ABSTRACT

Today's technology has experienced very rapid development. There are so many tools that can help complete human work, one of which is Radio Frequency Identification (RFID). RFID can be used to help manage the borrowing of goods in the warehouse. RFID can assist in the process of inputting goods data into the warehouse database.

The purpose of this study is to determine the performance of the RFID system in a warehouse to help borrow goods from the warehouse, so that every activity such as borrowing and returning goods in the warehouse can be recorded accurately. The main components of this system are an RFID reader which is used to read data from an RFID tag which contains a UID key from the goods data, an RFID tag with a card model that will be attached to a warehouse loan item, a Personal Computer (PC) to run a website that has been built. The RFID tag used is a passive RFID tag that does not have an onboard battery, uses the power signal received from the reader to read the desired data in memory and sends it back after processing.

The result of this research is a tool that can help technicians and employees in borrowing goods in the warehouse. The results of the testing of this tool conclude that the RFID reader can read a maximum of 3.5 cm RFID tags and the expected functions all work as expected.

Keywords*: Warehouse, PC(Personal Computer), RFID , RFID Tag, Website.*