

## **ABSTRACT**

*A relevant and accurate minimum inventory control system in warehouse and inventory management is really needed by a company to carry out proper control functions. This is the background to the research carried out at the Rajawali Electronics Store where the process of recording the need and availability of goods at the Rajawali Electronics Store is still carried out manually which creates difficulties in precisely monitoring the availability of the minimum quantity of each type of item needed each week. The aim of this research is to apply an information technology-based system to determine the minimum safety stock inventory which can minimize errors in procuring the required goods. The benefits of this research are providing information on minimum stock data, providing recommendations for safe stock for weekly supplies, as well as providing knowledge about information technology-based systems that can be applied to minimize data errors in determining the amount of safety stock and inventory required. This research was carried out using qualitative methods. Data was collected using interview techniques, collecting references and observations. The data collected is used as a reference in developing system applications which are then tested using the Black Box Testing method by carrying out tests related to application performance, appearance, interaction and output provided by the application. The research results show that the development of a safety stock information system design system can help monitor and manage inventory and minimize errors in determining the minimum stock of inventory items at the Rajawali Electronics Store.*

**Keywords:** *Safety Stock, Inventory, Warehouse*