConnect is a revolutionary mobile application that addresses these concerns by providing an easy-to-use interface where employers can report work-related issues in detail and employees can easily express their interests and engage with potential employers.

It emphasizes transparency, efficiency and trust to ultimately reduce the challenges of unemployment and underemployment while improving the overall efficiency of the economy. In addition, KarmikConnect offers contractors unique features to collaboratively manage their workforce, finding solutions to the challenges employees face on a daily basis and the challenges employers face in the labor market.

VI.   SYSTEM DESIGN

A block diagram that utilizes boxes and arrows to visually represent the functions of and relationship between individual components or modules of a system in a simplified manner.
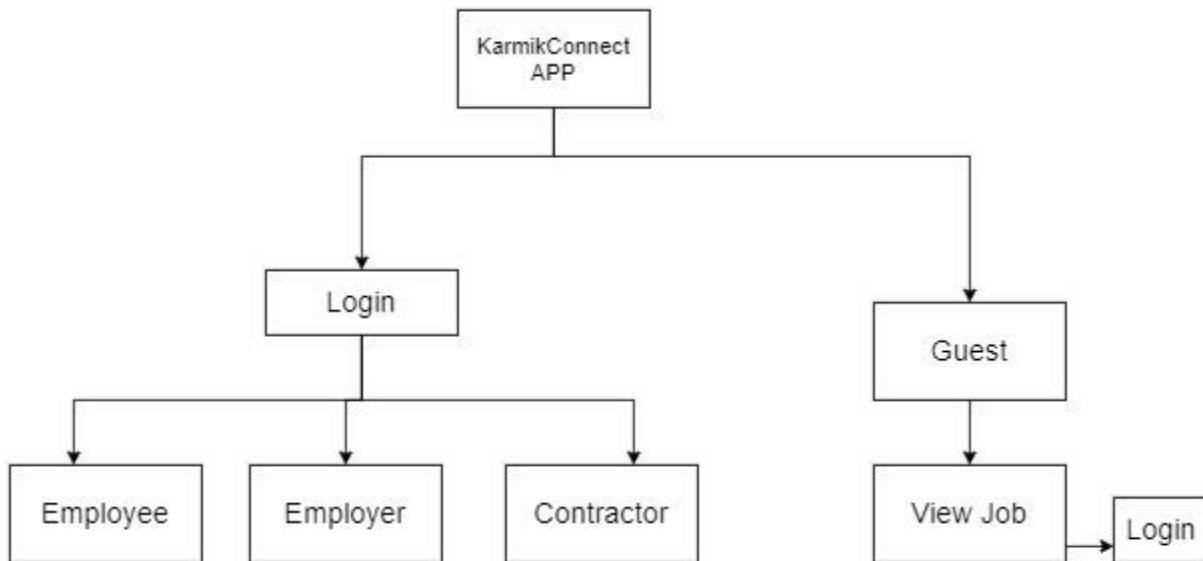
A.   Block Diagram

Fig. 1 Block diagram

The image depicts a flowchart outlining the user journey within the "KarmikConnect APP." It begins with the application name at the top, branching into two main paths: "Login" and "Guest." The "Login" path leads to user authentication, with further branches for different user types such as "Employee," "Employer," and "Contractor." This indicates distinct access levels and functionalities tailored to each user's role within the app. For instance, employees may access job listings or manage their profiles, while employers might post job advertisements or review applications. On the other hand, the "Guest" path offers options for users who prefer not to log in, providing access to view job listings or return to the login screen. The flowchart outlines the user journey within the "KarmikConnect APP" effectively, illustrating two primary paths users can take upon entering the application: "Login" and "Guest."

The "Login" path caters to users who have accounts and need to authenticate themselves. This path is crucial for providing personalized experiences and access to specific features based on the user's role within the platform. The branches for different user types such as "Employee," "Employer," and "Contractor" indicate that the app recognizes and accommodates various user roles with distinct access levels and functionalities.

For example, employees might use the app to search for job listings, manage their profiles, or communicate with potential employers. Employers, on the other hand, may utilize features to post job advertisements, review applications, or manage their company's profile and listings. Contractors may have access to features tailored to their unique needs, such as managing project details, invoicing, or tracking work hours.

By customizing the user experience based on their roles, the app enhances usability and ensures that users only see relevant information and features aligned with their needs and responsibilities. The "Guest" path caters to users who prefer not to log in or haven't yet created an account. Despite not logging in, these users still have access to basic functionalities such as viewing job listings. This approach allows the app to attract and engage users who might be exploring the platform before committing to creating an account or logging in. Overall, the flowchart illustrates a user-centric approach to app design, accommodating various user roles and preferences to provide a seamless and tailored experience for all users.
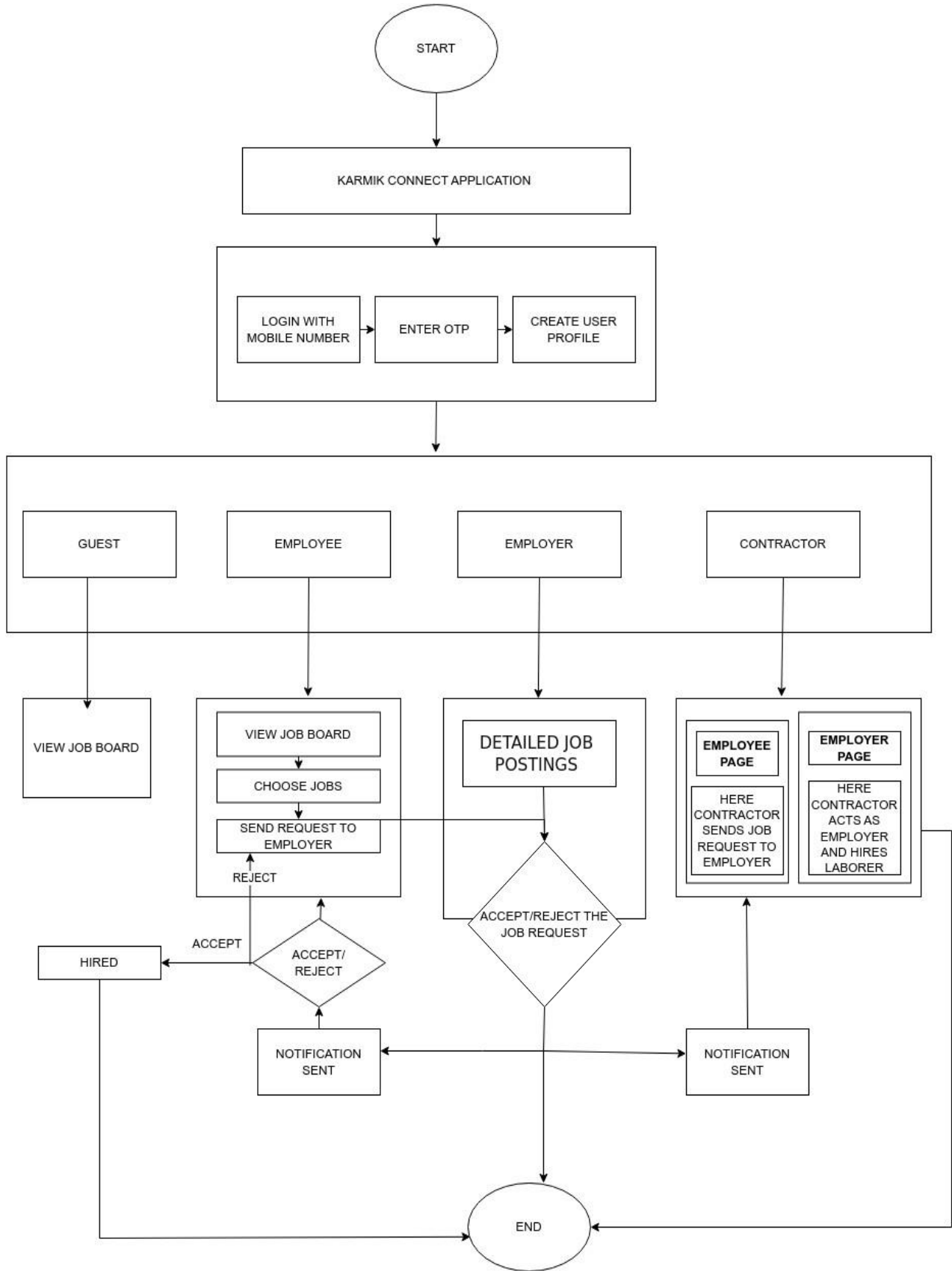
B.	Flow Chart

Fig. 2 Flow chart

The flowchart diagram provided depicts the operational flow of the "Karmik Connect Application," a platform designed to facilitate interactions between job seekers and employers. Beginning at the "Start" point, the diagram delineates distinct user roles: guests, employees, employers, and contractors. Guests have access to view the job board, while employees can further engage by selecting jobs and submitting proposals to employers. Employers, on the other hand, can search employee profiles or post detailed job listings. Likewise, contractors can view employee profiles or post job opportunities. The processes for employees and employers involve proposal acceptance or rejection, leading to subsequent notifications. Once these interactions are concluded, the flowchart culminates at the "End" point. Login page: This is the portal through which you can access the features of the Karmik Connect application. To continue, users must enter a phone number. After logging in, an OTP (One Time Password) will be sent to the provided mobile number to verify the user's identity. function. They often have access to job boards. The Job Board is a place that lists various job postings and allows users to search for available opportunities. They can browse the job board as a guest but request jobs from job sites. This means they can express interest in specific job postings and wait for the employer to respond. They can send job listings to job managers detailing the requirements and features of the job they hold. They also have the right to accept or reject job requests from employees. This means that interested candidates can review their applications and decide whether to hire them for the job posting. Similar to employees, they can search job postings and apply for jobs posted by other employers. They can also post job postings themselves, just like employers. These two roles allow contractors to participate in bidding and finding jobs through the app. They cannot participate in job applications and announcements. They are waiting for a response from their employers for their job applications. Provide a way to work in the application. It provides easy job search, application and recruitment to meet different customer and business needs. Additionally, the addition of the guest option allows passive users to browse job postings without creating an account. The website's main goal is to inform users about its benefits and offerings, given by the app. Additionally, users are provided with direct contact options to reach out for support or inquiries about the app or website. The flow adapts according to the user's actions, whether they continue exploring the site or proceed with downloading the app or submitting their contact information.
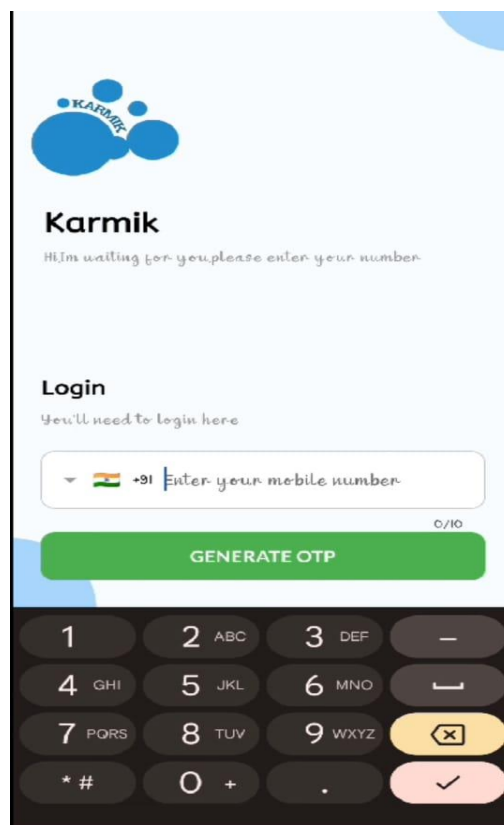
VII.   RESULT ANALYSIS

Fig. 3 Login Page

The image above displays the portal through which you can access the features of the Karmik Connect application. To continue, users must enter a phone number.
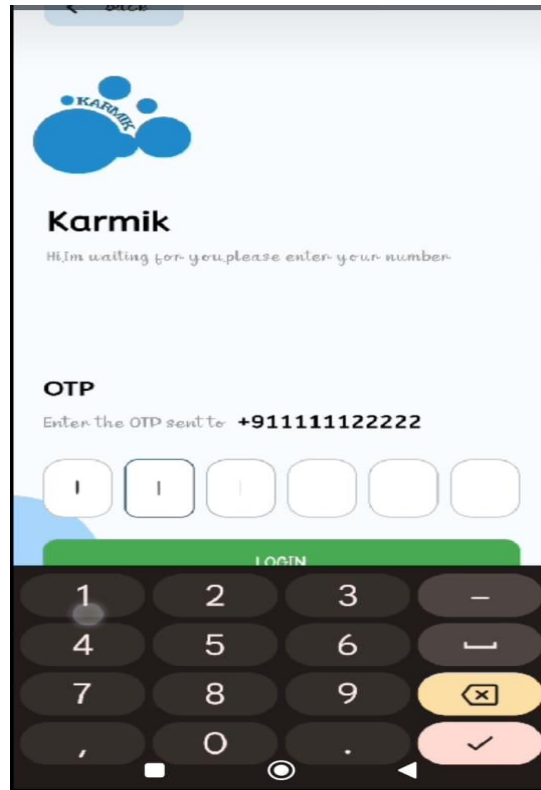
Fig. 4 OTP generation page

The image above displays the portal where after logging in, an OTP (One Time Password) will be sent to the provided mobile number to verify the user's identity.

Fig. 5 Dashboard

The image above displays the homepage of the app, the dashboard is a place that lists various job postings and allows users to search for available opportunities. They can browse the job board as a guest but request jobs from job sites.
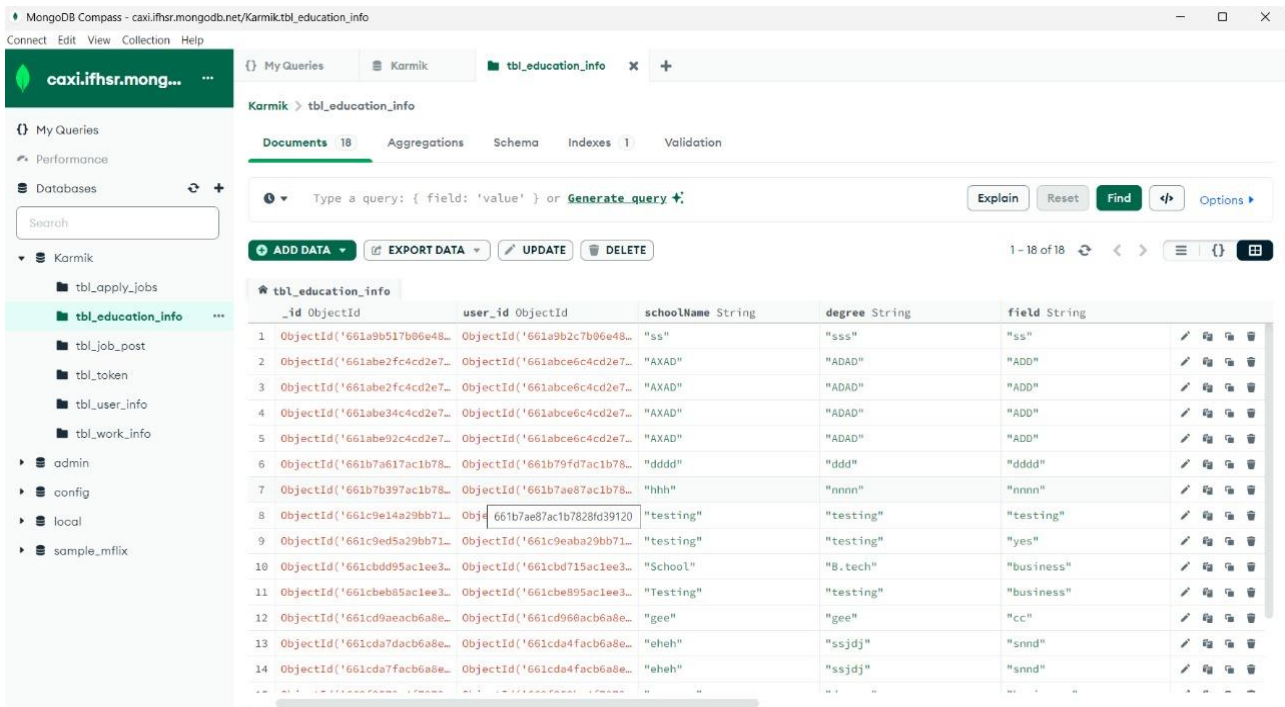
Fig. 6 MongoDB Connection

The image depicts the MongoDB connection, it establishes a link between the application and the MongoDB database, allowing to interact with and manipulate data stored in the database.
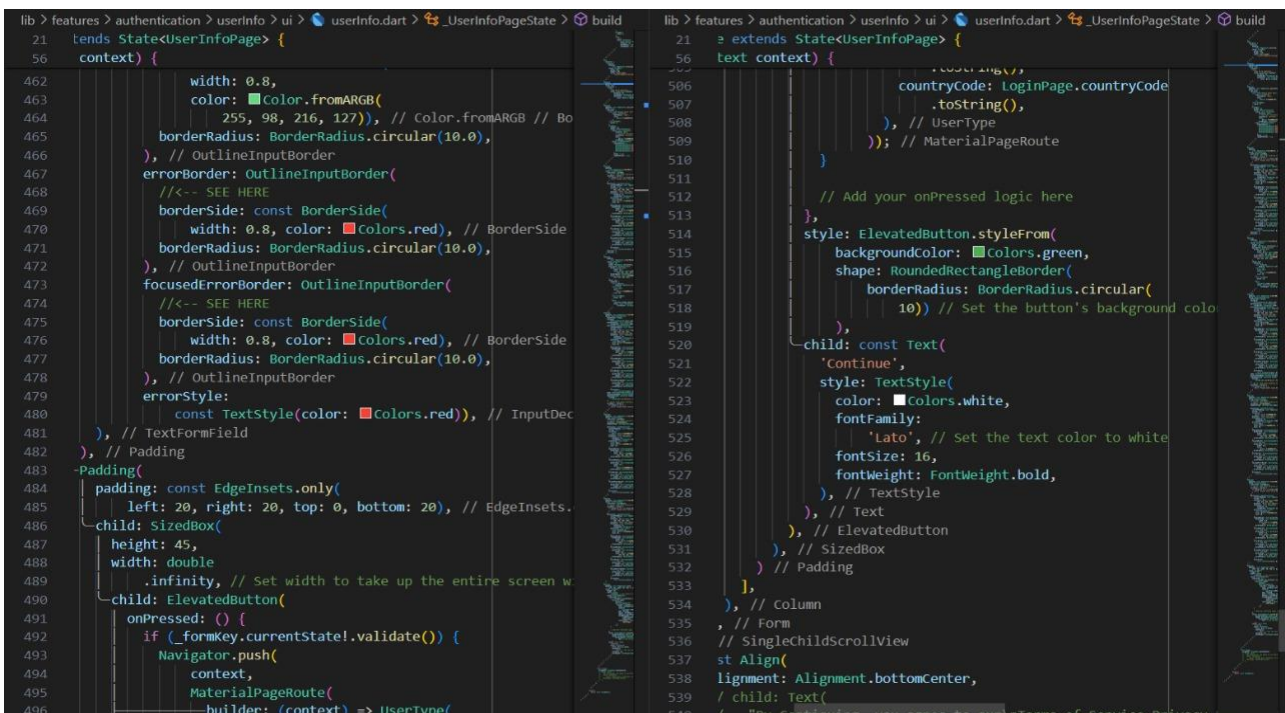
Fig. 7 Code snippet of user info page

The snippet of code displayed represents the user info page, a user info page typically displays relevant information about a user, such as their profile details, preferences, activity history.

Fig. 8 Code snippet of jwt token

The provided snippet of code showcases the jwt token, JWT (JSON Web Token) is a compact, URL-safe means of representing claims to be transferred between two parties, typically used to authenticate and authorize users in web applications.

VIII. CONCLUSION

We have presented a user-friendly app. KarmikConnect emerges as a transformative solution, revolutionizing the interaction between daily wage workers and employers. Its mobile application's brilliance lies in its ability to seamlessly connect labor with job opportunities through a user-friendly platform. By enabling employers to post detailed job ads enriched with key tags, it efficiently matches them with interested workers.

The app's unique feature of contractors managing contracts and organizing workers within their network adds another layer of efficiency to the entire process. Overall, KarmikConnect not only bridges the gap but also cultivates a symbiotic relationship between employers and workers while revolutionizing the landscape of labor engagement.

REFERENCES

[1]. Kamal Kishore, Shanu Khare , Vaibhav Uniyal , Sahil Verma " Performance and stability comparison of React and Flutter:Cross -platform Application Development".

[2]. Xinle Yang , Yang Chen and Xiaohu Chen in " Effective scheme against 51% Attack on Proof-of-Work Blockchain with History Weighted Information".

[3]. G Devisree, Ch. Rupa, U Gayathri , Hemanth Ch Kumar "A Cloud Based Mobile Application to Hire Unskilled Workers".

[4]. A. Roy, V. Shah , A. M. S. Zalzala, "A feasibility study for the development of an employment system for underserved communities".

[5]. M. N. Islam, M. A. Ahmed and A. K. M. N. Islam, "Chakuri-Bazaar: A Mobile Application for Illiterate and Semi-Literate People for Searching Employment".

[6]. E. Bagarukayo and E. Mwesigwa, "Jobs256 Mobile app linking job seekers to job opportunities".

[7]. O. Pandithurai, D. Jayashree, D. K. Aarthy, R. Jaishree, K. Bhavani and T. Dharani, "Smart Job Recruitment Automation Using Location Based Filtering".

[8]. Saurabh Shukla, Saif Ali Khan, Harsh Kumar Singh and Manmohan Sharma, "Online Job Search Application".

[9]. David Israel Nicolas Quispe, Josue Martin Nicolas Quispe, Jose Luis Herrera Salazar, Johny Pretell Cruzado, "Mobile App for the Promotion of Home Services".

[10]. Ziad Elgammal, Abdullah Barmu, Hamza Hassan, Khaled Elgammal, Tansel Özyer, Reda Alhajj, "Matching Applicants with Positions for Better Allocation of Employees in the Job Market".

[11]. Ephzibah Ep, Suja Radha, "Framework of an Intelligent Job Recommendation System".

[12]. Yunhua Gu; Shu Shen; Jin Wang; Jeong-Uk Kim, "Application of NoSQL database MongoDB".