## **ABSTRACT**

Frendy Sports is a business entity engaged in sales in Yogyakarta which was founded in 2014. The types of goods sold are shoes, clothes and other sports equipment. In the process of recording stock starting from the process of checking stock items, requests for additional stock items and reports are still not computerized, which creates the risk of data loss and will reduce the effectiveness of the system. The purpose of this research is to build a decision support system to optimize the existing system by managing stock items at Frendy Sports. With the implementation of a system that has a function of supporting the recommendation for additional stock of goods, it is hoped that later it will be able to help facilitate the recording of goods, request for stock of goods where when the stock is low the system will recommend what items or products should take precedence. The method used in conducting research to obtain complete and accurate data is the method of observation which the author conducts research by going directly to Frendy Sports. The Simple Additive Weighting (SAW) method is used for decision making in solving problems that exist at Frendy Sports. In designing the system using Entity Relational Database (ERD) and Data Flow Diagrams (DFD). From the results of this study, the system design created can process detailed data on shoes and sales transactions that have been running and display them then the system can also provide informative information in the form of a dashboard that provides a lot of information on one main page.

Keywords: Recommendation, Simple Additive Weighting (SAW), Stock.