## **ABSTRACT**

The increasingly rapid development of information technology has triggered the creation of various innovations in the field of information technology that are very useful for humans. Ayla grocery store, located in Sidoarjo, East Java, is a retail business that focuses on selling basic food products which provides a variety of products, including rice, oil, sugar and eggs. The problem with Ayla's grocery store is that it still records daily sales manually and often experiences shortages of basic food products. In this problem, this research combines a userbased design approach with software development life cycle plan driven prototype which allows store managers and employees to be actively involved in the system design process. Software development life cycle plan driven prototype is a software development approach that combines planning and documentation with initial prototyping to understand customer needs and integrate elements from planning and prototyping based approaches. There are several stages in the prototype method, namely the stages of identifying problems, literature study, identifying needs, making prototypes, evaluating prototypes, developing websites, testing websites and evaluating websites. This website was designed using Figma as a user interface and user experience (UI/UX) design tool, Unified Model Language (UML) to design the structure in the software, the programming language used in developing this website is the PHP programming language, and the MySQL database as data storage and management. Website testing uses the black box method and white box method. This website can allow users to manage stock of goods and monitor sales transactions. Features such as real-time stock monitoring and sales reports allow users to make better decisions. The output of this research is an inventory management system that can help the Ayla grocery store in fixing problems in stock management and sales reports so that it can be digitized in stock data collection and make sales reports easier.

Keywords: Management System, Website, Prototype Method, Inventory, Sales, Ayla Sidoarjo Grocery Store.