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Job Ease MGNREGA For Rural People: Kayaka Bandhu

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Abstract: The Kayaka Bandhu Android application aims to streamline the implementation of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) by digitizing and automating various processes involved in job demand registration and payment disbursement. MGNREGA, a pivotal social welfare scheme in rural India, guarantees 100 days of employment to adult members of rural households willing to undertake unskilled manual work. However, the implementation of this scheme has faced challenges such as corruption, delays in payment, and manual paperwork. To address these challenges, Job Ease provides a user-friendly platform for rural laborers and Rozgar Sewaks (employment assistants) to register job demands, manage work plans, and facilitate online payments. By leveraging mobile technology, the application aims to improve transparency, accountability, and efficiency in the execution of MGNREGA.

Keywords: MGNREGA, rural employment, women's empowerment, wage employment, decentralized democracy, Gram Panchayats, Gram Sabha.

I. INTRODUCTION

The Kayaka Bandhu Android application seeks to maximize the implementation of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in rural parts of India. This project aims to simplify the registration process for job requirements, reduce corruption, and improve the efficiency of handling work assignments and payments within the system. The primary objective is to enable rural households in electronically registering their job preferences, therefore eliminating the need for paper-based applications and reducing administrative expenses and probable errors. By constantly monitoring the submission and acceptance of job requests, the program seeks to improve openness and responsibility in the registration and allocation processes, therefore lowering the incidence of dishonest behavior.

Furthermore, the aim of the program is to improve the efficiency of Rozgar Sewaks by helping them to properly handle their tasks. Real-time data input and access help to do this, thereby improving the task allocation and creation of the work plans. Furthermore, it provides Gram Panchayat staff with current data to improve administration and monitoring of performance, therefore supporting government officials in developing policies based on accurate facts. The program helps numerous stakeholders, including civil society organizations, to promote the rights of beneficiaries, therefore fostering inclusive growth and the general efficacy of MGNREGA. Users with various degrees of computer literacy should find the Kayaka Bandhu application's simple UI simply intelligible. For all work requests, task assignments, and payment records, real-time data synchronizing provides quick changes. Security systems are set in place to protect user information and provide program openness all around. Variations of access and functions are provided to rural laborers, Rozgar Sewaks, Gram Panchayat officials, government agencies, and civil society organizations. The reporting and analytics features provide a complete analysis and valuable reports for policy development, performance evaluation, and decision-making.

II. LITERATURE SURVEY

This research looked at how MGNREGA affected important factors such work days, compensation, and income as well as its effects on socioeconomic groups including dalits, adivasis, and women and help to reduce poverty. This research looked at state-level data looking for traits influencing performance. Furthermore included are micro-level scenarios created from Andhra Pradesh village focus group discussions (FGDs). Over the period of 2006-07 to 2011-12, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has been instrumental in the general rise in agricultural wages all over the nation.



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Furthermore shown by this study were a significant rise in income for women employed in agriculture and a clear decrease in the pay difference between men and women. Studies on how MGNREGA affects agricultural labor markets reveal labor shortage, salary variations, automation, adaptability to peak season work, acceptance of MGNREGA calendar, and migration.

The notable decline in the work force has resulted in a limited rural labor market, therefore causing shortages of agricultural workers. Improving Indian agricultural productivity is much hampered by the shortage of workers. The more competitive labor market has also empowered agricultural workers with improved bargaining power, enhanced working conditions, the possibility to negotiate their working hours, and an increasing trend toward piece rate or contract employment, so changing the number of working days

III. PROBLEM STATEMENT

The legal clause of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) ensuring rural families the chance to participate in 100 days of unskilled manual work annually is very vital. Unfortunately, delays, corruption, and inefficiencies abound in the current manual process for registering job requests, applying, and assigning positions. Lack of a well-defined and efficient organizational structure causes common problems like inadequate governance, intermediate influence, and breakdowns in communication between workers, Rozgar Sewaks, and Panchayath Pradhans.

By automating all facets of the MGNREGA program, the Job Ease Android app helps consumers apply for jobs and register for demand services online, therefore removing the need for paper-based procedures. The program seeks to eliminate corruption, streamline processes for authorities and recipients, and provide a direct line of contact within the system. The current issue calls for the development and implementation of a complete mobile application that can be linked with the MGNREGA framework to guarantee the efficient and open execution of rural employment programs free from corruption.

IV. OBJECTIVE

- · Automate the MGNREGA Process: Develop a comprehensive mobile application to automate job demand registration, application filing, and work allocation for MGNREGA, reducing manual inefficiencies.
- Eliminate Corruption: Create a paperless solution that minimizes opportunities for corruption and interference by middlemen, ensuring a fair and transparent system.
- · Simplify Tasks for Beneficiaries and Officials: Streamline tasks for laborers, Rozgar Sewaks, and Panchayath Pradhans, making the MGNREGA process more user-friendly and efficient.
- Enhance Communication: Establish a direct and effective communication channel between laborers, Rozgar Sewaks, and Panchayath Pradhans, improving coordination and reducing delays.

V. METHODOLOGY

The iterative model of the Software Development Life Cycle (SDLC) was employed for the development of the Job Ease Android application. This approach involves repeated cycles of planning, designing, implementing, and testing, allowing for incremental development and continuous improvement. Initially, a basic version of the app was developed, focusing on core functionalities such as job demand registration and payment tracking.

This prototype was tested and evaluated, gathering feedback from end-users, including rural laborers, Rozgar Sewaks, and Gram Panchayat officials. Based on this feedback, subsequent iterations incorporated enhancements and additional features like work plan management and real-time data access. This iterative process ensured continuous improvement, user-centric development, and the creation of a robust, efficient, and reliable application that meets the needs of all stakeholders involved in the MGNREGA implementation.



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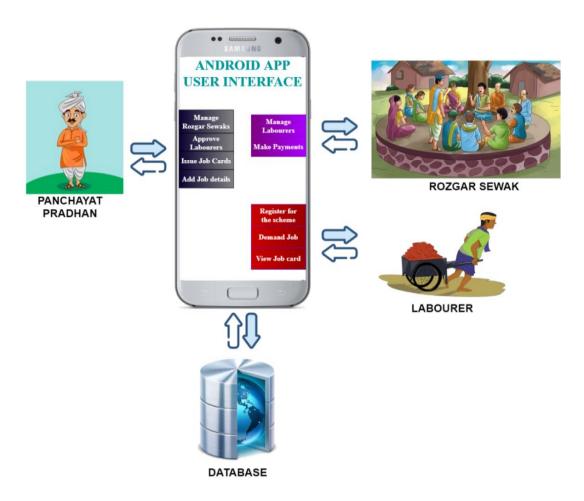


Fig.1. System Architecture

VI. PROPOSED SOLUTION

Including registration, issue of employment cards, and job demand, the employment Ease smartphone app supervises all aspects of the proposed system.

Advantages of Proposed System:

The smartphone software allows users to request employment, therefore guaranteeing openness in labor distribution and payments and so lowering the possible risk of corruption.

VII. SOFTWARE IMPLEMENTATION

The implementation of the Job Ease app follows the iterative model of the Software Development Life Cycle (SDLC), enabling incremental development and continuous improvement. Initially, a basic version focusing on core functionalities such as job demand registration and payment tracking was developed.

This prototype underwent rigorous testing and user feedback collection from rural laborers, Rozgar Sewaks, and Gram Panchayat officials. Each iteration incorporated user feedback, adding enhancements and new features like work plan management and real-time data access. This iterative approach ensured a robust, efficient, and user-centric application, effectively addressing the needs of all stakeholders involved in MGNREGA implementation.



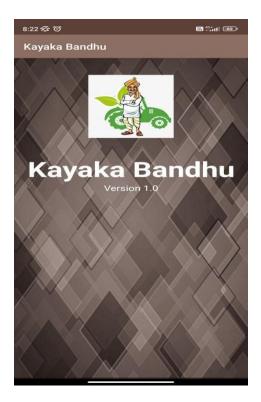
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UI OF THE APP



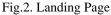




Fig.4.Panchayat Pradhan Home Screen



Fig.3. Home Page



Fig.5. Rozgar Sewak Home Screen



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Fig.6 Labourer Home Screen

VIII. CONCLUSION AND FUTURE SCOPE

Finding job for employees might be made easier with the Job Ease app. Without the need for paper, it totally eliminates the shortcomings and addresses all the problems related with the current method. Making this application helps to simplify the procedure for eligible people to obtain government employment guarantee program benefits by means of job applications, submission of applications, and contact with the relevant authorities. The Panchayath Pradhan, the Rozgar Sewak, and the worker program streamlines and automates their processes, therefore benefiting all the parties involved. This initiative might cut intermediaries and help to reduce corruption. Potential future improvements might include biometric verification techniques, including fingerprint or face recognition, to provide safe and reliable identification of rural workers throughout the process of recording job needs and issuing money. This strategy helps us to improve system dependability and openness as well as help to eliminate misleading assertions.

REFERENCES

- [1]. Khan, M. A., & Younis, M. A. (2018). "Design and Development of Mobile Applications for Learning Enhancement." International Journal of Computer Applications, 180(14), 1-5.
- [2]. Jin, X., & Wu, Z. (2015). "The Design and Development of Mobile Applications Based on User Experience." Journal of Software Engineering and Applications, 8(6), 317-328.
- [3]. Mannan, M. S., & Sheikh, A. A. (2020). "A Review of Backend Technologies for Mobile Applications." Journal of Computer Science and Technology, 35(2), 243-258.
- [4]. Bertino, E., & Sandhu, R. S. (2005). "Database Security—Concepts, Approaches, and Challenges." IEEE Transactions on Knowledge and Data Engineering, 17(1), 60-72.
- [5]. Liu, Y., & Wang, S. (2016). "Analysis and Design of Mobile Payment Systems: A Survey." Journal of Computer Applications, 36(2), 18-25.
- [6]. Rao, P. S., & Prasad, D. S. (2018). "A Study on Mobile Payment Systems and Their Impact on E-Commerce." International Journal of Engineering and Technology, 7(1), 63-71.
- [7]. Choudhury, S. M., & Mandal, S. (2018). "Impact of Digitalization on Governance and Public Service Delivery: A Case Study of Rural Employment Schemes in India." International Journal of Public Administration, 41(12), 979-992.