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(AUTONOMOUS)

RAMBUTAN WAREHOUSE

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Scrum Master

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ABSTRACT

Rambutan Warehouse is a comprehensive e-commerce platform designed to streamline the trade of rambutan fruits and related products. This innovative platform integrates cutting-edge e-commerce capabilities with smart tools, thus ensuring smooth teamwork between various user roles: farmers, customers, wholesale buyers, and administrator. This platform is there to boost rambutan sale, distribution, and management under the guarantee of fair trade and quality product. It has a smart product management solution where farmers can simply add, update, and manage their stock of rambutan. The introduction of the bid system lets farmers make a post on their rambutan where they can specify a minimum or maximum price. Farmers can adjust parameters for competitive pricing and engagement in markets through the platform. Furthermore, it has an image verification system which employs machine learning to check images before they are uploaded and to ensure that these images relate to rambutan fruits only and not to incorrect or fraudulently uploaded products. The user platform allows people to purchase various goods, like fruits, juices, pickles, and wines. New smart bulk ordering allows users to make their purchases easier and smarter. Besides, there is also a recipe generation feature that will provide multilingual recipes for rambutan-based dishes according to one's preference in terms of cooking and further use of rambutan in other cuisines. The platform has an excellent security infrastructure in place, with a role-based access control mechanism for user management, ensuring secure access. It notifies users by e-mail whenever a bid alert comes through or an order gets updated. Thus, it creates better communication and engagement. It also features a suite of analytics that allows the administrators to monitor activities and resolve any problems fast. The Rambutan Warehouse is technologically based on Django and SQLite. This is ensured with proper management of data. It has responsive HTML and CSS to give the user-friendly interface to work on the front. Image validation of pictures with the Google Cloud Vision is another addition to AI integration, enhancing platform performance. Razorpay is used to make secure transactions, so the transactions can be made reliably. AI image validation is an essential measure for verifying authenticity while quality assurance, along with the advanced order tracking system, ensures real-time updates. Automated notifications about various activities on the platform contribute to improving user experience. The platform continues to improve in providing a better user experience and efficiency in the trade of rambutan.

Technologies and Tools:

- Frontend: Responsive and user-friendly interfaces built using HTML, CSS, and JavaScript frameworks.
- Backend: Robust data management powered by Django with scalable APIs for seamless integration.
- Database: SQLite for core operations with the flexibility.
- Machine Learning and AI: Integrated image detection to verify product authenticity and improve the quality of listings.
- Secure Payment Gateway: Ensures encrypted and reliable transactions.

