



Agri Mart: Agriculture Product Selling Application

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ABSTRACT

Agri Mart is an advanced e-commerce platform designed to cater to the agricultural sector by providing a seamless online shopping experience for farmers and agribusinesses. The system enables customers to browse and purchase a wide range of agricultural products, including seeds, fertilizers, farming equipment, and other essential supplies. The platform features a user-friendly interface, allowing customers to register, log in, add products to the cart, and place orders through a secure bank deposit payment method.

The admin panel empowers administrators with complete control over product management, enabling them to add and categorize products efficiently. Additionally, it includes an order management system where administrators can track, process, and update order statuses. The platform ensures an intuitive and interactive shopping experience, integrating AJAX-based search functionality for fast and efficient product discovery. By incorporating a structured preference-based system, Agri Mart enhances usability and customer satisfaction, making agricultural e-commerce more accessible and efficient.

Key word: Agri Mart, E-commerce, Agricultural Products, Online Shopping, Admin Panel, Product Management, Order Management, Customer Registration

Introduction

Agri Mart is an e-commerce web application developed using PHP and MySQL, designed to streamline the purchasing process for agricultural products. The platform serves as a digital marketplace where farmers and agribusinesses can conveniently browse and purchase essential farming supplies, including seeds, fertilizers, pesticides, and equipment. Unlike conventional marketplaces, Agri Mart provides a seamless and user-friendly shopping experience, allowing customers to register, log in, add products to their cart, and place orders with a secure bank deposit payment method.

The system incorporates an intuitive admin panel, enabling administrators to efficiently manage product listings, categorize items, and handle order processing. The inclusion of an order management section allows admins to track and update order statuses, ensuring a smooth transaction process. Additionally, Agri Mart features an AJAX-powered search tool that enhances product discovery by providing instant and dynamic search results, allowing users to filter and refine their searches based on specific preferences.

By integrating modern web technologies and interactive design principles, Agri Mart enhances accessibility and usability, making agricultural e-commerce more efficient. The platform not only simplifies the online purchasing process but also ensures that farmers have easy access to high-quality agricultural products, ultimately contributing to the growth and digital transformation of the agricultural sector.

e-fertilizer shop is an android based application intended to provide automated solution and services to customer. Consider a business organization which have all of its business through internet application .The business organization has its office in few states and normally use courier facility to deliver the product. If possible home delivery is also possible .The business organization mainly has two sectors first one is sale which sale the product to the customer and second is service which is provided to the customer-fertilizer shop provide sales and service to customer by interaction with customer. The success of a company is mainly based on its satisfied customer which in turn gives huge profits.

Retaining existing customer is also an important job of a company. e-fertilizer shop concentrates on the retention of customer by collecting all data from every interaction , every customer makes with a company from all access points whether they are phone, email, web or field. The company can them use this data for specific business purpose viz, marketing, service, support or sales. e-fertilizer shop is basically the collection and distribution of all data to all areas of business. The data can them help market the company help up sell to existing customer, understand customer better so that customer can be given better service and allow them to interact with the company by whatever means they wish.

Literature Review

The rapid expansion of e-commerce has transformed the way consumers interact with online shopping platforms. In the agricultural sector, e-commerce solutions are increasingly being adopted to provide farmers with easy access to essential products such as seeds, fertilizers, and equipment. Previous studies on online shopping systems have explored various aspects of user interaction, preference-based recommendation engines, and efficient search mechanisms to enhance the customer experience. Research indicates that customer preference elicitation and interactive search tools significantly improve user satisfaction and product discoverability.

Several online shopping platforms integrate recommender systems based on collaborative filtering, which suggests products based on other users' preferences. Additionally, AJAX-powered interfaces have been studied for their ability to improve user experience by reducing page load times and enhancing search functionality. Studies have also highlighted the importance of robust admin panels in managing product catalogs, order tracking, and customer interactions to ensure seamless e-commerce operations.

The Volere requirements specification framework has been widely used for evaluating interactive systems, particularly in e-commerce applications. It provides a structured approach to understanding system requirements, including functional and non-functional aspects, making it an effective method for evaluating user satisfaction and system usability. Agri Mart leverages these principles to enhance its platform, ensuring a seamless shopping experience for agricultural customers.

Discussion and Methodology

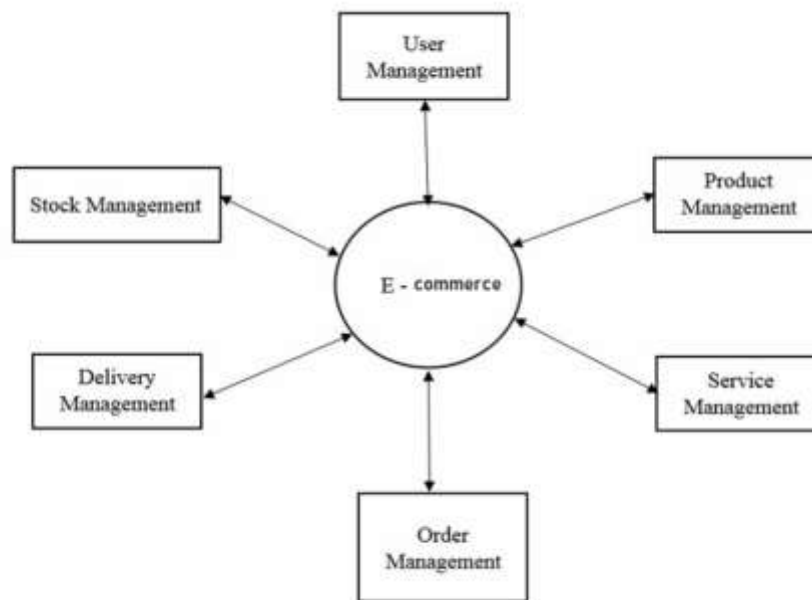


Figure 1. Data Flow Diagram

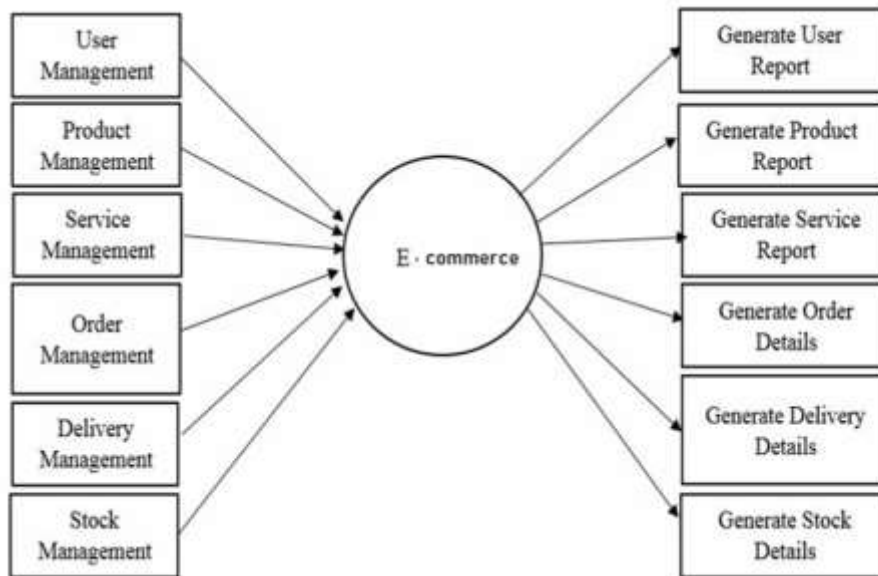


Figure 2. Data Flow Diagram

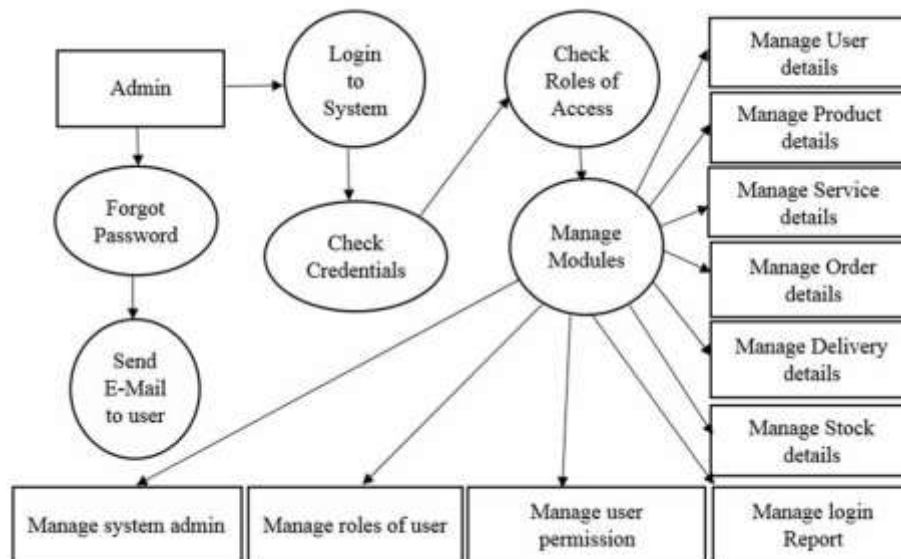


Figure 3. Data Flow Diagram

- A dataflow diagram is way of representing a flow of data through a process or a system (usually an information system).
- The DFD also provides information about the outputs and inputs of each entity and the process itself . A data-flow diagram has no control flow- there are no decision rules and no loops. Specific operation based on the loop.
- It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no loops or decision rules are present. Specific operations depending on the type of data can be explained by a flowchart. It is a graphical tool, useful for communicating with users , managers and other personnel. it is useful for analyzing existing as well as proposed system.
- Data flow must be from entity to a process or a process to an entity. There can be multiple data flows between one entity and a process.
- Data flow must be from data store to a process or a process to a data store. Data flow can occur from one data store to many processes.
- Every process must have input data flow to process the data and an output data flow for the processed data
- Every data store must have input data flow to store the data and an output data flow for the retrieved data.

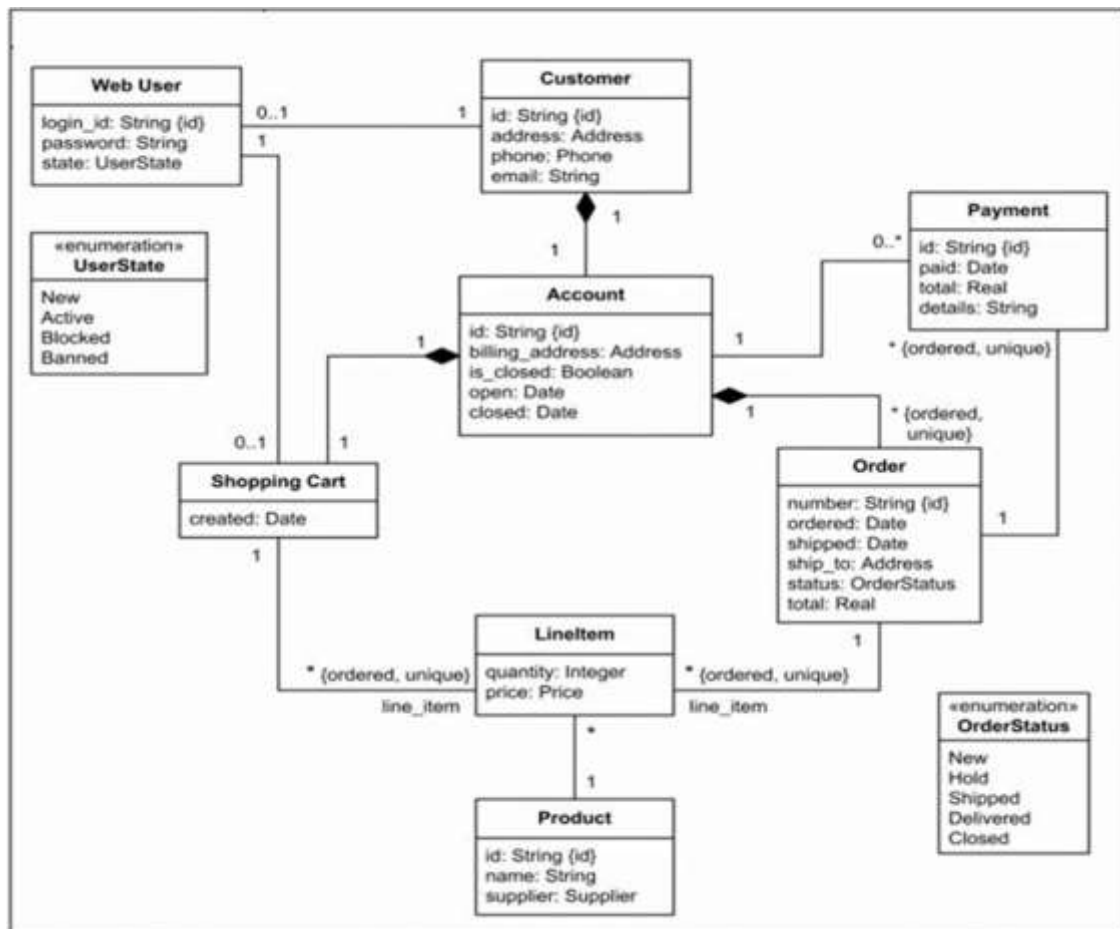


Figure 3. UML Diagram

Conclusion

The Agri Mart E-Commerce Store provides a comprehensive and user-friendly platform designed to streamline agricultural product purchases while ensuring a seamless shopping experience for customers. With an intuitive admin panel, administrators can efficiently manage product listings, categorize items, track orders, and oversee customer interactions. Customers can easily register, log in, browse products, add items to their cart, and proceed to checkout using a secure bank deposit payment method. The platform enhances user experience through an interactive and responsive interface, ensuring smooth navigation and effective order management. By integrating modern web technologies such as PHP and MySQL, Agri Mart ensures a scalable and efficient solution for agricultural e-commerce. This system not only simplifies transactions but also fosters trust and reliability in online agricultural trade, paving the way for future advancements in digital commerce within the farming sector.

A huge source of information for all the types of crop production is given we have successfully created an application that will help the farmer to increase his annual growth and earn more, we offer service to farmers regarding cultivation of crops fertilizers pesticides to be used and even suggestions regarding modern Techniques for cultivation ,usage of biofertilizers, can obtain best crop cultivation in recent history of the region etc. Our android application "Agri Mart" will support all the smart phones on android. It focuses on suggest them the most suitable crop geographically and even with the required fertilizers, pesticides throughout their work simultaneously calculating and providing predicted growth of the selected crop in their farm.

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References

- [1] Abratt And Goodey (1990). Preference Buying And In-Store Stimuli In Supermarkets. *Management Decision And Economics* (11), P. No 111-12
- [2] Clover V.T (1950), Relative Importance Of Preferences Buying In Retail Stores. *The Journal Of Marketing*, 15(1), 66-70
- [3] Sanjay Kumar (2015). "Online Shopping-A Literature Review". National Conference On Innovative Trends In Computer Science Engineering (Itcse-2015).
- [4] Sidhartha Reddy Vatrpu (2014). "Design And Implementation Of An E-Commerce Site For Online Shopping".
- [5] Hausman (2000) A Multi Method Investigation Of Consumer Motivation In Preference Buying Behavior. *Journal Of Consumer Marketing*, 17(5), 403 -419
- [6] Shen And Khalifa (2012). System Design Effects On Online Preference Buying. *Internet Research* ,22(4),396-425.
- [7] Yu And Bastin (2010). Hedonic Shopping Value And Preference Buying Behavior In Transitional Economy. *Journal Of Brand Management* ,18(2), 105-114.