

DESIGN AND DEVELOPMENT OF DRUG STORAGE INFORMATION SYSTEM

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Abstract—Inventory is a stored material or item that will be used to fulfill certain purposes. Every company that carries out business activities generally has inventory. Inventories are goods that are stored for use or sale at a future date or period. Inventory system has an important role in every company, especially those engaged in purchasing good. In the health sector there is such a thing as a drug storage information system which function to monitoring drug stock supplies within a certain period of time. This system will monitoring every drug transaction In & Out or Buy & Sell. Benefits of this system are to keep drug stock, to have full control over inventory, and to analyse and make decision for future achievement.

I. INTRODUCTION

Inventory is stored material or item that will be used to fulfill certain purposes. Every company that carries out business activity generally has an inventory [1]. There are many companies that have a large inventory like Amazon, Unilever, etc. They not only have a large inventory, but they also have a great information system to connecting one inventory to another inventory also to monitoring all the transaction (stock in, Stock out and stock return). The scope of this thesis are The provides information about the drug transaction and the system can input supplier, customer, drug information and generate report (daily, monthly, annual). The system can't give a warning if the stock is low and There is no prevention of hacker because there is no security system

II. LITERATURE REVIEW

The purpose of this section is to explain the concepts and objectives related to those used in developing this thesis.

A. Inventory

Inventory is stored material or item that will be used to fulfill certain purposes. Every company that carries out business activity generally has an inventory [1]. There are many companies that have a

large inventory like Amazon, Unilever, etc. They not only have a large inventory, but they also have a great information system to connecting one inventory to another inventory also to monitoring all the transaction (stock in, Stock out and stock return). Many sector using information system, like health sector, industrial sector, etc. In Health sector, Information system use for increase public service in health sector.

B. Drug Store Information System

Drug Store Information System is a system in the health sector to tracking all the transaction to make purchasing efficiently and generate report to make a decision for the future purpose. Drug Store Information System really help the health sector to record all the transactions.

III. METHODOLOGY

RAD or Rapid Application Development, is software development method used to develop the system in a short time period, and also the RAD method focusing on prototyping and minimize planning [3].

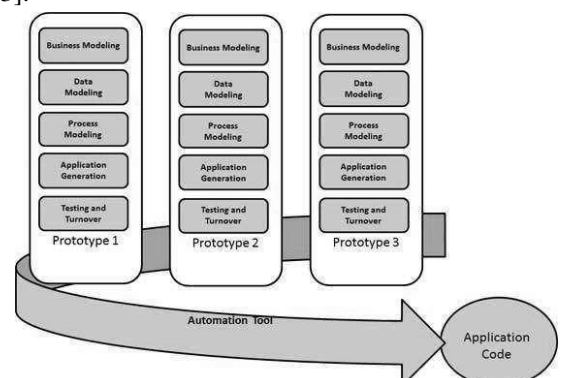


Figure 1 RAD

From the explanation above about RAD, The RAD model is perfectly suit students need to finish this thesis because of the time given is limited.

Project that used RAD seem to be typically relative small scale and in short duration and also two to six months is normal project length. The RAD model focus on prototyping rather than planning, so it can maximize the short time given to finish the thesis development.

IV. DESIGN AND IMPLEMENTATION

This section will explain the system development process on the system and show the results of the user interface that will be created.

A. System Analysis

The system analysis section describes the functions and features of the program based on predetermined requirements, to develop the objectives of this application.

B. System Overview

This desktop application that can be accessed by install the application. This application was developed using Visual Basic as a programming language and MySQL as a database. Users of this application is admin and employee as a staff. The features contained in this application:

Administrator users can create user, category and unit items. Staff users can create transactions, items, customers, categories, unit items and reports.

C. Use Case Diagram

Use case diagrams serve to briefly describe who uses the system and what they can do. The use case should provide some observable results.

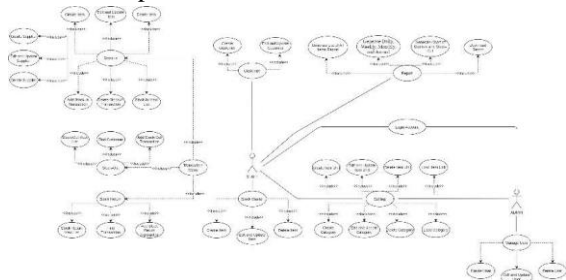


Figure 2 Use Case Diagram

D. User Interface Design

User Interface is a description of the application that will be made which will be shown to the client.

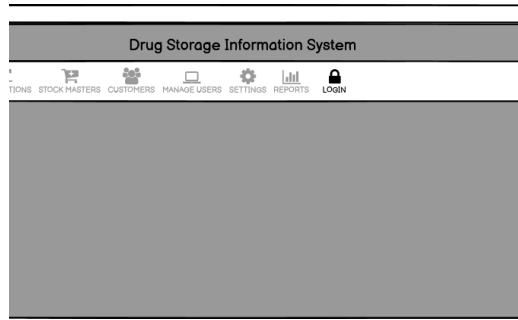


Figure 3 Home

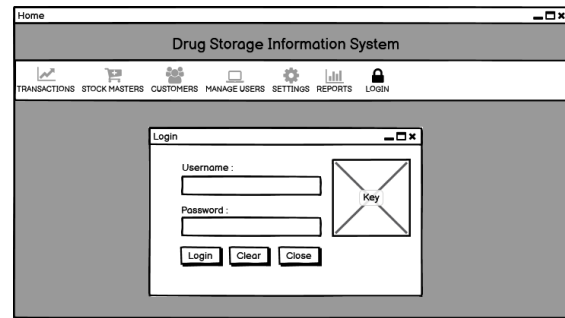


Figure 4 Login Page

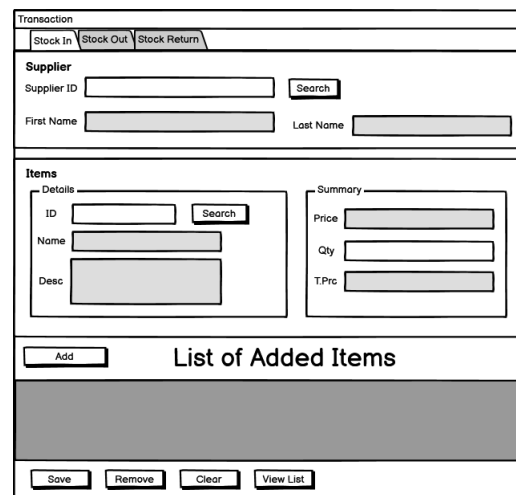


Figure 5 Transaction Page

Stock Master

Add New Item

Item ID

Item Name Category

Description Price

Quantity

0 of x Search

ITEMID	NAME	DESCRIPTION	TYPE	PRICE	QTY

Figure 6 Stock Master Page

Customer Form

Add New Customer

Customer ID

First Name Last Name

Address Mobile

Telephone

0 of x

List of Customer Search

SUPLIERCUSTOMERID	FIRSTNAME	LASTNAME	ADDRESS	TELEPHONE	MOBILE

Figure 7 Customer Page

User Form

Add New User

Name

Username

Password

Type

List of User

NAME	USERNAME	TYPE

Figure 8 Manage User Page

Settings

Add New Category

Category

Add New Item Unit

Item Unit

Figure 9 Setting Page

Report Form

File Edit View Help

Report Type

Report Date Filter

From

SEPTEMBER 2020

S	M	T	W	T	F	S
	1	2	3	4	5	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

To

SEPTEMBER 2020

S	M	T	W	T	F	S
	1	2	3	4	5	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Figure 10 Report Page

E. Entity Relationship Diagram

Entity Relationship Diagram or what we usually call ERD is a diagram to determine the relationship between one entity and another.

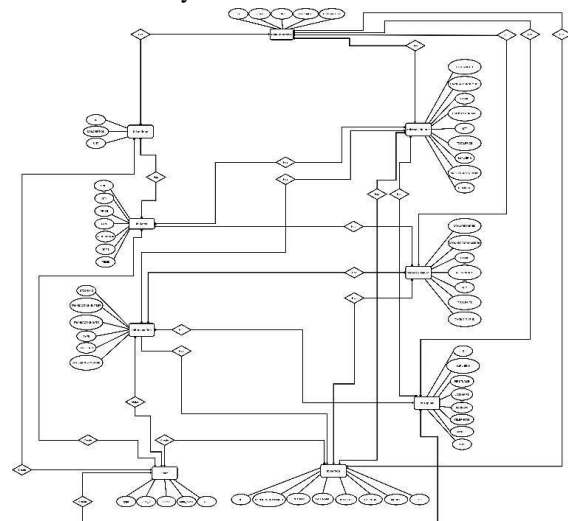


Figure 11 ERD

V. EVALUATION

In the evaluation section, the finished program is tested again from start to finish and all the features that are tested, to check whether the program still has errors or has bugs.

Scenario	Expected Results
Account Login	User can login to the homepage
Account Register	Account can be created
Make Transaction	User can make a transaction
Make Item	User can make an item
Make Unit Item	User can make an unit item
Make Category	User can make a category
Make Report	User can generate report

VI. CONCLUSION

This research was created to help solve problems related to the management of drug inventories. With this application, it is hoped that it can help these problems.

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