

## Design of Inventory Management and Cashier System

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### ABSTRACT

The rapid development of technology at this time is needed by various fields, which are used to support and manage the assets of both large companies and small companies. The utilization of computer-based technology is important to overcome the problems of companies and business competitors who are increasingly competitive. The information system developed includes monitoring the stock of goods, buying and selling processes, and reporting on buying and selling of goods. The inventory system development method will use the RAD (Rapid Application Development), With the availability of this inventory system design, it is hoped that HR Ambar Batik can more easily manage inventory, and obtain sales information more quickly and accurately. The output target of this research is the availability of an inventory management system for management at HR Ambar Batik.

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## 1. INTRODUCTION

The rapid development of technology at this time is needed by various fields, which are used to support and manage the assets of both large companies and small companies. Therefore we need supporting facilities that support development, namely information systems. Information systems contribute a lot to the need to provide a competitive advantage through lower costs, good quality, and improved service to consumers. Data management is one of the things that is done to ensure that the data obtained is accurate and safe and can provide the fastest information.

At HR. Ambar Batik in managing the inventory of sales data and making reports inhibited. Because the system used is a manual system using sales receipts and then submitted to the sales recording department to be recorded in a book, reporting is inhibited in presenting the data because sales reporting is given at the end of the month, so it cannot be accessed at any time. And also not supported by an integrated and integrated system in marketing and reporting stock of goods. This can interfere with performance in selling their products. Management of sales and cashier data in HR. Ambar Batik is expected to contribute to the company in terms of sales efficiency and goods management.

By building a goods and cashier control system, it is hoped that will be a solution to solving the various problems above and achieving effectiveness and efficiency. Therefore, based on the problems above, the topic that will be created is "Design of Inventory Management and Cashier Systems".

## 2. RESEARCH METHOD

The Rapid Application Development (RAD) method is an oriented approach to system development that includes a development method as well as software. There are 3 stages in RAD:

### a. Requirement Planning

At this stage, the user and analyst meet to identify the goals of an application or system and identify the requirements of the system. This phase requires the active role of both parties the analyzer and the user.

### b. Design Workshops

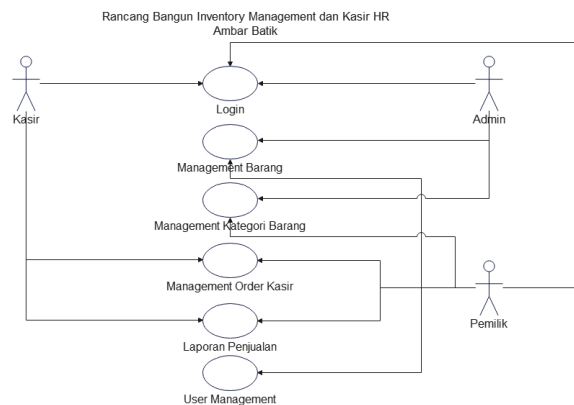
This phase is used to design and improve what is usually referred to as a RAD design workshop, users respond to working prototypes, and analyzers improve designed modules based on user responses.

### c. Implementation

The analyst works closely with users to design aspects of the business to be approved and built so that parts of the system are tested and then introduced to the organization. At this stage, it discusses programming and testing using black-box testing

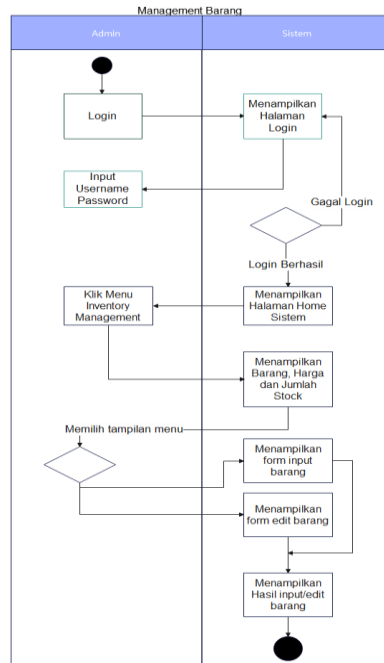
## 3. RESULTS AND DISCUSSIONS

System analysis is carried out to meet the needs of HR Ambar Batik for the system that is made, this is done to suit the needs. The design and development of an inventory management system is intended for admins, cashiers and owners. Goods management, cashier management, sales reports, and user management are the main components used in making inventory management systems and cashiers, in process design using use case diagrams, activity diagrams, and class diagrams. The following picture is a use case of diagram design for the HR Ambar Batik system



**Figure 1.**The activity diagram describes the activities that occur in the inventory management and cashier systems in the system design

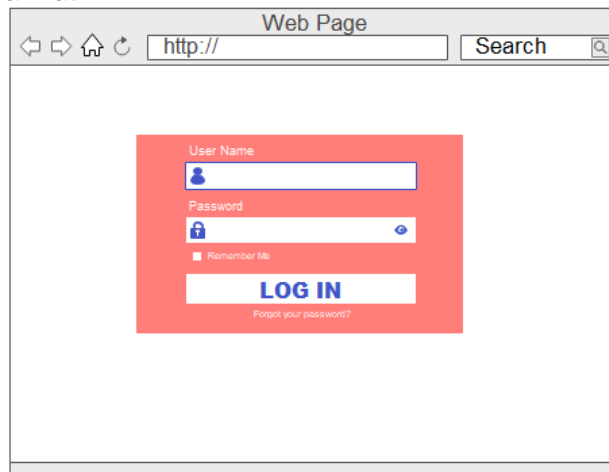
**The proposed Activity Diagram**



**Figure 2.** Activity diagram of goods management for managing inventory and listing item and stock

**The proposed Design Input and Output**

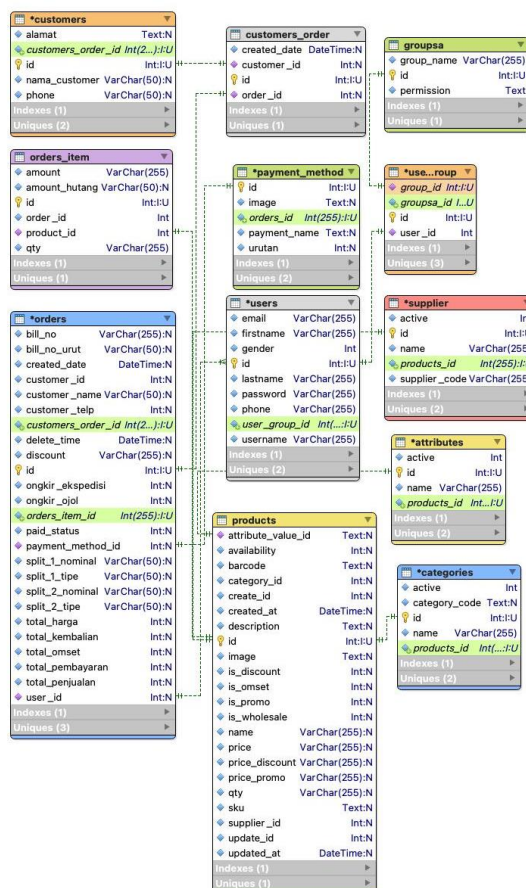
This discussion will display the input and output design of the Inventory Management System and cashier at HR Ambar Batik



**Figure 3.** Login information output and design for interface

**The proposed Class Diagram**

The following is a class diagram that will be used in making the Inventory Management and Cashier System for HR Ambar Batik



#### 4. CONCLUSION

Based on the description of the previous chapters, several conclusions can be drawn from the design of the inventory management and cashier systems, namely the resulting inventory management and cashier system for HR Ambar Batik can organize data in a short time. In this system there is a system that can monitor sales reports on HR Ambar Batik. By using this system, data collection of goods becomes faster and more time efficient. Suggestions from this study are expected to be able to develop an inventory management and cashier system design is the system can be developed into a more complex system to back up data regularly in the event of a failure by the online system. In using the cashier module, a responsive method can be applied so that it can cover the use of small devices. The reporting system in the report module is made more detailed for annual reporting

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