"Bill Easy"-An Impeccable Web Application For Supermarket Automation

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Abstract- *The project* *"Bill Easy"* *deals with the automation of supermarket. Large record-books have to be maintained where relevant and irrelevant information has to bestored.Usually they lack efficiency. Less efficiency has a great impact on productivity of any human being keeping the data up-to-date. The new system will cater to the need of the salespersons of any supermarket so that they can manage the system efficiently and user friendly. The project* *"Bill Easy"* *is developed with the objective of making the system reliable, easier, fast and more informative. Mainly it is focused on the method of bar code scanning. Main purpose of our system is to reduce the time and get quick access. It avoids human errors and also generates accurate values. Then it automatically gets the price of an item by using the bar code scanner. To make software fast in processing with good user interface.*

Keywords- Bill Payment ,Account Management, Admin ,User.

I. INTRODUCTION

To make software fast in processing, with good user interface so that user can change it and it should be used for a long time without error and maintenance. This project is based on Supermarket billing..The user interface is designed using PHP along with Cascading Style Sheet for creating a responsive design. The forms validation is done using JavaScript.

II. AIM OF THE PROJECT

The important level of this project is to create an information for supermarkets meanwhile the entire detail complete self-functioning rapid billing and dispatch about all items which has in that particular departmental system in a super-market. The system basically consists of a cart fitted with a bar code scanner linked to a billing server. When goods in departmental stores are added to the cart, the bar code scanner automatically detects the item type, quantity and sends the information to the billing server and system validation. This project has four modules. In case the customer removes an item from the cart, the server immediately recognizes it and aligns billing. Once the customer acknowledges the server to provide the bill, the server provides the gross amount.

III. EXISTING SYSTEM

- There is no handy analytics in the existing application. As for as analyzed stock maintenance is very difficult in the existing application.
- It is designed using the VB.NET application, the coding that is written for both online and offline workings are different.
- Time consumption is very high and it is not more efficient for the users to work on it.
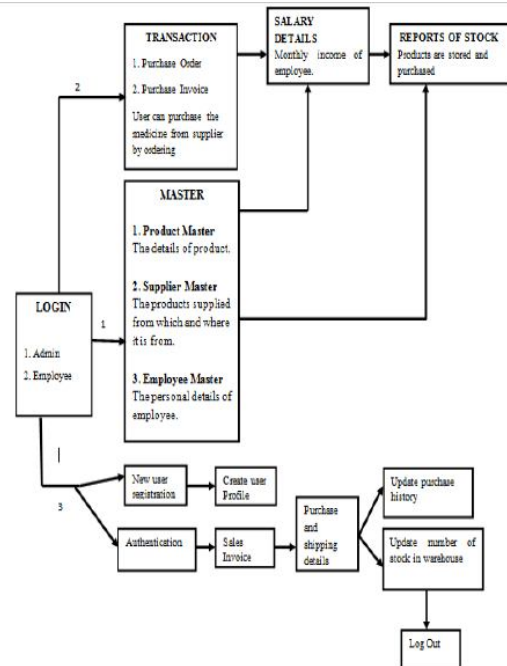

Fig 1: Architecture diagram

IV. PROPOSED SYSTEM

- The proposed applications are responsive application which provides information about the sales and products offered by super market to be hosted on the server.

- The customers and the staffs are given with the separate registration for purchasing the products.
- Database has been centralized which can be updated globally only by the admin side of access is granted.
- Database contains details about all staffs, salaries, order id, purchase id, stock details, product name and serial no.
- The payment mode is adopted as cash on delivery.
- Sales department can see current sales reports without any delay.

V. DESIGN

- Product Master
- Supplier Master
- Employee Master
- Product Order
- Product Invoice
- Sales Invoice
- Sales Returns

Login

In this module user and admin can logged with their account credential. Admin can give the permission to the user for access the modules.

MASTER

A. PRODUCT MASTER

This module containing the following details

- Generate the automated product sales code
- Product name, description, Manufacture license number, company name and address.
- Before add the product in master list user need to choose the type of medicine like Piece, ML and gm.
- If product type is piece user need to enter tablet per box and loose quantity per pocket in that box with MRP.
- If product type is ML or gm(liquid or powder) user must enter the loose quantity of that product (ex if liquid 200ml/bottle)
- Then enter the stock in warehouse, with purchase rate.

B. SUPPLIER MASTER

This module developed for store the supplier auto generated code with Supplier name, contact details and their business details like TIN number, CST number, ECC number and website url of their business.

C. EMPLOYEE MASTER

The personal details of the employee and their salary details. The joining details, department, designation and granting access rights.

TRANSACTION

D. PURCHASE ORDER

This module developed for place the product order to the supplier. This module contains the order number, date and then the supplier name. The description of the product that is available and then the purchase order list of the product to the supplier. The order number automatically generated by the system.
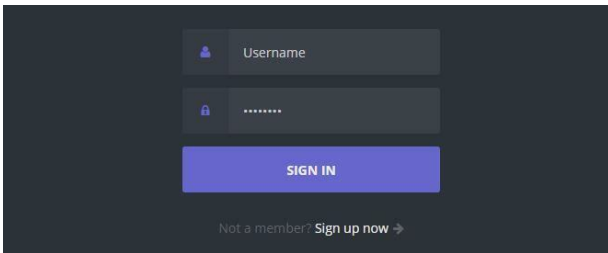
E. PURCHASE INVOICE

This module developed for receiving the products based upon the purchase order number. If the user choose the order number from the drop down list all the remaining details filled automatically by the system based upon the purchase order number. This module contains the supplier invoice number, name and then customer invoice number, order number and then product item details. The net amount will be calculated.
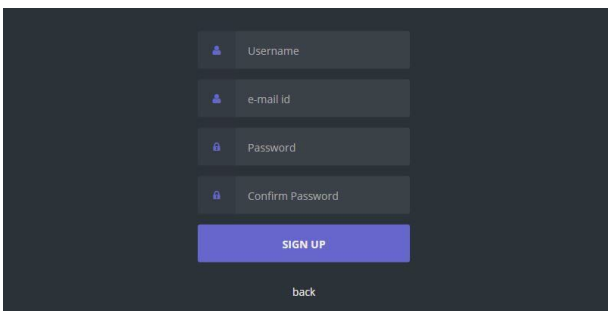
F. SALES INVOICE

This module developed for generating the bill for customer product list which is suggested by the employee. Sales invoice contains: invoice no, bill date, employee name, employee name, product name with type, quantity and rate. If user choose the product name from the item menu remaining details will filled by the system automatically. If product is not available with stock quantity .Then the bill is generated accordingly.

G. SALES RETURN

This module is developed to receive the product from the customer based upon the sales bill number the reason of wrong billing, or mistakenly add.
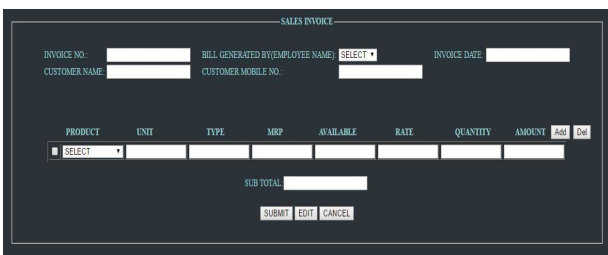
Fig 2: Bill Easy login page

Fig 3:Bill Easy registration page

Fig 4: Bill Easy Supplier Master

Fig 5: Bill Easy Sales Invoice

VI. CONCLUSION

The "BILL EASY" has been developed to satisfy all proposed requirements. The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested with all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level and user friendly.

VII. FUTURE ENHANCEMENT

- The system is may be further extended to add a cart module that would allow the customer to add the products. The developed system does not provide any kind of such facility.
- By using MD-5 algorithm in MySQL for encrypting the password could make the password more secure than now.
- The search option in the current system is simpler it can be made more powerful by using different search methods.
- By adding one more feature help menu in this website could be more useful to the customer.

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