A Report on the Course Project

SUPER MARKET BILLING SYSTEM

Submitted By,

XXX
XXX
XXX

TEAM Name: Tech Knights.
CODE FOR DEV
Project Title: SUPER MARKET BILLING SYSTEM

1. Introduction

The project is on supermarket billing system. A supermarket is a self-service shop offering a wide variety offood and household products, organized into aisles. It is larger and has a wider selection than earlier grocerystores, but is smaller and more limited in the range of merchandise than a hypermarket or big-box market.

1.1 Background (System Study Details in brief)

Our project's system study is about knowing the successful implementation of ERP software in a supermarket and knowing how they manage each functional area and the software they use. We made our system study in a (supermarket) Jayanthi bakery located inside CMC. We got details about the history of That store, their stock, supply chain, transportation of goods, sales of goods, their sales department, the method used in carrying out accounting and finance, requirements etc. With these details further proceeding in our project to design and implement the billing system ensuring it meets most of the requirements.

1.2 Problem Statement

Supermarket management system is about management of supermarket on all types of department. Manual management of supermarket has become a tedious task for a supermarket with more number of customers. They cannot automate their business to reach a level of sales and customer satisfaction because of information boundaries with each FA's. The supermarket needs to automate their business and reduce manual work. The manual work gives confusions and lot of maintenance and accounting problems. Different software is used for each department which causes difficulties in monitoring of stock details. The best-known solution is implementation of ERP in the supermarket help in automation of all FA's there by offering the system with easy processing of product related data. The system reduces manual calculations and implementation of digitalized

accounting bill and customer service is done. The system helps the employees in easy bill calculation and providing an efficient customer service. The system also maintains the relation between shop keeper and supplier by auditing the records digitally (keeping track of bill paid and to be paid). we are concentrating more on implementing ERP software in super market and try to cover some part of functional areas.

1.3 Importance

To improve the entire business process that are involved in supermarket requires a complete solution so that every department can be under a proper Management. ERP software helps in automating the business so the functions in the business can be carried out automatically which also gives rise to other advantages. Olden days the ERP software was considered as a luxury in the market. Then people understood the importance of ERP software and it is renounced as an essential necessity for all kind of business. This implementation of ERP has affected the profit or loss in a good way. More over most of the process which are carried out manually is being reduced.

2. Overview and Planning

2.1 Proposed System Overview
The challenges that we faced while collecting the details of the shop are:
- To know the vendor's previous projects, industry vertical and experience.
- The limited time that the shopkeeper gave for the interview.
- The shopkeeper doesn't share all the details regarding the ERP that he has having.
- Each of us is from different part of the city so we had timing issues in accessing the shop.
- The shopkeeper doesn't want us to return again and again.

2.2 Challenges
   The challenges that we faced while eliciting the details of the shop are:
☐ 1.To know the vendor's previous projects, industry vertical and experience.
☐ 2.The limited time that the shopkeeper gave for the interview.
☐ 3.The shopkeeper doesn't share all the details regarding the ERP that hehaving.
☐ 4.Each of us is from different part of the city so we had timing issues inaccessingthe shop.
☐5. The shopkeeper doesn't want us to return again and again.

2.3 Assumptions

The supermarket maintenance ERP software allows us to do the following
- 1.Fast and effective billing of the products
- 2.Analyzing the inventory and its details
- 3.Connection between logistics and servers in the store
- 4.Maintaining the profit and loss of the enterprise
- 5.Provides good customer feedback and increasing the worth of the shop

2.4 Architecture Specifications

The system architecture is designed using the object oriented analysis concept style. It is also called Abstract Data Type. The system has business component and database component at its backend architecture. The architecture is based on the three-tier architecture model.

2.5 Hardware Requirements

- 1.Intel core i7 microprocessor.
- 2.8 Giga Byte RAM
- 3.1 Tera Byte ROM
- 4.1 Giga Byte NIVIDIA Graphic Card.
- 5.Swiping machine
    6.Feedback receiver
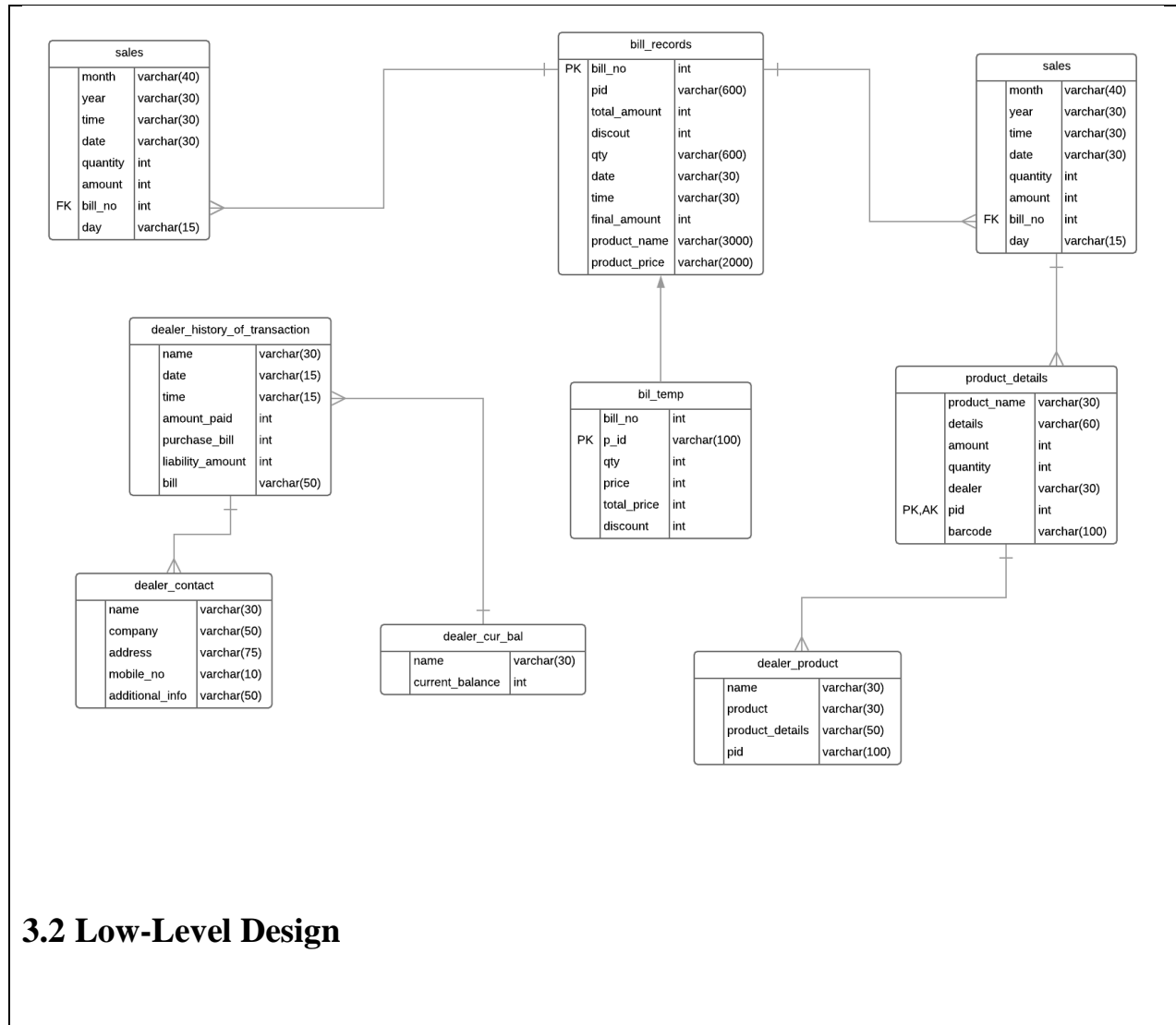
2.6 Software Requirements

1.windows platform
2.Front end using html 5, CSS, P5.js, Java Script and PHP.
3.Backend using MySQL (wamp server)

3. System Design

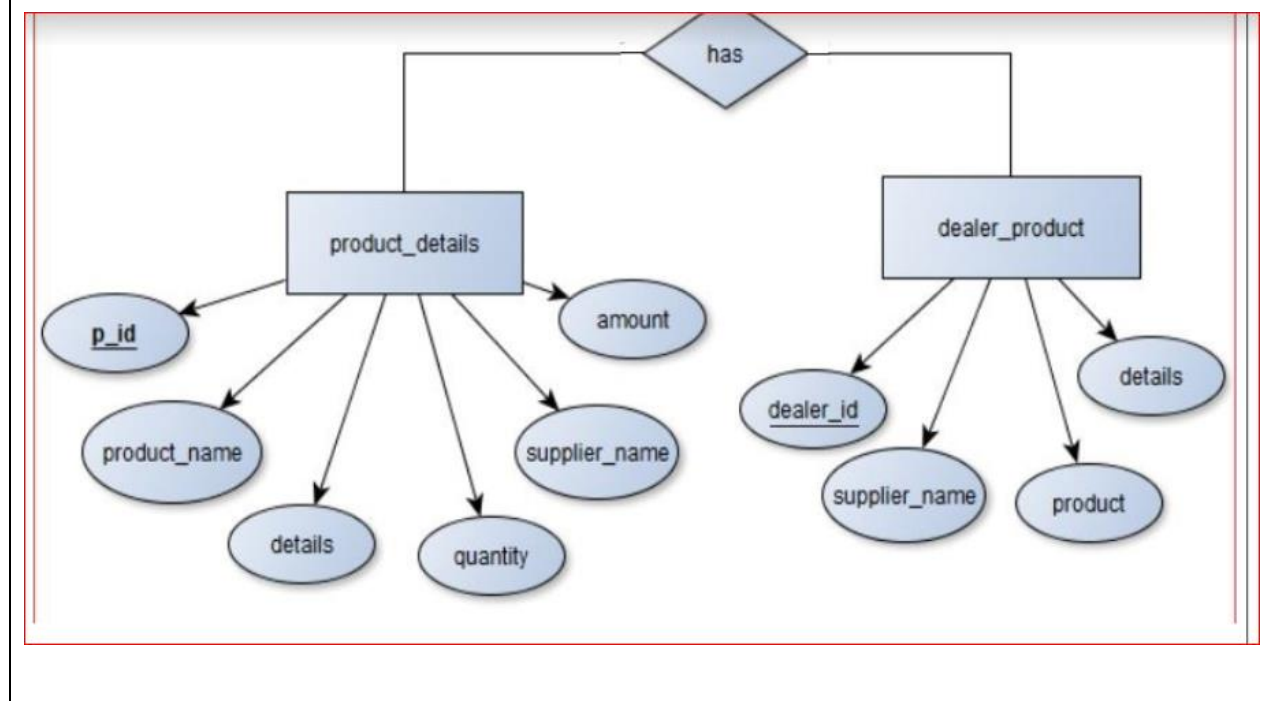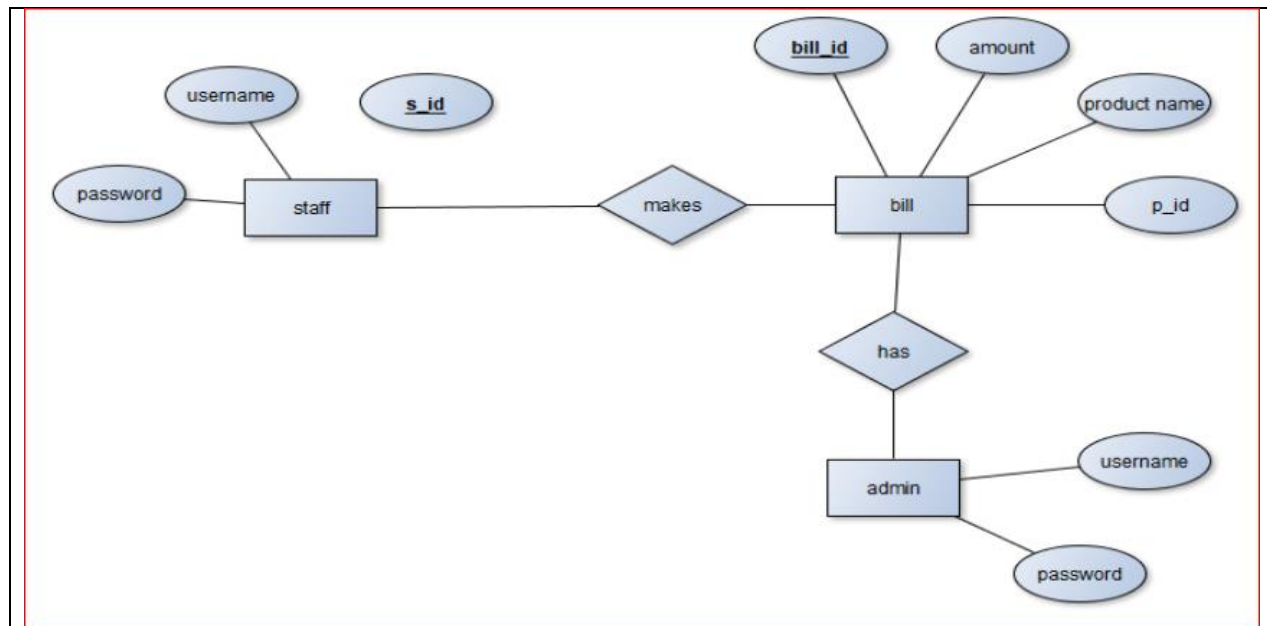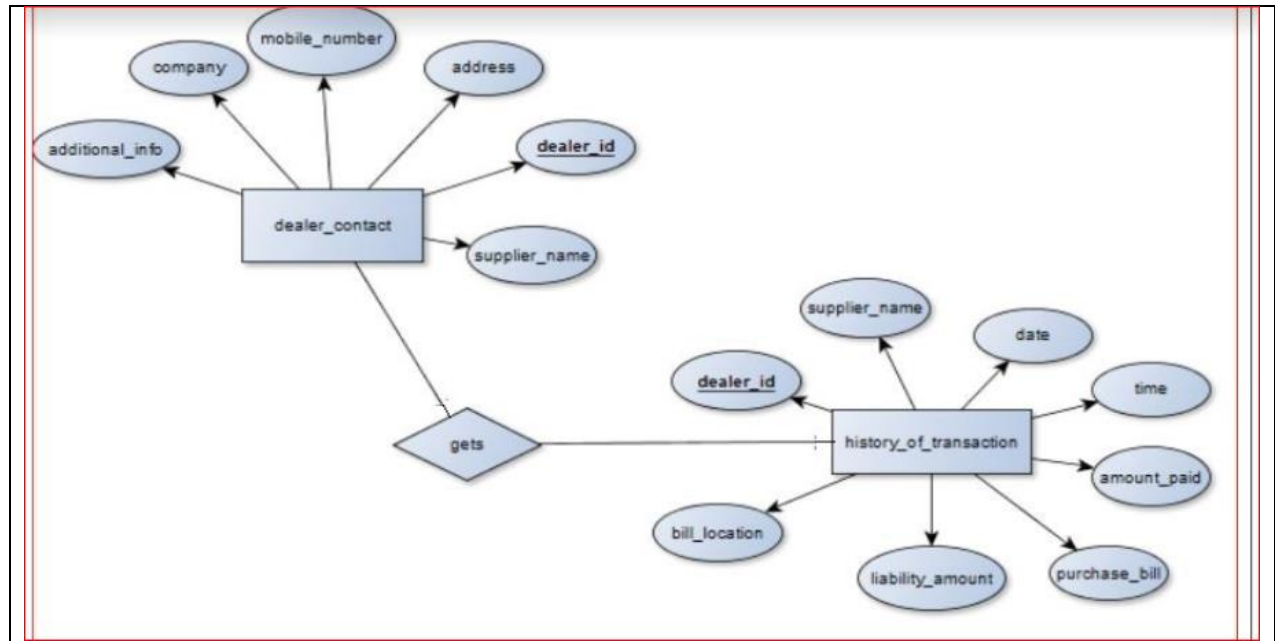## 3.1 High-Level Design

Super market billing system

sales

	month	varchar(40)
	year	varchar(30)
	time	varchar(30)
	date	varchar(30)
	quantity	int
	amount	int
FK	bill_no	int
	day	varchar(15)

bill_records

PK	bill_no	int
	pid	varchar(600)
	total_amount	int
	discout	int
	qty	varchar(600)
	date	varchar(30)
	time	varchar(30)
	final_amount	int
	product_name	varchar(3000)
	product_price	varchar(2000)

sales

	month	varchar(40)
	year	varchar(30)
	time	varchar(30)
	date	varchar(30)
	quantity	int
	amount	int
FK	bill_no	int
	day	varchar(15)

dealer_history_of_transaction

	name	varchar(30)
	date	varchar(15)
	time	varchar(15)
	amount_paid	int
	purchase_bill	int
	liability_amount	int
	bill	varchar(50)

bil_temp

	bill_no	int
PK	p_id	varchar(100)
	qty	int
	price	int
	total_price	int
	discount	int

product_details

	product_name	varchar(30)
	details	varchar(60)
	amount	int
	quantity	int
	dealer	varchar(30)
PK,AK	pid	int
	barcode	varchar(100)

dealer_contact

	name	varchar(30)
	company	varchar(50)
	address	varchar(75)
	mobile_no	varchar(10)
	additional_info	varchar(50)

dealer_cur_bal

	name	varchar(30)
	current_balance	int

dealer_product

	name	varchar(30)
	product	varchar(30)
	product_details	varchar(50)
	pid	varchar(100)

3.2 Low-Level Design

Super market billing system

Super market billing system

Super market billing system

ADMIN:

ADMIN	LOGIN TO SYSTEM	MANAGE MODULES

MANAGE STOCK

MANAGE PURCHASINGDETAILS

MANGE STORE DETAILS

AUDIT PAYMENTS

ADD NEW PRODUCT

MANAGE RETAILER DETAILS

MANAGE ORGANISATION DETAILS

MANGE ROLES OF USER

MANAGE LOGIN REPORT

VIEW SALES REPORT
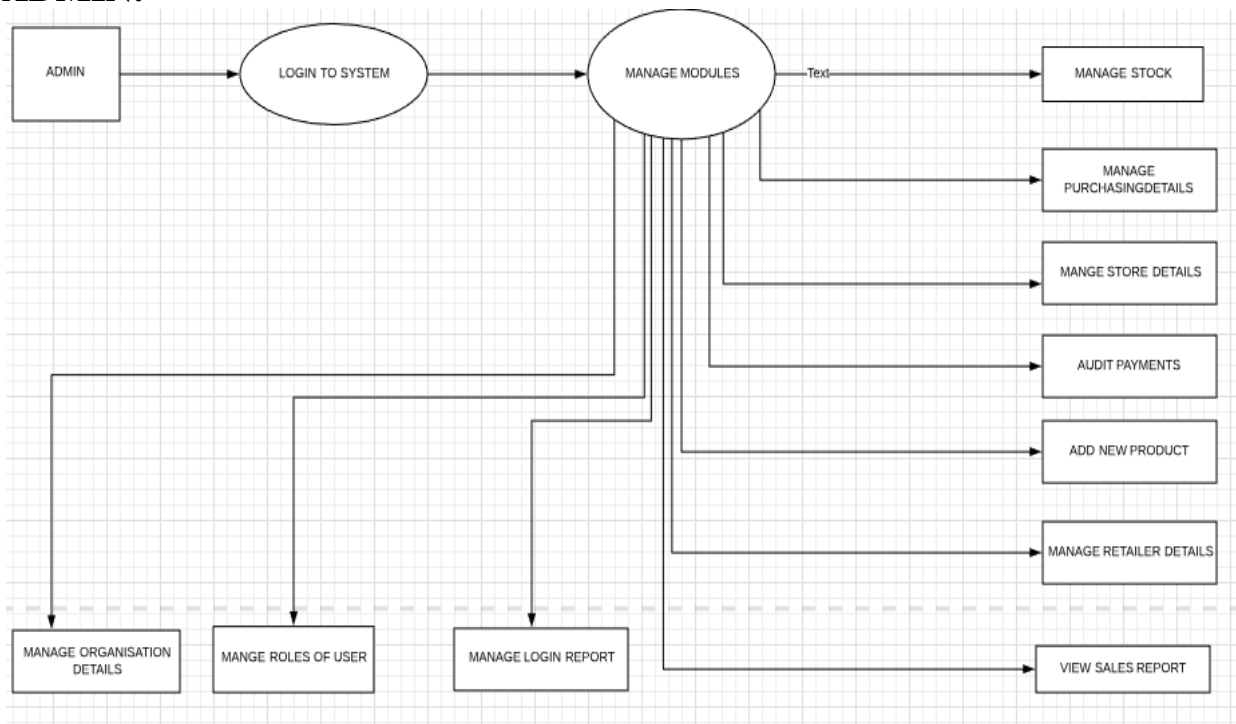
o **Module Development – Code**

super market billing system

user login module

bill module

stock module

accounting and finance

sales

generate bill

view payments (transactions)

update payments

view sales report

update stock

view stock

edit product details
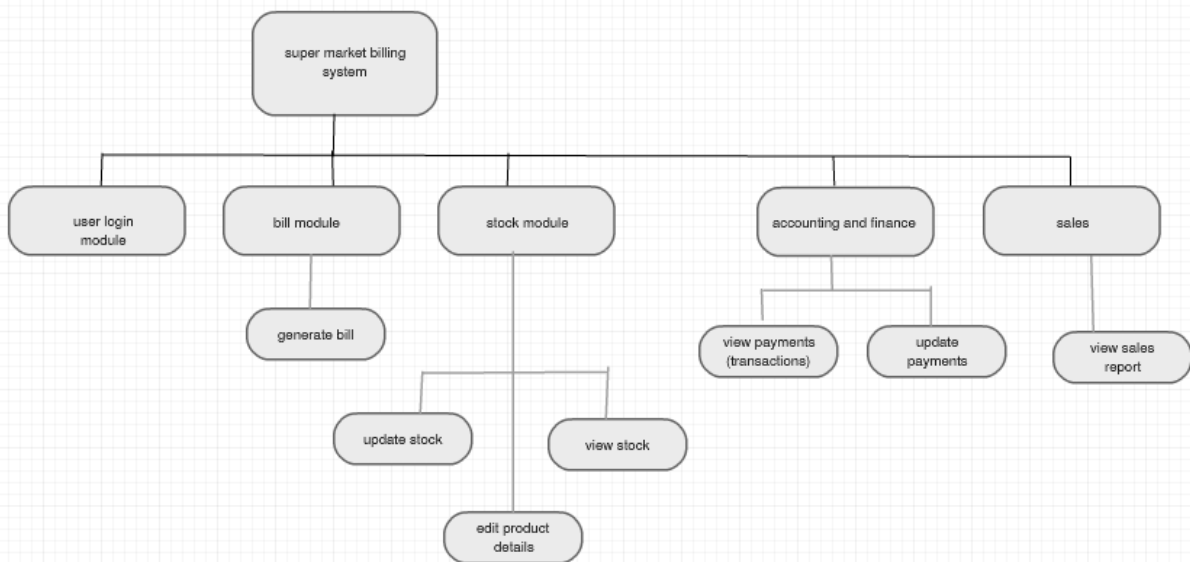
- **System Implementation**

User login module.

Notification of insufficient stock module.

Normal employee:
- **Generate bill module**

Stock manager:
- **Generate bill module**
- **View and update stock module**
- **Add product module**
- **Update product details module**

Admin:
- **Generate bill module**
- **View and update stock module**
- **Add product module**
- **Update product details module**
- **Auditing payments and adding supplier module**
- **Sales report module**
- **User account management module**
- **Organization information module.**
  - **Output/Results**

Billing System

KK MARKET

(Tech Knights)

Sign in

kavya

.....

Login

Super market billing system

View Login History

initial ▼		view history

user	login time	role
kavya	01:03	stock manager
kavya	01:09	stock manager
kavya	01:09	stock manager
kavya	05:13	stock manager
priya16	05:21	employee

Delete Staff

kavya ▼

Remove Account

Home

bill

stock

finance management

analytics

manage account

organization info

log out

I broke my rules for you

upload profile

Add Staff

Staff Name

address

mobile number

kavya

•••••

Choose File | No file chosen

select role of the user : stock manager ▼

Sign up

select report type   --select-- ▼

--select--
annual report
monthly report
date customized

Update organization details:

patameter to be updated: address ▼

enter new value

update

Rhythm Events
Perfection Guaranteed

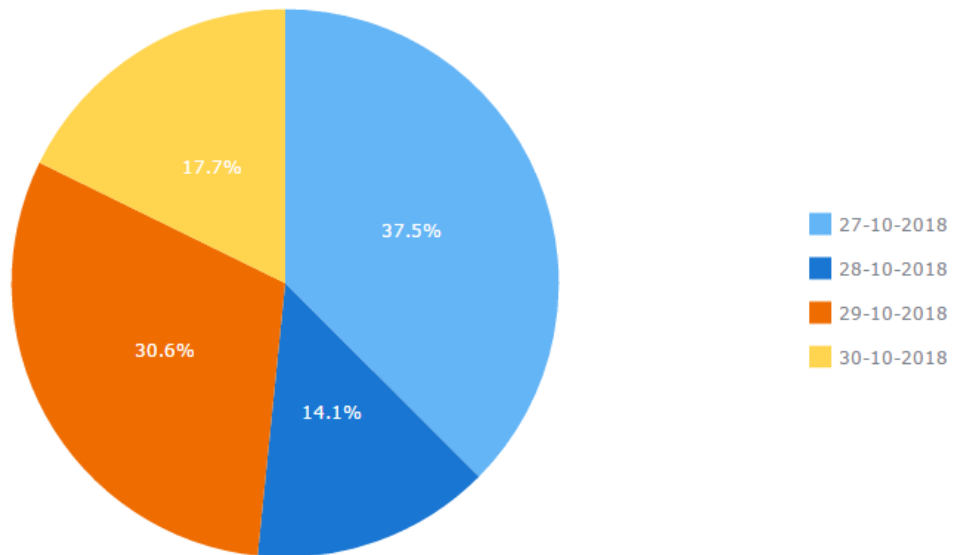upload logo

note(the organization details should contain both mobile number and address)

Super market billing system

select report type   --select--   ▼

sales report for the year

37.5%

14.1%

30.6%

17.7%

■ 27-10-2018
■ 28-10-2018
■ 29-10-2018
■ 30-10-2018
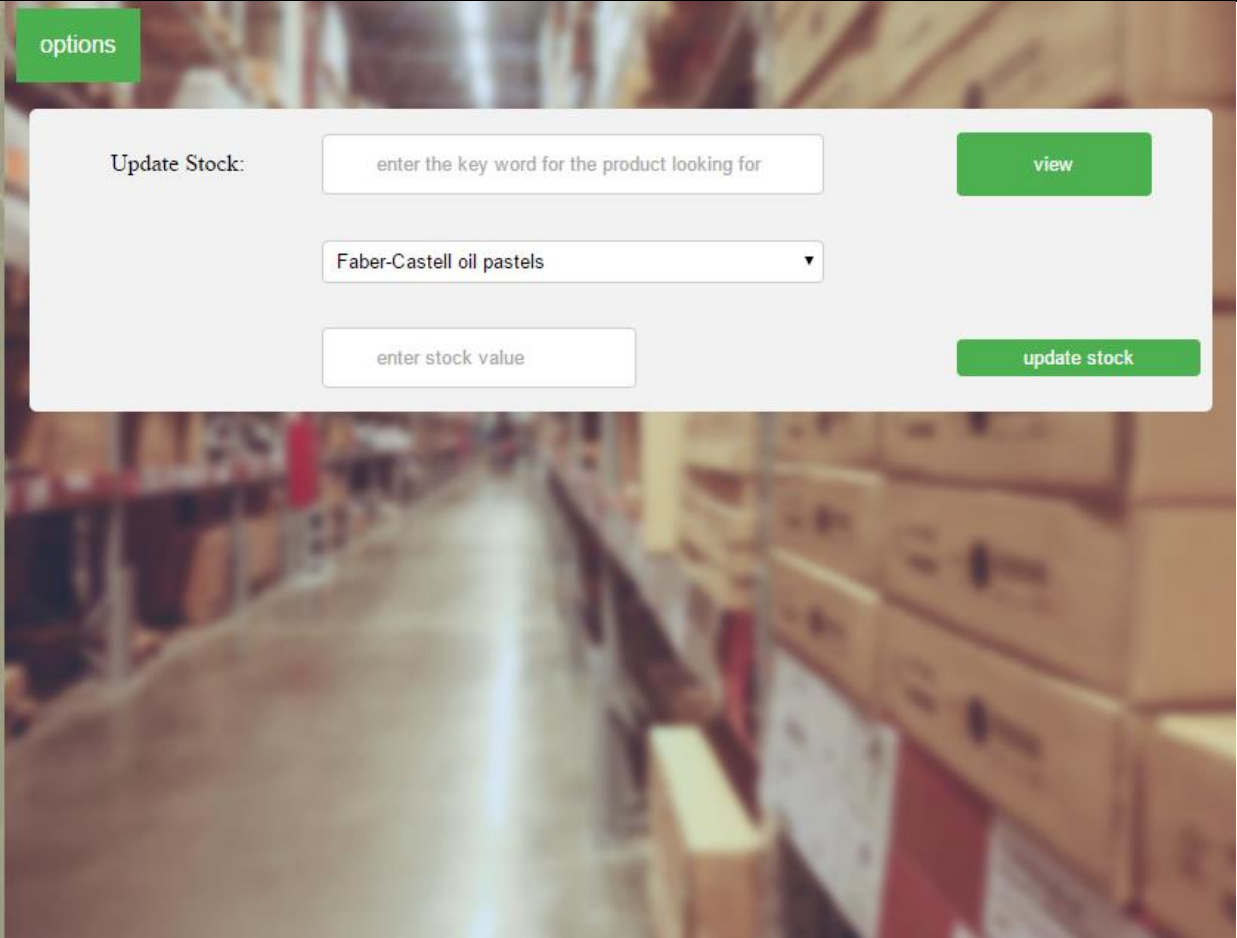
Super market billing system

options

Update Stock:

enter the key word for the product looking for

view

Faber-Castell oil pastels

enter stock value

update stock

Super market billing system

Home

options

bill

view stock

stock

update stock

finance
management

edit product

analytics

manage account

organization info

log out

I broke my rules
for you

upload profile

Add new product

enter product id

(scan using bar code scanner).

Product Name

details

enter the stock value

enter the price of per product

antonio samaranch ▼

add

options

Repay Bill

antonio samaranch ▼

enter the amount paid

upload receipt: Choose File No file chosen

update paid amount

Bill of Purchased Goods

antonio samaranch ▼

enter the purchased amount

Purchase Bill: Choose File No file chosen

add bill amount

Super market billing system

options

view stock: [enter the minimum quantity] [view]

product	product details	dealer details	dealer	stock
Faber-Castell oil pastels	15 oil pastels 60 mm x 10.5 mm diameter	8836045620	R.K. Khosla	36
classmate note	ruled note 160 pages size 31.4 x 19.4	9974856321	antonio samaranch	289
classmate note	un-ruled note 160 pages size 31.4 x 19.4	9974856321	antonio samaranch	266

options

View current balance

select the dealer name : [antonio samaranch ▼]   [view complete transaction] [view balance]

dealer name	company	date	time	amount paid	purchase amount	liablity amount	view bill
antonio samaranch	KGC	01-10-2018	07:06	0	0	12000	view bill
antonio samaranch	KGC	22-10-2018	08:37	100	0	11900	view bill

- **Conclusion and Future Developments**

The supermarket enterprise is used by all the persons who are living in this world. The supermarket has a good scope in all the durations. The supermarketenterprise which we visited is known as Buttons. This enterprise is not a big shopstore. This enterprise has only minimum number of employees. Buttons enterprisedo not any advanced software they only make use of normal websites. They are notusing any ERP software to coordinate all the departments. They use software for theprocess of billing. They are not using any software to maintain the inventory stock.
They bring the goods from that particular warehouse and they maintain the details using a hand written receipts. The accounting and sales area is implemented. The ERPwill help a lot to develop an enterprise in an effective way.

- **References**

http://files.spogel.com/miniprojectsin-cse/p-00479--billing_system_departmental_store.pdf

https://www.scribd.com/doc/27828662/ABSTRACT-the-Project-supermarket-Deals-With-The

[1] T. Sriram, K. Vishwanatha Rao, S. Biswas and B. Ahmed "Applications of barcode technology in automated storage and retrieval systems", Industrial Electronics, Control, and Instrumentation, 1996., Proceedings of the 1996 IEEE IECON 22nd International Conference on, vol. 1, pp.641 -646

[2] Ref: Alistair Milne "The Rise and Success of the Barcode: some lessons for Financial Services" feb 2013

Any other related information, you want to add.

Super market billing system

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Course Project- Implementation Review
(Review III) -Evaluation Sheet</td></tr>
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