Viswesvaraya Technological University Belgaum, Karnataka



A Project report on

EASY BUY: AN ECOMMERCE APPLICATION WITH ADVANCED ACCOUNTING FORMULAE

Submitted in partial fulfilment of the requirement For the award of the degree

MASTER OF COMPUTER APPLICATIONS

Submitted By

AZMATH ULLA S

(1CR18MCA56)

Internship Carried Out at

EBIX TECHNOLOGIES

Internal Guide

Dr. V ILANGO

External Guide

Mr. Abhinav Maniyambath Ebix.Biz Technologies Bangalore.

Professor MCA Department CMR Institute of Technology. Bangalore.

> CMR INSTITUTE OF TECHNOLOGY 132, IT Park Road, Kundalahalli, Bangalore-560037 2019-2020

CMR INSTITUTE OF TECHNOLOGY



Department of Master of Computer Applications, 132, IT Park Road, Kundalahalli, Bangalore-560037 2019-2020

CERTIFICATE8

This is to Certify that AZMATH ULLA S Bearing USN 1CR18MCA56 Has Completed His Final Semester Internship report on Work Entitled "Easy Buy:An Ecommerce Application with Advanced Accounting Formulae" as a partial fulfilment for the award of Master of Computer Applications degree, during the academic year 2020 under our joint supervision

Signature of the Guide

Dr. V Ilango

Professor

Signature of HOD Prof. Gomathi.T HOD MCA Dept Signature of Principal Dr. Sanjay Jain Principal of CMRIT

External Viva:

1.

2.

Signature with date:



09th June, 2020, Bangalore

PROJECT COMPLETION LETTER

This is to certify that Mr.AZMATH ULLA S, (Roll No 1CR18MC56), is a bonafide student of MCA from CMRIT, Bangalore, completed the project entitled "EasyBuy : An E-commerce Application with Advanced Accounting Formulae" during the period from Jan 2020 to May 2020 at our organization EBiX.BiZ, Bangalore, under my guidance and he has completed the work to my satisfaction.

Box BBIX, BIL Abinav M

Team Lead EBiX.BiZ

343/14, SR Arcade, 2^{ed} Floor, Banaswadi, Bangalore - 560 043 Email : abbinav mca@live.in | Website : www.ebix.biz | Mobile : +91 9740640203

DECLARATION

I, AZMATH ULLA S, Student of 6th MCA, CMR Institute of Technology, Bearing USN 1CR18MCA56 hereby declare that the Internship Work entitled "EasyBuy:An Ecommerce Application with Advanced Accounting Formulae" has been carried out by me under the supervision of External guide Mr. Abhinav Maniyambath Project Manager and under the guidance of Internal guide Dr. V ILANGO, Dept. of Master of Computer Applications, CMR institute of Technology, and this internship Work is submitted in the partial fulfilment of the requirements for the award of the degree of Master of Computer Applications. By the Viswesvaraya Technological University during the academic year 2020. This report has not been submitted to any other Organisation/University for any award of degree or certificate.

Place: Bangalore Date:

Azmath Ulla S 1CR18MCA56

ACKNOWLEDGEMENT

I would like thank to all those who are involved in this endeavour for their kind cooperation For its successful completion. At the outset, I wish to express my sincere gratitude to all those people who have helped me to complete this project in an efficient manner.

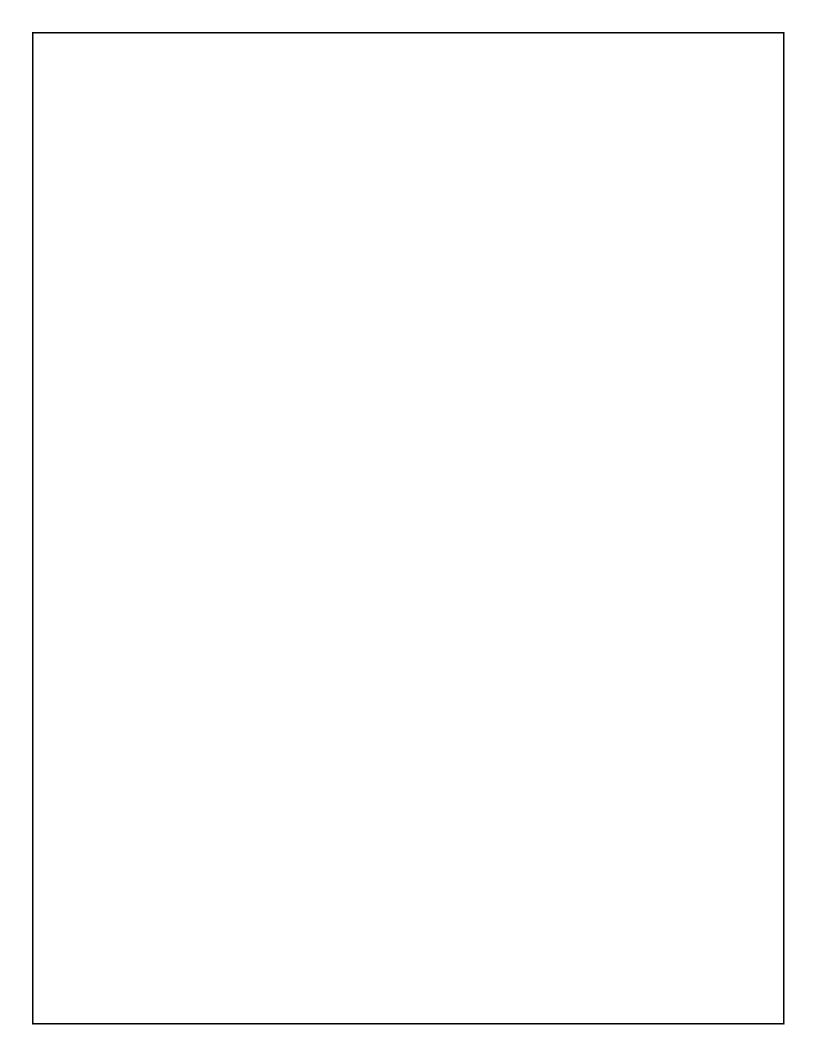
I offer my special thanks to my external project guide **Mr. Abhinav Maniyambath** Project Manager Ebix.Biz, Bangalore, and to my Internal Project guide **Dr. V ILANGO** Department of MCA, CMRIT, Bangalore without whose help and support throughout this Internship would not have been this success.

I am thankful to **Dr. SANJAY JAIN**, Principal, CMRIT, and Bangalore for his kind support in all respect during my study. I would like to thank **Mr. Abhinav Maniyambath**, Ebix,Biz, Bangalore who gave opportunity to do this Internship at an extreme organization Most of all and more than ever, I would like to thanks my family members for their warmness, support, encouragement, kindness and patience. I am really thankful to all my friends who always advised and motivated me throughout the course.

AZMATH ULLA S 1CR18MCA56

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CHAPTER 1 INTRODUCTION

1.1PROJECT DESCRIPTION

This application is the data analysis consultant job for the business online promotion and sales analysis. The application is developed as a part of made in India project to enhance the sales of the small and medium size industry in India. In the recent year the online giant has dominated the market and it was made small scale industry to find their customer. So by finding the limitation of the giant online portal suppliers the new application of ESYBY has initiated the data analysis facts to overcome those limitations an make the small scale application more profitable.

Apart from the business inventory operations the new application has algorithm to make out users purchase nature, spending habit, geographical performance etc. This will help the business analysis to provide the instruction to the client shops with respect to the stock item to be purchased and delivery management. The chart representation for the zone wise, the shop, the sales etc will be also managed in the application besides the online delivery sales. The application

How the software works?

The application is make a chain of small shops from the stationary shop, super market, medical shops across India under one umbrella and delivery the product to customer who made the request. The shops needed to take registration in ESYBY through the online portal and the request from the nearest customer will be received for the item delivery.

Now the question will be asked if the portal like Amazon or FLIPKART can supply the item will huge discount then how the small scale industry can get the business call. If we test out the existing online portals they do free delivery the product only if the total cost payable

exceeds some limits. So the for the customers who do not want to order large items and if the shops are ready to deliver the item with NILL delivery order the business can sustain the market.

How items can be delivered in zero cost and what is the profit for the software app developers?

The algorithm will find the nearest shop to the person who made the order so there is not possibility for logistic or freight over the item delivery. To make the application developers income the shops are needed to pay the certain registration fees which can made recovered from the sales income.

The modules of the ESYBY.

This application is developed for the employees of the ESYBY origination and for the delivery management. The customer module is not included in the current module which it is developed by the mobile developers team. The modules as follows.

- Vender registration
- Billing and Tracking management
- Payment collection, refund history
- Product QC and product sales analyse
- Report

Vender registration

In this module the details over the vender shop registration and the memory ship validity etc are managed. The vender's can register for free one month membership to check how much increase in the sales through the ESYBY application. The details over the GST, the bank account details, the owner PAN card verification etc are controlled in the vender registration module.

Billing and Tracking management

This module uses the call receipt from the customer, use algorithm to find the nearest showroom, get response to the item request receipt, if item not available find next nearest shop or cancel item from the billing, and the delivery management with GPS tracing are managed in the billing module.

Payment collection, refund history

The cost of item bill will be generated in the application and the amount can be payable either through the cash n delivery, the banking portal or other virtual wallets. This module will keep track over the total cost, the amount paid, the received, the discount given etc. Also the description over the refund if the item got returned, the steps for payment return through bank or wallet. The payment gateways are used for the banking and wallet fund transfer.

Product QC and product sales analyse

In this part the admin of the ESYBY will check and ensure the quality of the item that are delivered through the applications. The QC is applied for the products which are directly manufactured and supplied by the registers shops. The manual QC control test will be made and make sure the product are up to market standard. The details with respect to the items sales and promo marketing will be done in the sales analyse part

Report

The report has important role in the application where the details of which item has more demand, and location wise demand (some product demand vary according to the customers and the state). The application uses accounting formulae like inventory turnover, the collection ratio to generate the clear picture of the item sales and better improvements.

1.2 COMPANY PROFILE

EBIX.BIZ is Bangalore based software company focus on the E commerce based development and maintenance. The software has developed the accenting based software plug in and the e commerce application. With help of this plug in the software will find the

set of units (customer) and re arrange according to the priority basis. This software is now used as inbuilt module or as the separate product for the customer accounting usages.

The team of the EBIX.BIZ is set of freelancer users from the software development background and as well in the accounting back grounds. They work mutually over the list of issues generated in the accounting (network based) platform and how to resolve the issues through the software enhance.

Our Portfolio is we observe a scientific and little by little methodology for all our application development. Our software layout and utility improvement follows the established Ebix methodologies and methods. Our awareness is on commercial enterprise answers that fulfil enterprise goals, as opposed to simply presenting technical solutions. The essential foundation of all our utility is this philosophy. We've described tactics for necessities seize analysis, design, development, testing and deployment. We generate UML diagrams representing the use case fashions, analysis model, layout fashions, Implementation version and check model.

It is multi functional ERP business control solution that helps you to join your financials, sales, carrier and operations to streamline your commercial enterprise processes, improve customer interactions and make higher selections.

It is a next generation of business solution for the edge of digital transformation. It offers more perception into all of the technique into corporation. Microsoft Dynamics 365 commercial enterprise central/NAV is a modern-day answer for modern enterprise to satisfy their evolving wishes today and into the destiny.

CHAPTER 2 LITERATURE SURVEY

2.1 EXISTING SYSTEM AND PROPOSED SYSTEM

Existing system

In the existing system application is developed by charging the fees from the customers for the product delivery and also application is more shop to client communication mode. The application act as an interface between the vender and seller. In the office module the application has the feature over the total sales and the cash collected through the business. No features to calculate the tax for the item sales and manufacturing item GST tracking.

In the application side the majority of the work is managed with the mobile application transactions. No effective steps to manage the item return or cancelation of the item ordered. The business is mainly focussed in the stationary and grocery sales.

Limitations in the existing system

- Three tier architecture with TPLX plug in for the banking transactions.
- Application is concentrated in the certain location only. So more transportation cost required for the distant transactions.
- Limited to the certain business profiles.
- Advanced GPS tracking not added in the application.

Proposed system

In the proposes system the service charges are collected from the shop owners and the make sure all products are received in the hand of end users for MRP or less. Apart from the shop to user communication the application is now more clerical operational activities. The clerical work includes the item sales analysis, the zone sales analysis, the customer nature analysis etc. These applications now act more than a vender seller interface but an accounting software plug in. The GST tax calculation form is included to auto generate the GST tax payable to the software company. More properties to manage the item return and replace item with broken product, instead of the waiting three to four working days for the refund with wallet the vender will get the refund within five hours. Other refund and amount payable detail will be managed by the vender and ESYBY authorities.

Advantage.

- Five tier architecture with MOM architecture for the advanced wide range application communication.
- Application is covered entire small scale shops in India and makes sure all customers request will find nearest shops.
- Applicable to all kinds of business staring from small scale manufactures to the shops owners.
- GPS module is introduced so the seller will get the latest track location of the delivery agent.

2.2 FEASIBLE STUDY

The feasibility study is carried in the ESYBY application to check whether this business can sustain sufficient capital to run in the market. This application must be feasible for both developers and the client who uses the product. The feasibility study is carried out in the following area.

- Cost feasibility
- Technical feasibility
- Operational feasibility

Cost feasibility

In the cost feasibility is calculated on the software building expenses and in the software maintenance cost. The entire organisation has their own budget to start the application and developers will make the check list for controlling the expenditures. Similarly the changes in the cost estimation and the provability of the income generated from the new step-ups are also calculated in the cost feasibility study. For example in the initial stage the ESYBY 's cost feasibility is calculated in a single location so the server space required to store the data

will be less than 1 TB. But when the business grows the more space and the network challenges are needed to implement and the developers are needed to check their cost feasibility study.

Technical feasibility

In this section the configuration needed for the technical support are discussed. In the software application the technology used are related to the web based developing kits. Visual studio 2012 and SQL server 2008 second edition are used for the software development. The supporting tools for the network, the SQL security, the banking payroll communication are included in the technical feasibility study.

The developers are required identify the all the supporting tools used for ESYBY application development before the first step of development is processed. Since Microsoft edition has the software tools for the front end design of ESYBY GUI, the C# for the business logic coding and te Microsoft based SQL server is also used for the software development, the developers has decided to go with visual studio as IDE.

Operational feasibility

In the operational feasibility the details on how the ESYBY can operate to reach more in the market and also how to make the ESYBY more user friendly to use. The detail over how the retails business works finding the right users and their consuming possessions will be checked through the ESYBY based algorithm. The ultimate aim of the operational feasibility is to check whether from the current operational possession business can grow to expectations. If not what are the extra steps to be taken for the business growth.

2.3 TOOLS AND TECHNOLOGY

The tools used in this E commerce application is Microsoft licensed tools and technologies. The five tier architecture developed in the visual studio with controls for the software development. testing and the methodology. The tools are as follows

- Visual studio Agile with SVN
- MTM
- C#.NET
- SQL
- VM ware
- Team build

Visual studio Agile with SVN

The IDE used for the software development kit is visual studio 2014. This IDE has also the propertied for the agile and SVN (sub version) control features. The agile software will be used for creating the sprint order in the application project, tacking the sprint steps, the work pending management steps etc the SVN is needed to store the over written content in the agile methodology, That is if any content in the sprint is updated instead of remove and over write with help of SVN we can save all the changes made by the developers.

MTM

Microsoft Test Manager is the software used for the application testing. The test users can create the test cases, iteration for the test modules (which form to test first and which web form will come next) and also the units for the white box and black box parameters. The test users can save time and effort for the application module testing

C#.NET

The business logical operations coding is coded in the C# language in the platform C#.NET. This platform is used for the middleware component for ESYBY modules and gateway interaction classes too.

SQL

The back end SQL code for the data storage and the migrations is done in SQL. This application uses three SQL server each for the client and customer data storage, the second for the banking based SQL storage and the third the local server for the developers use. The more confidential data which are related to the banking and fund transferring are saved in the banking server which has high end security parameter used for the communication

VM ware

The virtual machine used for developing purpose: the developers will write the code in windows operating system and will be tested whether the application of ESYBY will run in the machine of non ASP.NET platform too. So with help of VM ware the developers will create the virtual environment and run the application.

Team build

This software is used to build the ESYBY application modules which are saved in multiple system including he VM ware. Some time the application which is build in windows OS will run successfully and the application which is build in LINUX will also run successfully. When developers integrate both system together there could be a chance for error occurring. So the developers will use the team build software and integrate and run the application modules together.

2.4 HARDWARE AND SOFTWARE REQUIREMENTS.

RAM (ESYBY)	128 GB
RAM (without ESYBY)	2 GB
Hard Disk (without ESYBY)	250 GB
Server (without ESYBY)	IIS, HTTP caching server
Processor (without ESYBY)	Pentium 4
Hard Disk (ESYBY)	1 TB extendable to 16 TB
Server (ESYBY)	IIS, TFS

Software requirements

Test (ESYBY)	MTM
Front end (ESYBY)	ASP.NET
Middleware (ESYBY)	C#.NET
IDE (ESYBY)	Visual studio
Back end (ESYBY)	SQL server 2008 R2
Processor (ESYBY)	Pentium 4

CHAPTER 3

SOFTWARE REQUIREMENTS SPECIFICATION

3.1 USERS TYPES

The application users are generalised on the basis of the department they work and the authorization is made over the users accessibility in each module. Admin is the default user of ESYBY application and admin will create the other employees of the organisation and the client. The application users those who use application to purchase product are created by themselves.

Users list

- Admin users
- Employees
- Vender
- App users

Admin users

The default users of ESYBY application and the users user ID and password will be created by the developers for the first time and permitted to change the password. The role of the admin users in each modules as follows

Module	Read permission	Editing permission	Delete permission
Vender registration	Yes	No	Yes
Billing and Tracking management	Yes	Yes	Yes
Payment collection, refund history	Yes	No	Yes
Product QC and product sales analyse	Yes	Yes	Yes

Employees

The employee of the ESYBY organisation who are created to control the business operation like marketing, analysis the sales business, the bank and total fund transfer management. The employees are also assigned to manage the product QC control for the certain selected organisation

Module	Read permission	Editing permission	Delete permission
Vender registration	Yes	Yes	Yes
Billing and Tracking management	Yes	No	No
Payment collection, refund history	Yes	No	No
Product QC and product sales analyse	Yes	Yes	Yes

Vender

The vender is the shop owners who are registered for the business activities. These users module needed to update the items in the shop, the stock report the opening and closing stock after and before sales etc.

Module	Read permission	Editing permission	Delete permission
Vender registration	Yes	Yes	Yes
Billing and Tracking management	Yes	Yes	Yes
Payment collection, refund history	Yes	No	No
Product QC and product sales analyse	Yes	No	No

App users

The mobile app users who can search and update the items to be purchased. These users GUI modules are not included in the web based application since they are managed by the mobile app users. But the information regarding the order made, the amount payable and the sales return the banking operations are needed for the further business operations

3.2 FUNCTIONAL REQUIREMENTS

Function number: 1

Function name : application wallet

Functional description : the wallet is the module unit for saving the amount which needed high secured network access

Input : user ID, the bank link, the amount credited

Process : connect with the baking gateway and transfer the amount to the ESYBY bank and the amount code in the user wallet account

Output: display the rate in the wallet

Function number : 2

Function name : sales purchase with wallet amount

Functional description : if the user selects the wallet as payment option the rate amount will be debited from the account

Input: user ID, the amount

Process : check whether the amount received is less than wallet amount, if yes access the permission and if no connect with the users bank account to continue the sales

Output: status of sales and updated the wallet amount.

Function number : 3

Function name : wallet update

Functional description : The transaction made with the wallet do not have any direct ink with the bank. Once the wallet is updated with rate all the transaction is made with application and the users. After the transaction is completed the admin are needed to pass the rate from their bank account to the application.

Input : sales ID, users ID

Process : write code to update the wallet amount and display the user account.

Output: new wallet update.

Function number : 4

Function name : item return wallet update

Functional description: If the item retuned the wallet must be updated with the refunded amount.

Input : sales ID and amount.

Process : receive the amount, date, status from the seller shop. If the algorithm is processes generate the cost with refund amount.

Output: new wallet amount updated.

Function number : 5

Function name : zone statistic report

Functional description : generate the product wise sales report from the total sales in each zone.

Input: zone ID,

Process : call method for the inventory ratio, the collection ratio, the working capital ratio and the generate the statistic report

Output: display the report

3.3 NON FUNCTIONAL REQUIREMENTS

Functional requirement is study conducted for the application post work relations. This study is made to figure out whether the ESYBY operation can meet the vendors and the users requirement, make the study over the possible error which can be occurred during the application use and the steps to overcome those issues. The non functional requirement in the ESYBY is carried in the following areas

- > Portability
- > Security
- ➢ Reusability
- > Flexibility
- ➢ Reliability

Portability

This part states the application module portability in the different configuration systems or the ability of software to be transferred from one machine to another machine.

For example the application modules will be operated in the banking sector in the LINUX system, or in the SQL server unit under ubuntu OS etc. So the developer has coded the application with better portable features.

Security

The modules of banking and gateway interactions of the ESYBY application have code with the security session based operations. This give safe and hassle free operation for all the users and developer side. Security is the main thing to any Software that has to be made to safeguard the data from the hackers here the data security is very important.

Reusability

The features introduced in the ESYBY can be implemented in the other online business operations too. The idea of the wallet can be used for other features like flight booking, using online food ordering etc. This feature is not implemented in the current version but can be used for future enhancement

Flexibility

The application flexibility shows the EYBY applications adaptability over the future requirements. The new system will allow the all kind of business user to register, sell and analysis the report generated in the application. Since the application do not allow to sell the items in the next zone or remote area all the users can understand the needs of their particle location and take steps for the business improvement.

Reliability

In this part the detail over the reliability of the wallet amount transactions are checked. The developers give more importance to the code in the money transactions since there could not be any money loss from the hands of sellers as well in the buyers account. If any of the users do not get the refund this could lead to close his account and affect the ESYBY business process. Here Reliability refers to the degree to which the result of a measurement, specification can be depend.

CHAPTER 4

SYSTEM DESIGN

4.1 SYSTEM PERSPECTIVE

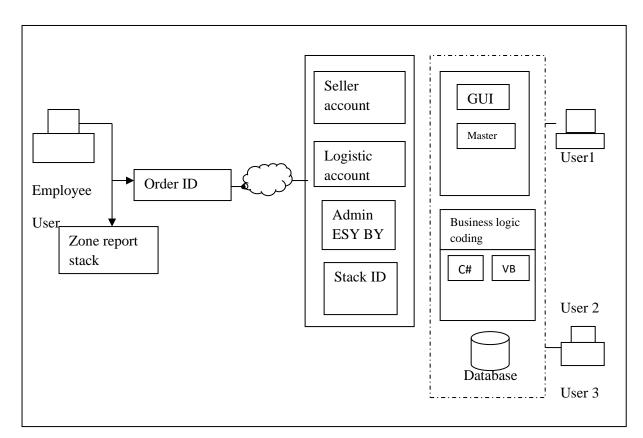


Fig 4.1: architecture diagram for ESYBY format.

This architecture has user type of employee and the other hand side the customer user type. The instructions from the user are saved in the three tier architecture of GUI, business logic and database. The analysis report of the users processing are managed by the employee based on the one where the employee is assigned to work.

4.2 CONTEXT DIAGRAM

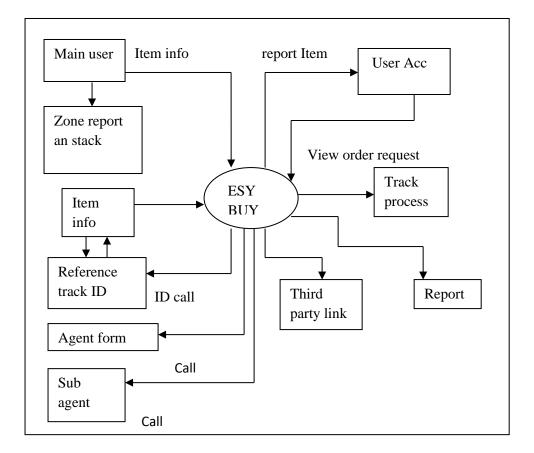


Fig 4.2: context diagram in the ESY BUY.

The developers create the context diagram to understand the operational objects in the ESY BUY project. And the input – output flow the operational objects. The operational flow of different objects in the area of user ordering, the item info the zone wise sale , the third party link used in the ESYBUY etc.

CHAPTER 5

DETAILED DESIGN

5.1 USE CASE DIAGRAM

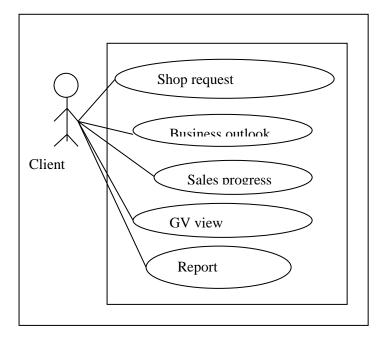


Fig 5.1.1: use case diagram of ESYBY client

The shop owner who register their show for he ESYBY through sales. This users work process is related to gathering the business outlook for their shop, make the sales based updates, the user input and review details in the grid view report etc. The Client can have access to the following data as follows like shop request, Business outlook, Sales Progress, GV view, Reports.

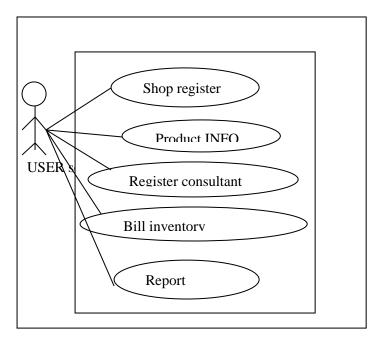


Fig 5.1.2: use case diagram Production Company.

The users need to update the product information for the ESYBY stock which is available for the billing inventory. The report over the total product included for the sales the report of the total sales made through the ESYBY are managed by the user seller.

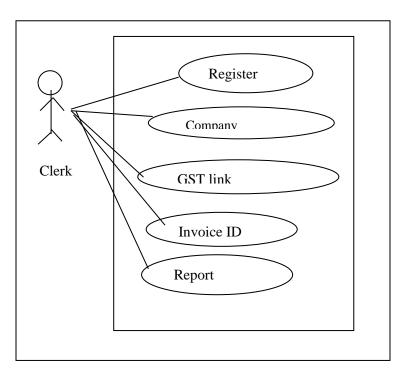


Fig 5.1.3: use case diagram for clerk for registering activities.

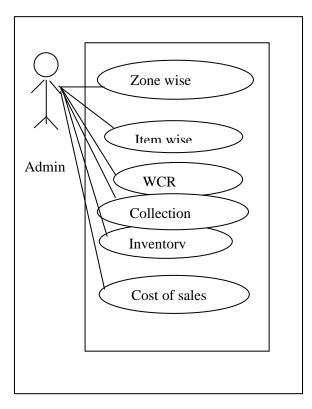


Fig 5.1.4: use case diagram for administrations activities.

The admin create the zone assignment for the shop and the records are saved in the ESYBY. The product and the zone process will be moved to perform the advance e commerce based formula like WCR, collection ratios, the inventory ratio etc. The cost of sales is the value report generated from the E commerce sales with data integration with advance formula.

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5.2: SEQUENCE DIAGRAM

A sequence diagram is a type of interaction diagram that it describes how and in what order a set of items works collectively. These diagrams are used to is familiar with the requirement for a new device or to an present machine.

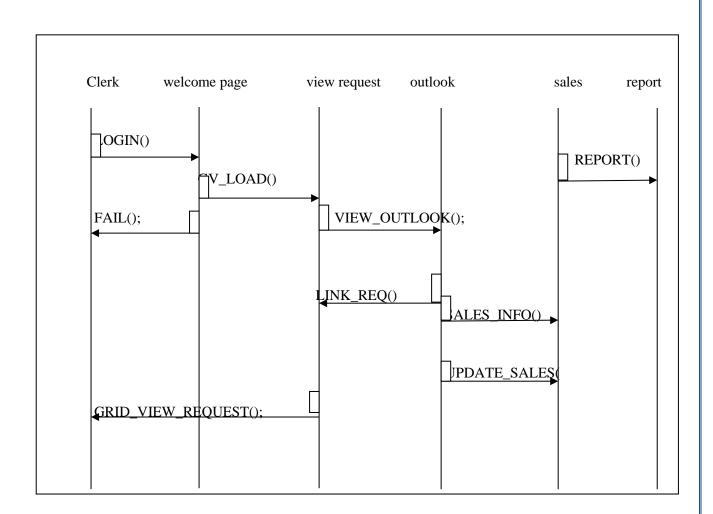


Fig 5.2.1: sequence diagram of ESYBY clerk

The employees of ESYBY company who are work assigned to make sales activities with the applications. These users can view request received from the other shop to work with ESYBY and the further steps needed for the sales are managed and outlook management are created by the these clerks.

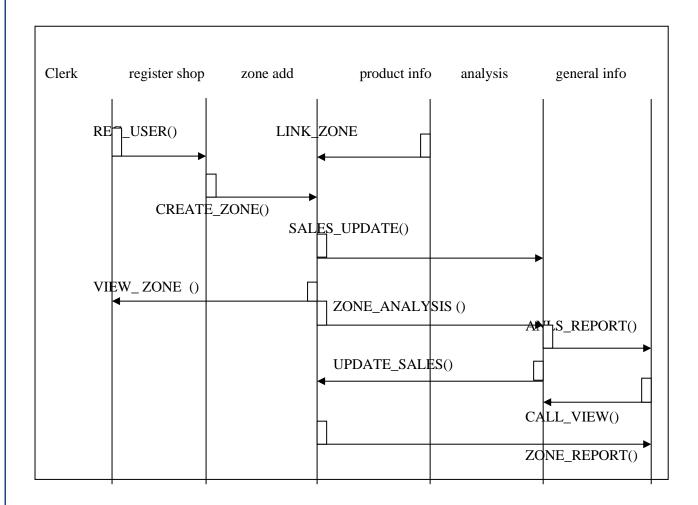


Fig 5.2.2: sequence for the shop registration and analysis.

The clerk will register the shop and add the zone where the shop is located. There will be more than one shop in the zone the sales based analysis and the product sales for each zone are analysed in the ESYBY application. the report is generated for the product for the shop and the area wise processing.

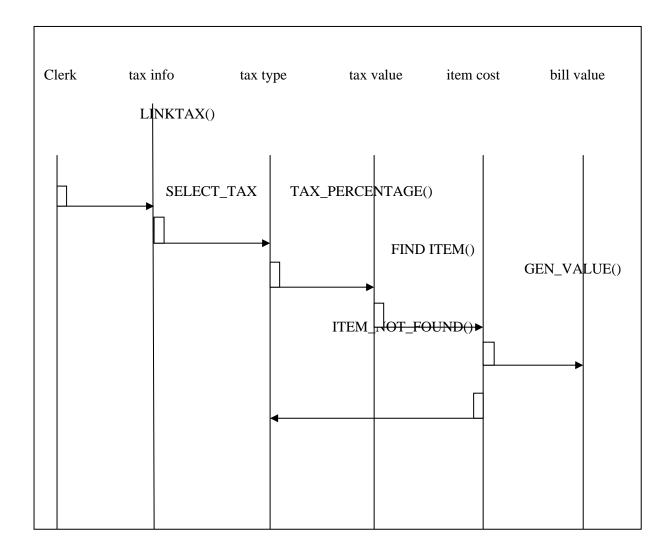


Fig 5.2.3: sequence diagram in auto generation of tax.

When the user select the product for the online purchase the application will auto call the tax info where multiple tax details are loaded and for the each selected product the tax type is initiated and the value from the tax type will called for finalising the tax percentage. This percentage will be added to the product and will be added to the product in the bill for the net amount value generation.

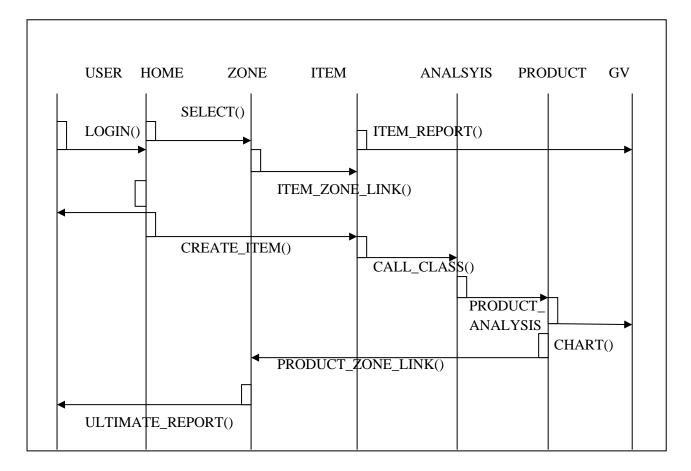


Fig 5.2.4: sequence for further product analysis

After the report and the zone wise process are created the user can take instruction to increase the sales of the product. If the a product A is fund better sales in the zone north the instruction to promote the product A in the area north and update the sales in the area with other product linking etc are managed in this user category.

5.3 COLLABORATION DIAGRAM

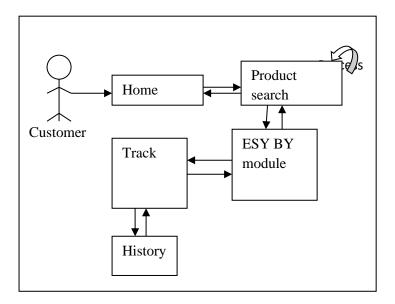


Fig 5.3.1: collaboration diagram of product search in ESYBY

In the above diagram the Customer can be follows as Home in home he can view the all details it is like dashboard in that he can make a product search and from that product search he can go to EasyBuy model from that easybuy model he can track the Product details.

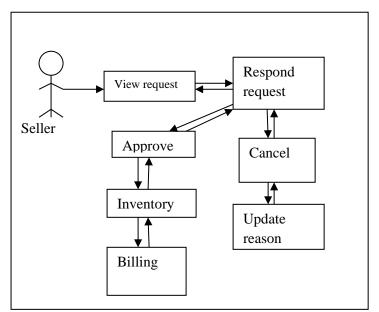


Fig 5.3.2: collaboration diagram in sellers activity in ESYBY

In the above diagram here mainly focuses on Seller here seller can view request and can respond to it and if the stock is there he can approve the order and he can be moved to the billing part and also he can cancel the request if the order is not n stock and update the reason to customer like the stock is not available it will be available soon.

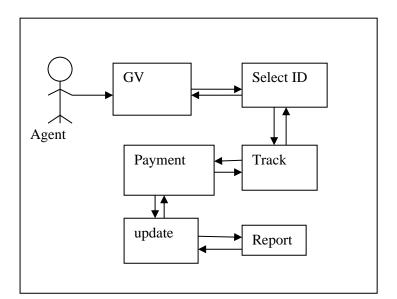


Fig 5.3.3: collaboration diagram payment report and updates in ESYBY

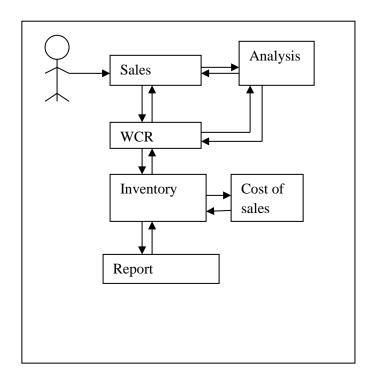


Fig 5.3.4: collaboration diagram in ESYBY inventory management. In the above diagram here Inventory management has been discussed how the sales will be analysed ,as from that it will be passed to WCR from that it will go to the inventory in this inventory all the cost of sales will be updated in the final report.

5.4 ACTIVITY DIAGRAM

Activity Diagram describes the Dynamic representation of the system that shows the graphical representation how the system actually works.

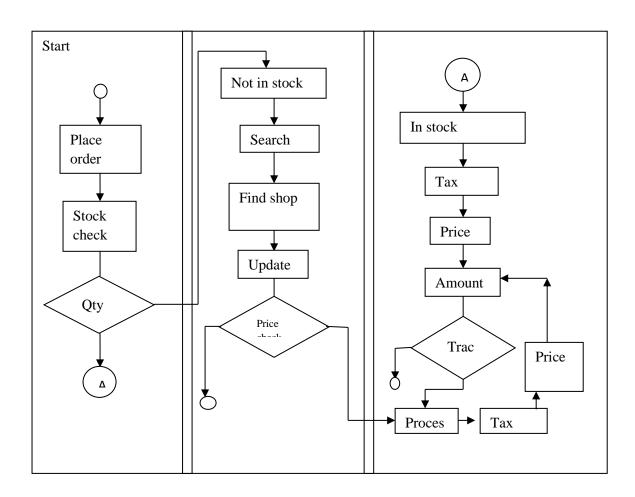


Fig 5.4.1: activity diagram of buyer and sales activity.

When a user make an item request the application will search for the shop where all the items are available. If items are found the tax and billing activities are called and ESYBY sales process are called. If the item is not found in user selected shop the application will check the other shop where all the items are available and process are made.

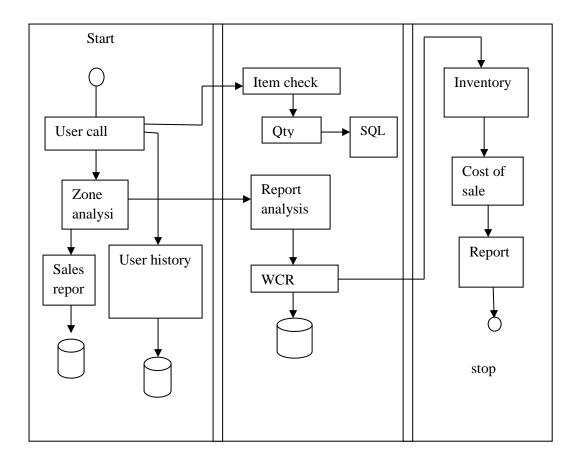


Fig 5.4.2: activity diagram in sales activities

When the overall sales activities are done the application will call the analysis of zone and the product with each users account. The total sales and the ESY base advanced E commerce formulae is carried to each and every users uses the ESYBY application and the sales report and the user history are saved in the centralised database and used in the future reference of the E commerce sales analysis.

Name of the table: RT_ESB_AZ_BUSINESS_OUTLOOK

Item name	Particular data type	Comments
RT_ESB_AZ_ID,	INT	PRIMARY KEY,

RT_ESB_AZ_USER_NAME	VARCHAR(17),	NA
RT_ESB_AZ_MOBILE_REG	VARCHAR(15),	NA
RT_ESB_AZ_USERVISIT	VARCHAR(6),	NA
RT_ESB_AZ_LOCTION	VARCHAR(56)	NA

	Column Name	Data Type	Allow Nulls
N	RT_ESB_AZ_ID	int	
	RT_ESB_AZ_USER_NAME	varchar(17)	✓
	RT_ESB_AZ_MOBILE_REG	varchar(15)	✓
	RT_ESB_AZ_USERVISIT	varchar(6)	✓
	RT_ESB_AZ_LOCTION	varchar(56)	✓

Name of the table: $\tt RT_ESB_AZ_CUM_INFO$

Item name	Particular data type	Comments
RT_ESB_AZ_ID	INT	PRIMARY KEY,
RT_ESB_AZ_CLNT_INFO	CHAR(41)	NA
RT_ESB_AZ_TRADE_NAME	CHAR (83)	NA
RT_ESB_AZ_INCHARGE	CHAR(83)	NA

	Column Name	Data Type	Allow Nulls
₽₿	RT_ESB_AZ_ID	int	
	RT_ESB_AZ_CLNT_INFO	char(41)	✓
	RT_ESB_AZ_TRADE_NAME	char(83)	✓
	RT_ESB_AZ_INCHARGE	char(83)	✓

Name of the table: $\tt RT_ESB_AZ_REG$

Item name	Particular data type	Comments
RT_ESB_AZ_ID	INT	PRIMARY KEY,
RT_ESB_AZ_SHOPLOGIN	CHAR (41)	NA
RT_ESB_AZ_USER_ID	CHAR(8)	NA
RT_ESB_AZ_PASSWORD	CHAR(8)	NA

	Column Name	Data Type	Allow Nulls
N	RT_ESB_AZ_ID	int	
	RT_ESB_AZ_SHOPLOGIN	char(41)	✓
	RT_ESB_AZ_USER_ID	char(8)	<
	RT_ESB_AZ_PASSWORD	char(8)	✓

Name of the table: $\tt RT_ESB_AZ_SHOP_REG$

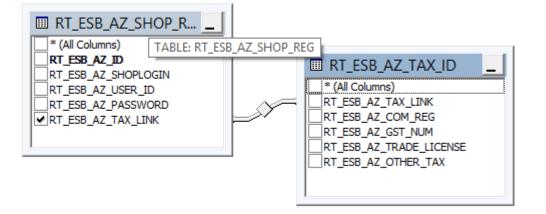
Item name	Particular data type	Comments
RT_ESB_AZ_ID	INT	PRIMARY KEY,
RT_ESB_AZ_SHOPLOGIN	CHAR(41),	NA
RT_ESB_AZ_USER_ID	CHAR(8),	NA
RT_ESB_AZ_PASSWORD	CHAR(8),	NA
RT_ESB_AZ_TAX_LINK	CHAR(2)	NA

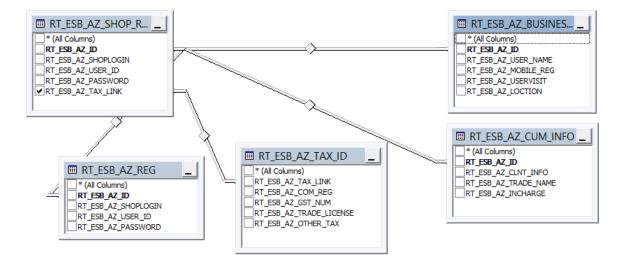
	Column Name	Data Type	Allow Nulls
₽ ₿	RT_ESB_AZ_ID	int	
	RT_ESB_AZ_SHOPLOGIN	char(41)	✓
	RT_ESB_AZ_USER_ID	char(8)	✓
	RT_ESB_AZ_PASSWORD	char(8)	✓
	RT_ESB_AZ_TAX_LINK	char(2)	✓

Name of the table: DBO.RT_ESB_AZ_TAX_ID

Item name	Particular data type	Comments
RT_ESB_AZ_TAX_LINK	CHAR(2),	NA
RT_ESB_AZ_COM_REG	VARCHAR(21),	NA
RT_ESB_AZ_GST_NUM	VARCHAR(12),	NA
RT_ESB_AZ_TRADE_LICENSE	CHAR(15),	NA
RT_ESB_AZ_OTHER_TAX	VARCHAR (21)	NA

	Column Name	Data Type	Allow Nulls
►	RT_ESB_AZ_TAX_LINK	char(2)	✓
	RT_ESB_AZ_COM_REG	varchar(21)	✓
	RT_ESB_AZ_GST_NUM	varchar(12)	✓
	RT_ESB_AZ_TRADE_LICENSE	char(15)	✓
	RT_ESB_AZ_OTHER_TAX	varchar(21)	✓





5.4 :ER Diagrams

ER diagrams is the entity relationship diagram that describes the inter relationship diagram that has structure of the Database.

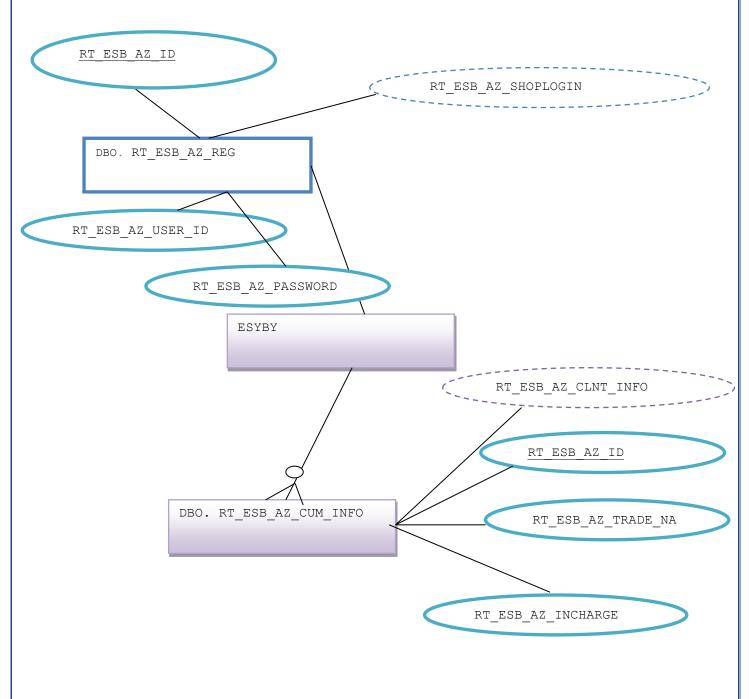
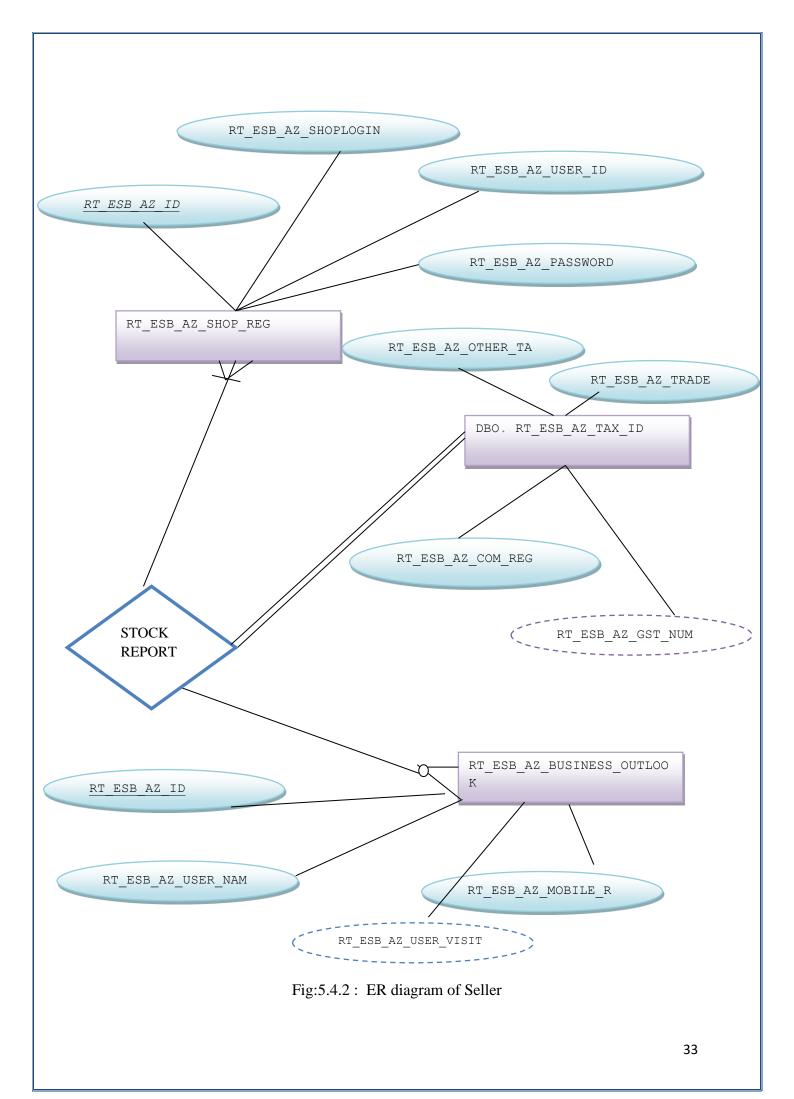


Fig:5.4.1 : ER diagram of EasyBuy Client



	CHAPTER 6	
	IMPLEMENTATION	
6.1 SCREENSHOT		
🕲 Буу Ву 🗙 +		- a ×
← → C △ ③ localhost:52935/loginpage.aspx		아 ☆ O :
	ESY BY	
	User Name clerk15 Password SUBMIT CANCEL	

Fig 6.1 the clerk with user ID clerk 15 log in. The user ID is auto generated by the system and the password is created by the admin for the clerks of the ESYBY. These data are very Credentials.

${igstar}$ Esy By ${\leftarrow} {\rightarrow} {f C} {igstar} {igstar} {igstar}$	X + D localhost:52935/Welcomepage.	aspx				- 0 ×
			ESY BY			
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	LOGOUT	
<u>e</u> = 1	🖉 🧕 🕷 🥠				2 - 16	(1) .ati 0.55 PM 07-04-2020

Fig 6.2 the welcome page for the clerk 15 in the ESYBY dash board. Contains Home page, Shop request, Business Outlook, Sales progression and Logout.

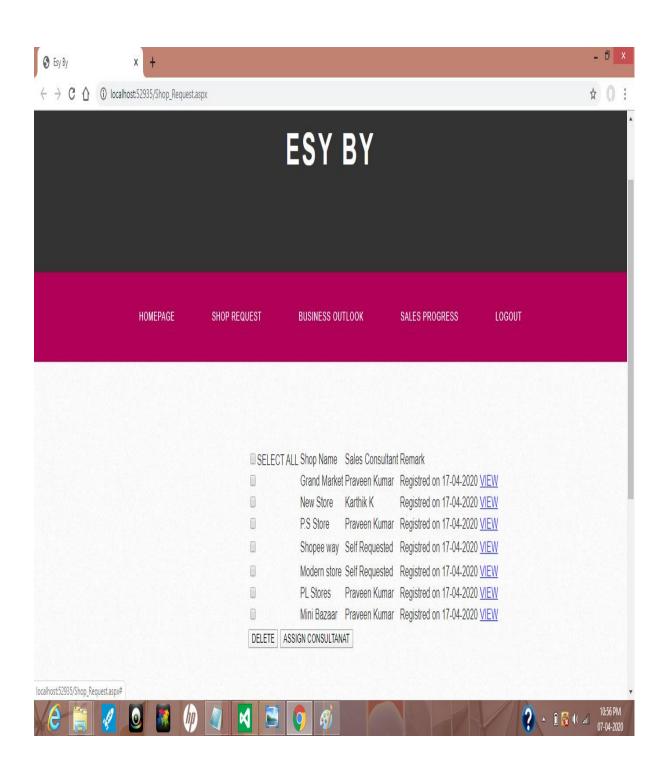


Fig 6.3 the clerk can view the request received from the different shop to be active members of the ESYBY. The details are view by the clerk and approve after the verification done for the shop registration and GST activities.

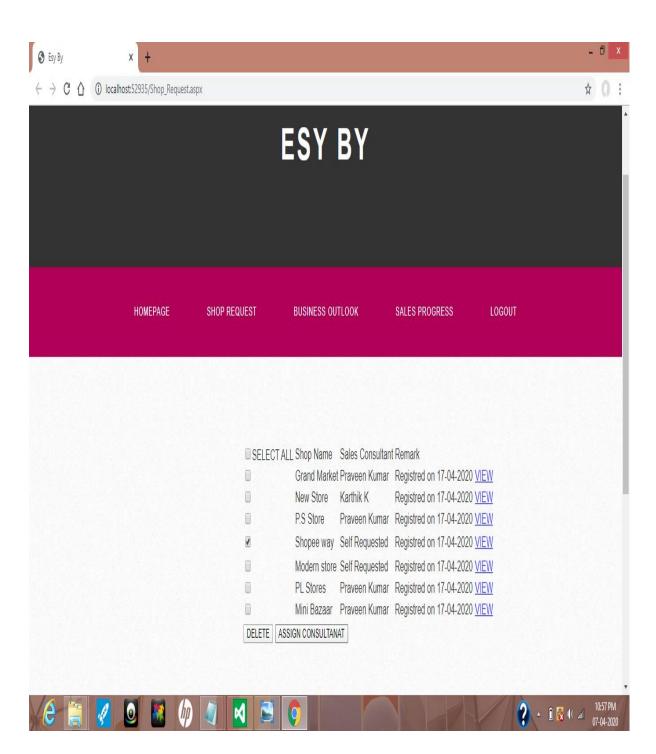


Fig 6.4: From the list of request the clerk can select and view and go with approve or reject request option.

③ Esy By ← → C △ ③	× + localhost:52935/Assign%20Con	sultant.aspx				- ª \$ ()
			ESY BY			
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	Logout	
			ne Shopee way nt NameSELECT • ntment <u>Calender</u>			
6	2 0 💽 🕼	INSERT	UPDATE REPORT DELETE) , i	🛐 (t) .ail 10:58 PM 07-04-202

Fig 6.5: the selected shop details are short listed. The clerk need to select the consultant to visit the shop and go with registration work. This verification is needed to avoid fraud activities like sales without registered shop or shop do not process the tax submit etc.

 € Esy By ← → C △ ① localh 	× + nost:52935/Assign%20Consu	ltant.aspx	ESY BY			- □ × ☆ () :
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	LOGOUT	
			t Name Praveen Kumar ▼ ≤ Mon Tri <u>30</u> 3 6 1 13 1 20 1 20 1 20 1 27 2	April 2020 ≥ ue Wed Thu Fri Sat Sun 1 2 3 4 5 I 1 2 3 4 5 Z 8 9 10 11 12 I 15 16 17 18 19 April 2 23 24 25 26 I 5 6 7 8 9 10		
javascript_doPostBack/ctl005Content	tPlaceHolder1\$Calendar1','7408')				2 . 11	💱 (I)I 10:59 PM 07-04-2020

Fig 6.6 . select consultant name and the date for the shop appointment.

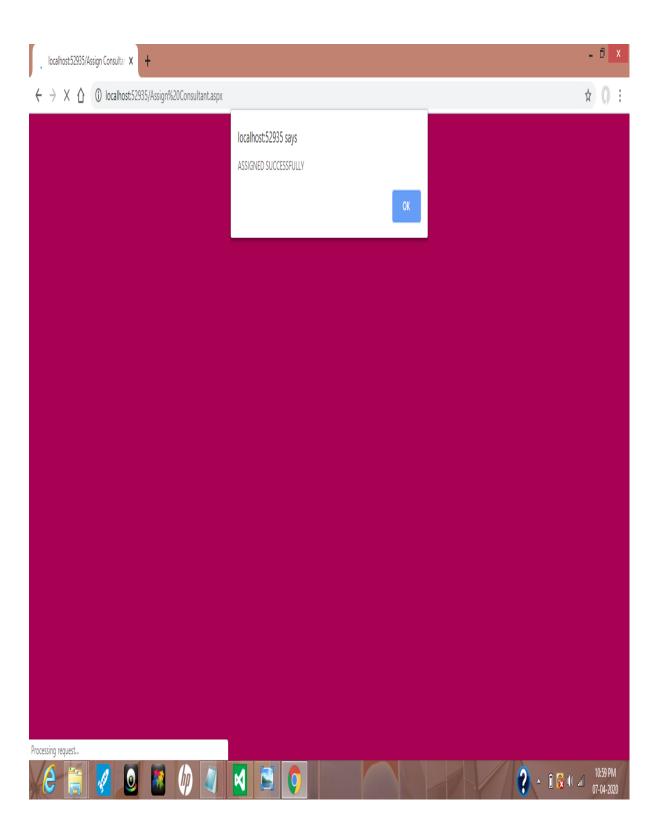


Fig 6.7: the consultant assigned successfully message loaded.

n.aspx		Q & ()
Create Login Access for the shop us	sers	
User ID		
Password		
Re type Password		
Create Cancel		
The second se	istomer information	
Esy By Cutomer contact Number		
Customer name Trading Name		
Store Name		
Company Registration Number		
GST Number		
Suburb		
Postal Code		
Contact Number		
Shop Address	Permenent Address	
Building Number	Building Number	
Street Address	Street Address	
City Province	City Province	
Land mark	Land mark	
Special instructions		
	//	
	_	
INSERT UPDATE REPORT DELE	TE	

Fig 6.8 . After the successful verification of shop the clerk needed to register the shop details in the ESYBY server and the details will be available for the other E commerce activities

Create Login Access for the sho	p users	
User ID way12		
Password ***** Re type Password *****		
Create Can	ICE	
	Customer information	
Esy By Cutomer contact Numbe	r 8965332456	
Customer name	Sreenivas	
Trading Name	Metro	
Store Name	Shopee Way	
Company Registration Number GST Number	SFG/1262/JKOP/896/98 SGHJ5966UOBV7856	
Suburb	North	_
Postal Code	560040	
Contact Number	8965332456	
Shop Address	Permenent Address	
Building Number Shop No56	Building Number	
Street Address 3rd cross	Street Address	
City Province Hebbal	City Province	
Land mark SBI bank	Land mark	
Special instructions		
	/	
INSERT UPDATE REPORT D		

Fig 6.9 : the form for the registration page is added with clerk user inserted data. In this registration page all the data should be clearly filled so that the analysis of the data can be easily calculated according the shop

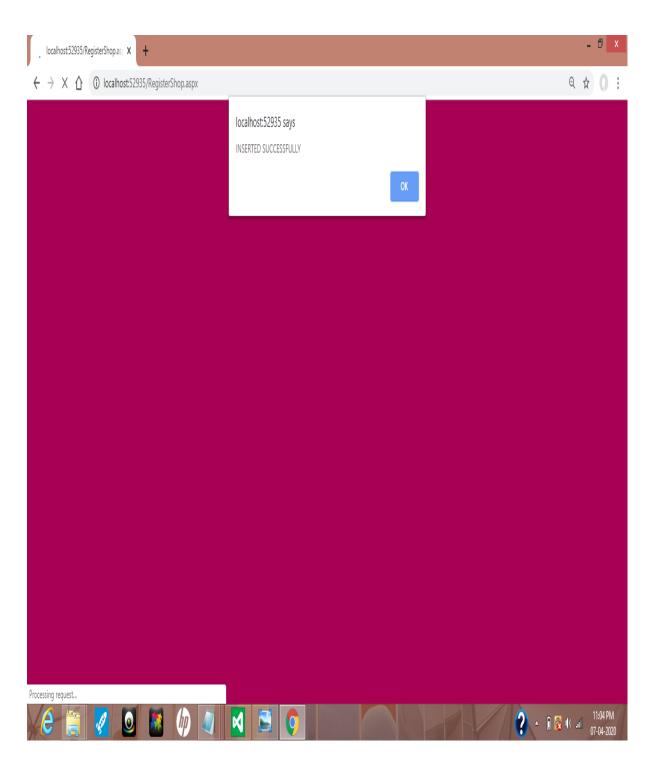


Fig 6.10 : shop details are inserted in the SQL server successfully. Since the data is centrally connected all the shop saved and the stock details in the server will be accessible for other E commerce activity

HONEDAGE		FOT DUO						
HOMEPAGE	SHOP REQU	EST BUS	INESS OUTLOC	OK SALES PROC	GRESS LOGOUT			
	E	Enter User name or	Register numb	er	SEARCH			
		# User Name	Contact number	Mobile verification status	Number of visits Location Near	shop		
		1 Raj	9842*****	Approved	24 Hebbal	<u>26</u>		
		2 Sam	8623*****	Pending	1 Jayanagar	35		
		2 Sam 3 Ram	8623****** 9756*****	Pending Approved	1 Jayanagar 18 Kalyan Na	<u>35</u> <u>33</u>		
						<u>35</u> <u>33</u> <u>7</u>	5	
		3 Ram	9756*****	Approved	18 Kalyan Na	26 35 33 7 35	\$	
		3 Ram 4 Joe	9756***** 8456***** 8563***** 9415*****	Approved Approved	18 Kalyan Na 12 RR Nagar	35 33 7 35 35 35	\$	
		3 Ram 4 Joe 5 Nidhi	9756***** 8456***** 8563*****	Approved Approved Approved	18 Kalyan Na 12 RR Nagar 14 Jayanagar	<u>35</u> <u>35</u>	\$	
		3 Ram 4 Joe 5 Nidhi 6 Anu	9756***** 8456***** 8563***** 9415*****	Approved Approved Approved Pending	18 Kalyan Na 12 RR Nagar 14 Jayanagar 1 BTM	35 33 7 35 35 26 7	\$	
		3 Ram 4 Joe 5 Nidhi 6 Anu 7 Vickey	9756***** 8456***** 8563***** 9415***** 9632*****	Approved Approved Approved Pending Approved	18 Kalyan Na 12 RR Nagar 14 Jayanagar 1 BTM 36 Hebbal	<u>35</u> <u>35</u>	\$	

Fig 6.11 : the page to see business outlook like total sales made through ESYBY(zone wise). The number of new shops located in the zone and near the selected zone are displayed in the link button.

		Shop Name Sample Shop 1	Contact number 9845632564	Sales made(COUNT) 21	Total sales ₹1,25,653.00	Zone South Zone	Message	
		Sample Shop 2		18	₹1,07,702.57		Message	
		Sample Shop 3		17	₹87,187.80	South Zone	Message	
		Sample Shop 4		15	₹89,752.20	South Zone	<u>Message</u>	
		Sample Shop 5		23	₹1,37,620.04		<u>Message</u>	
		Sample Shop 6		26	₹1,55,570.48		Message	
	RR/129	Sample Shop 7	9654789521	3	₹17,950.44	South Zone	<u>Message</u>	

Fig 6.12. when the user clicks the button the all seven shops in the zone will be displayed in the grid view. The details of latest updates can be send to the each shop from the ESYBY clerk can be done by clicking the link button message.

S Esy By	× +					- 0 ×
	calhost:52935/SalesProgress.a	spx				☆ () :
			ESY BY			
			EJIDI			
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	LOGOUT	
			ise Report se Report			
ê 🔋 🗸	0				2.	€ 🚱 (I) .al 11:11 PM 07-04-2020

Fig 6.13 : the application of ESYBY is coded with E commerce based advance algorithm for the business development. The clerk can view each report by the zone wise or by product wise report.

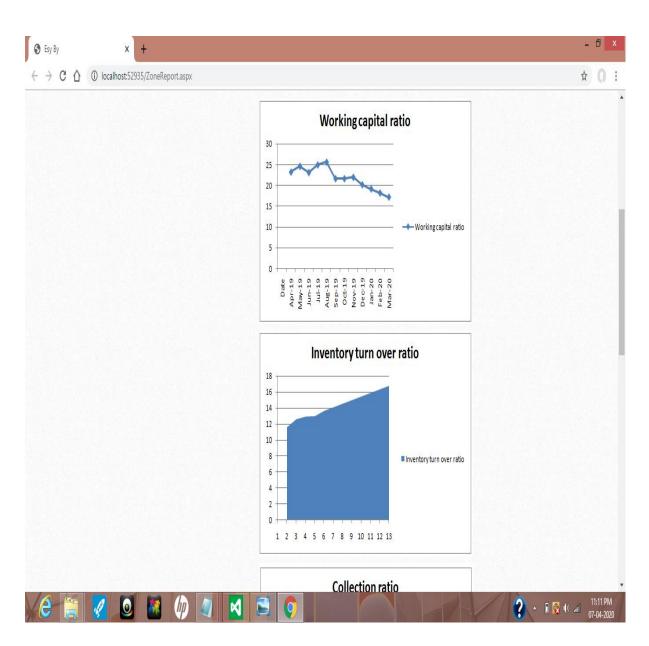


Fig 6.14 . report of working capital and inventory ratio analysis report

The working capital ratio shows total expense needed for item sales in the zone. If user spends more expense in the item manufacturing or expense in the cost of item storage to sale, the agent costs are called in WCR calculation. If the working capital ratio is less it shows better opportunity of the product.

Inventory turnover ratio is generate profit generated with efficient working capital planning. This image helps the business experts to make right decision over the selecting item and zone for the better sales report.

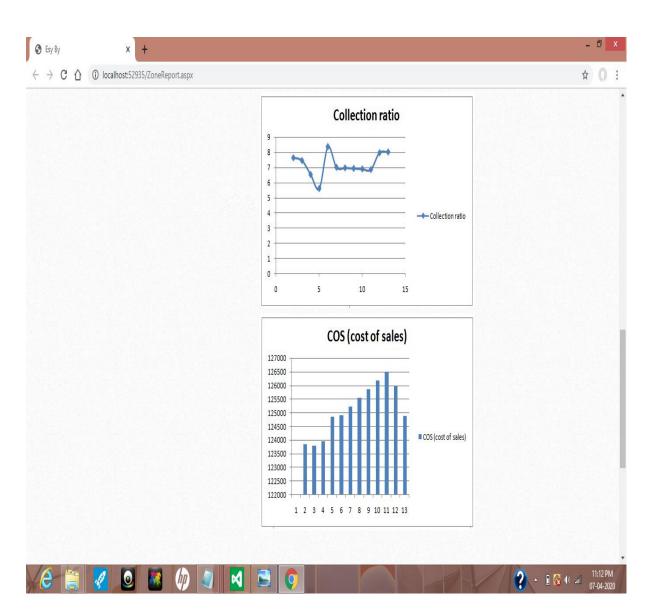


Fig 6.15 the collection ratio and cost of sales

Collection ratio is generated for the vender and seller business activity. When the large scale sales are made the amount collected will be made in one more instalments. If any product remains not sold for many months the amount payable will also gets delayed. So collection ratio will help the business managers to understand and make the right decision by avoiding those products from the main stream sales.

S Esy By ↔ C △ ○	× + localhost:52935/Item_suggest	ion.aspx				☆ ()
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	LOGOUT	
		Select Pro	duct Select 🔹 SUBMIT			
		Product N	here and the second sec			
		Product C				
		Total Item				
			More Sales			
		Zone with	Less Sales Updates Zone with More Item			
		Renlac	e zone with less sales with other product	_		
			Find discount and sales			

Fig 6.16: view report for single item. Here we can see the complete report of a single item that has been sold and also we can see in which Zone it has been sold more.

🕑 Esy By	× +					- 8
< → C ① 0	localhost:52935/ltem_suggest	.on.aspx				\$ 0
	HOMEPAGE	SHOP REQUEST	BUSINESS OUTLOOK	SALES PROGRESS	LOGOUT	
		Select Pro	duct Bislery 25 ltr 🔻 SUBMIT			
		Product N		iltr		
		Product C				
		Total Item	Sold 1,245			
		Zone with	More Sales North			
		Zone with	Less Sales South			
			Updates Zone with More Item			
		Replac	e zone with less sales with other prod	uct		
			Find discount and sales			
		1_1.01	mining with customer purchase choice			

Fig 6.17 select the item form the drop down list and the ESYBY application display the details like total sales made, zone where more sales and the zone with less sales created.

CHAPTER 7

SOFTWARE TESTING

7.1 TESTING

Testing is the technique of comparing a machine with the motive to find whether it satisfies the particular requirement as in line with the consumer fact

Test case	Test company registration
Page to test	Company info.aspx
Version of testing	1.0
Parameters to test	5

Text field	Parameter	Values	Test status
TXT_RT_ESB_AZ_TAX_LINK	@RT_ESB_AZ_TAX_LINK	1	Pending
TXT_RT_ESB_AZ_COM_REG	@RT_ESB_AZ_COM_REG	111	Pending
TXT_RT_ESB_AZ_GST_NUM	@RT_ESB_AZ_GST_NUM	111-111	Pending
TXT_RT_ESB_AZ_TRADE_LICENSE	@RT_ESB_AZ_TRADE_LICENSE	11	Pending
TXT_RT_ESB_AZ_OTHER_TAX	@RT_ESB_AZ_OTHER_TAX	0	Pending

Priority 2 STEPS SUMMARY TESTED BACKLOG ITEMS LINKS ATTACHMENTS ASSOCIATED AUTOMATION 🖋 Change steps 📲 Insert step 🎽 🌴 🤞 🏂 Insert shared steps 🍇 🥐 🎁 Insert parameter 🗍 в/ш - А 1 Action Expected Result . @RT_ESB_AZ_TAX_LINK 1 = -2. @RT_ESB_AZ_COM_REG 111 = @RT_ESB_AZ_GST_NUM
 @RT_ESB_AZ_TRADE_LICENSE = 111-111 = 11 . @RT_ESB_AZ_OTHER_TAX = 0 - 6 -17 🎦 Delete iteration 🕮 Rename parameter 🚷 Delete parameter

→ Play ▼ ■ 11 ♥ 除 ▼ 10 ▼ □ 0 ™ @RT ESB AZ TAX LINK	Ø •
@RT_ESB_AZ_COM_REG	Ø •
@RT_ESB_AZ_GST_NUM	Ø •
@RT_ESB_AZ_TRADE_LICENSE	Ø -
@RT_ESB_AZ_OTHER_TAX	Ø -
	1
End test	
End test	

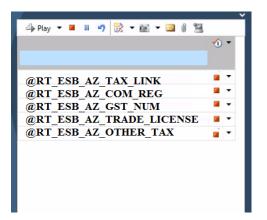
Parameter	Test output	Status
@RT_ESB_AZ_TAX_LINK	Success when	Success
	<pre>@RT_ESB_AZ_TAX_LINK gets</pre>	
	the value 1	
@RT_ESB_AZ_COM_REG	Success when	Success
	@RT_ESB_AZ_COM_REG	
	gets the value 111	
@RT_ESB_AZ_GST_NUM	Success when	Success
	@RT_ESB_AZ_GST_NUM	
	gets the value 111-111	
@RT_ESB_AZ_TRADE_LICENSE	Success when	Success
	<pre>@RT_ESB_AZ_TRADE_LICEN</pre>	
	SE gets the value 11	
@RT_ESB_AZ_OTHER_TAX	Success when	Success
	@RT_ESB_AZ_OTHER_TAX	
	gets the value 0	

Test case	Test company registration
Page to test	Company info.aspx
Version of testing	2.0
Parameters to test	5

Text field	Parameter	Values	Test status
TXT_RT_ESB_AZ_TAX_LINK	@RT_ESB_AZ_TAX_LINK	NULL	Pending
TXT_RT_ESB_AZ_COM_REG	@RT_ESB_AZ_COM_REG	NULL	Pending
TXT_RT_ESB_AZ_GST_NUM	@RT_ESB_AZ_GST_NUM	NULL	Pending
TXT_RT_ESB_AZ_TRADE_LICENSE	<pre>@RT_ESB_AZ_TRADE_LICENSE</pre>	NULL	Pending
TXT_RT_ESB_AZ_OTHER_TAX	@RT_ESB_AZ_OTHER_TAX	NULL	Pending

STATUS					DETAILS		
ssigned 1	To Adam Barr				Automation status	Not Automated	
itate	Design				Area	FabrikamFiber	
riority	2						
TEPS	SUMMARY	TESTED BACKLOG ITEMS	LINKS AT	TACHMENTS	ASSOCIATED AUTOMA	TION	
🖋 Cha	ange steps 🛯 🛋 Ir	nsert step 🕍 🔶 🔶	🍇 Insert shared	l steps 🕍 🤿	tel Insert parameter	0	
в /	<u>U</u>	A					
1	Action			Expected Resu	lt		
. 41 1.	@RT_ES	B_AZ_TAX_LIN	K	=	NULL		
- 2	aRT ES	B_AZ_COM_RE	G	=	NULL		
	ORT FS	B_AZ_GST_NU	M	=	NULL		
	CLUI LO						
- 3.			LICENSE	=	NULL		
3. 4. العر	@RT_ES	B_AZ_TRADE_I			NULL		
3. 4. العر	@RT_ES @RT_ES						

🎦 Delete iteration 🕅 Rename parameter 🦉 Delete parameter



Parameter	Test output	Status
@RT_ESB_AZ_TAX_LINK	Failed when	Success
	<pre>@RT_ESB_AZ_TAX_LINK gets</pre>	
	the value 1	
@RT_ESB_AZ_COM_REG	Failed when	Success
	@RT_ESB_AZ_COM_REG	
	gets the value 111	
@RT_ESB_AZ_GST_NUM	Failed when	Success
	@RT_ESB_AZ_GST_NUM	
	gets the value 111-111	
@RT_ESB_AZ_TRADE_LICENSE	Failed when	Success
	<pre>@RT_ESB_AZ_TRADE_LICEN</pre>	
	SE gets the value 11	
@RT_ESB_AZ_OTHER_TAX	Failed when	Success
	@RT_ESB_AZ_OTHER_TAX	
	gets the value 0	

CHAPTER 8 CONCLUSION

This application is developed with profile of make the small scale business more reachable for the consumers. Identifying the requirement in the domain to be improved and also in the software level updates this application is engineered. The activities in the domain has included the zone wise analysis, identifying the area business scope that is requirement in the commercial area and requirement in his residential area will be different. So the application will generate the potential item for the each area and promote the shops to sell those items in the zone. And when we take software level updates has high end accounting formula used for the software progress.

Right here the simple idea is that any small enterprise can easily begin a store to sell things without delay Across our application .This is important right now due to the fact so many small commercial enterprise are Transferring online to deal at once with customers and also to cope with financial fallout on this Situation.

As humans are being told to stay home, physical storefronts are having a tough time staying

Open and hundreds of people are dropping jobs

These Application is built with very easy User Interaction and can be easily understood by any person and these apps have native and having many features like Sales Analysis of a particular shop by using this sales analysis we can easily boost up the sales and make profit.

CHAPTER 9 FUTURE ENHANCEMENT

In the current application the accounting formulae for expense and indirect expense are used because the product sales in the ESYBY are only the finished goods. And there are more opportunity to user high end accounting formulae for short term cash flow management quick ratio analysis for the E business operations.

But in the proposed system the application will be using the manufacturing units supply with raw material control too which opens the possibility of advanced accounting usages.

This application has the used ratio analysis for the final product sales. So in the future if the application uses the raw material based semi item to manufacturing units and also control the sales activities of manufactured product the expense based accounting formulae will not be sufficient to manage the domain level operations.

The new advanced accounting for the production control like the raw material tax and CHA management, the prime cost identifier the opening work in progress management etc will be added

CHAPTER 10

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- The pragmatic programmer Andrew Hunt and David Thomas
- Agile Software Development principle's, patterns, and practises Robert C Martin
- Domain Specific Languages Martin Fowler
- Continuous Delivery Martin Fowler

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- <u>www.w3schools.com</u>
- <u>www.geeksforgeeks.com</u>