

Automated Coupon Generator for Subsidy (ACG)

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Abstract: *The proposed system is Automated Coupon Generator also known as ACG which introduces a dynamic coupon generation mechanism empowered by machine learning algorithms. This system is there to enhance people's engagement and optimize the coupon distribution process to be fair. The coupon distribution process will be in such a way that those farmers who are less privileged will be prioritized. The project involves several key steps. This project involves key stages including data gathering, preprocessing, feature enhancement, and autonomous decision-making logic development, taking into account diverse factors such as farmer segments and budget constraints. The system will interact with HTML, PHP, CSS, and JavaScript, with Python supporting the implementation. It aims to continuously adapt the model to meet evolving customer behaviors and preferences. This technological approach is essential for optimizing coupons effectively and staying responsive to real-time farmer interactions and preferences*

Keywords: Automated, coupon, data gathering, live interaction and coupon verification

I. INTRODUCTION

Automated coupon generator is a web-based app designed to be used for generating coupons for buying fertilizer at reasonable prices for needy people. This system will influence an advanced algorithm and data-driven techniques to ensure fair and efficient distribution of farm vouchers.

With a user-friendly interface, it allows administrators to input the names of eligible individuals and intelligently choose a specific group. Based on given factors like gender, age, number of people in the family, whether employed or not, and hence their salary for fertilizer subsidy each year.

This system will enable users to save costs. This can be achieved in such a way that instead of administrators being sent to verify who has received the coupons, they can receive feedback using the system.

Moreover, it maintains a transparent and equitable process by starting each subsequent year's selection with those who did not receive a subsidy in the previous year. By ensuring a balanced distribution of support. Welcome to a new era of subsidy allocation, where precision, fairness, and effectiveness converge for the benefit of agricultural communities.

II. EXPERIMENTAL SETUP AND, METHODOLOGY, AND RESULTS

2.1 Experimental setup

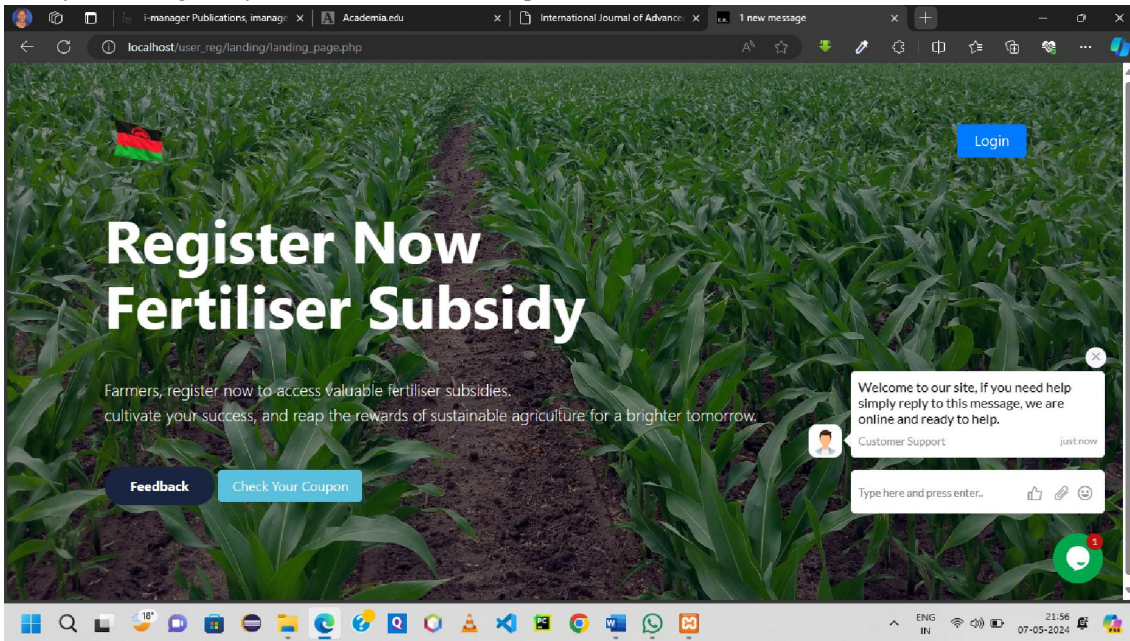
For the system's performance to be evaluated, XAMPP was developed to input various people's names and those to be selected. It was designed to verify the selected list of people.

2.2 Methodology

The CRISP-DM (Cross-Industry Standard Process for Data Mining) methodology has been applied to this system. First, define project objectives, understand available data, and prepare it for analysis. Then, cutting-edge algorithms, such as machine learning models, are used to predict subsidy eligibility. These models are evaluated for accuracy, fairness, and ethical considerations. Upon satisfactory results, the model is deployed into the operational system, monitored for performance, and integrated with a feedback loop for ongoing improvement. Comprehensive documentation, privacy compliance, scalability, and stakeholder engagement are maintained throughout the project, ensuring a systematic and effective approach to selecting needy people for subsidies while aligning with organizational goals and ethical standards.

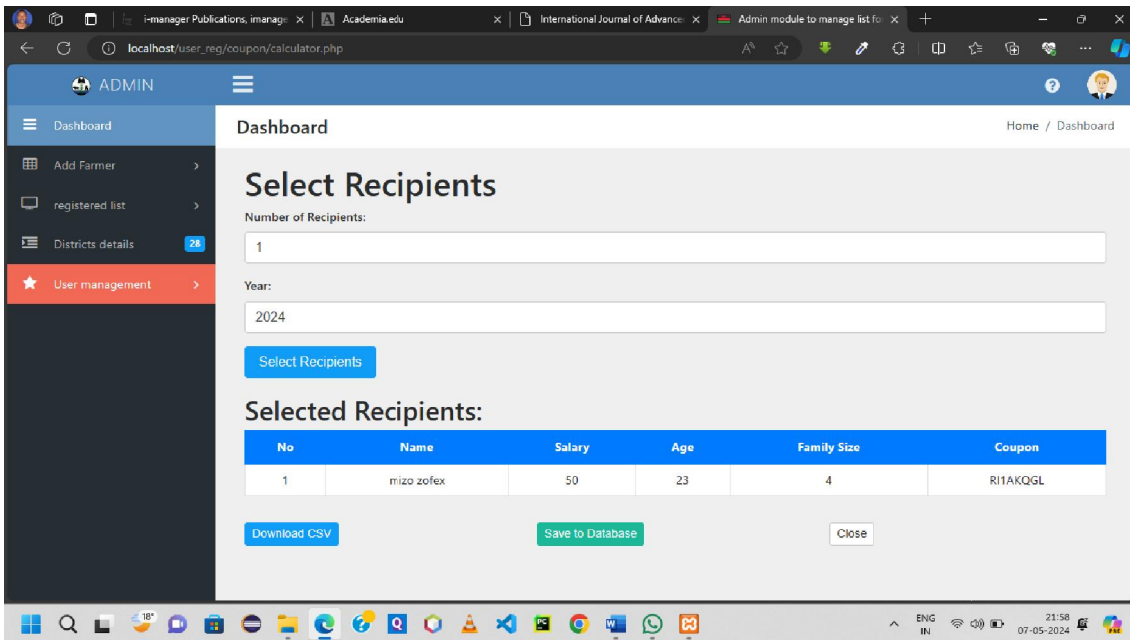
III. IMPLEMENTATION

System implementation for the Automated Coupon Generator involves the comprehensive process of deploying and integrating the system into the operational infrastructure. This phase encompasses the development, installation, configuration, and deployment of the Automated Coupon Generator, ensuring its seamless integration into the organizational environment. The primary goal of system implementation is to make the coupon generation system fully operational and accessible to users. This involves aligning the system with the organization's requirements and effectively addressing the dynamic needs related to coupon distribution.



The above picture is the landing page.

Feedback



IV. CONCLUSION

In conclusion, the development of the automated coupon generator and subsidy list selector has been an enriching project, providing a practical application of our academic knowledge and introducing us to new skills. The system comprises four modules catering to administrators, staff members, customers, and guest users. Through this system, individuals in need can easily apply for subsidies and efficient communication channels have been established with relevant authorities. This project not only showcases the practical implementation of theoretical concepts but also serves as a valuable tool to address real-world challenges and contribute to the welfare of the community.

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