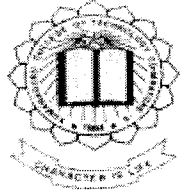
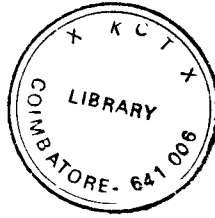
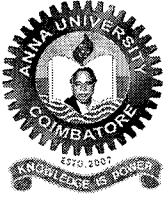


k-3246



PURCHASE AUTOMATOR SYSTEM

PROJECT REPORT

Submitted By

K.PRABHAVATHI

Register No.: 0720300029

*in partial fulfillment for the award of the degree
of*

MASTER OF COMPUTER APPLICATIONS

in

COMPUTER APPLICATIONS

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

May 2010

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

COIMBATORE – 641 006.

Department of Computer Applications

PROJECT WORK

MAY 2010

This is to certify that the project entitled
PURCHASE AUTOMATOR SYSTEM

is the bonafide record of project work done by

K.PRABHAVATHI

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of MCA (Computer Applications) during the year 2009-2010.

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17/5/10

Project Guide

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Head of the Department

Submitted for the Project Viva-Voce examination held on 17.5.2010

[Signature]
17/5/10

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DECLARATION

I affirm that the project work titled **PURCHASE AUTOMATOR SYSTEM** being submitted in partial fulfilment for the award of **MASTER OF COMPUTER APPLICATIONS** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

K. Prabhavathi

(Signature of the Candidate)

K.Prabhavathi

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I certify that the declaration made above by the candidate is true

R. VANITHA
10/5/20

Signature of the Guide,

R. VANITHA
LECTORER

With Name & Designation



ROOTS INDUSTRIES INDIA LIMITED

RIL/HRD/3736/10

06.05.2010

PROJECT CERTIFICATE

This is to certify that **Ms.K.Prabhavathi, III MCA** student of **Kumaraguru College of Technology** has done a Project Work on **“Purchase Automator System”** done in our organization from **December 2009 to April 2010.**

for **ROOTS INDUSTRIES INDIA LIMITED**

**(KAVIDASAN)
DIRECTOR**

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ABSTRACT

“Purchase Automator System” is designed to aid the employees in the organization to automate the processes thereby reducing the consumption of man hours and increasing efficiency.

This Project handles all the needs of the organization right from the user specific logins to transactions. Purchase Automator System is an Intranet based application that can be accessed throughout the organization.

It is a specialized software application that provides timely management of information on the effects of transactions in the workplace. This project is designed using SQL Server 2005 as the back end and ASP.NET as the front end tool.

This project can be hands on tool in the commercial organizations where there is huge data to be processed every day and interaction between different working groups of the organization for taking crucial decisions, and a desire to have comprehensive information available more quickly in order to improve internal administration, planning and processing.

In view of the fact that the versatility and speed is growing to be the most important factor of any system, the need of any such system comes into the picture. Computerized system possesses these properties and it is very useful. All the above criteria are met in this project to reduce all the uncertainty.

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CHAPTER 1

INTRODUCTION

1.1 ORGANISATION PROFILE

ROOTS INDUSTRIES LTD. is a leading manufacturer of HORNS in India and the 11th largest Horn Manufacturing Company in the world. Headquartered in Coimbatore, India, ROOTS has been a dominant player in the manufacture of Horns and other products like Castings and Industrial Cleaning Machines. Since its establishment in 1970, ROOTS has had a vision and commitment to produce and deliver quality products adhering to International Standards.

With a strong innovative base and commitment to Quality, Roots Industries Limited has occupied a key position in both international and domestic market as suppliers to leading OEMs and after market. Similar to products, Roots has leading edge over competitors on strong quality system base. Now, RIL is the first Indian Company and first horn manufacturing company in the world to get ISO/TS 16949 certification based on effective implementation of QS 9000 and VDA 6.1 system requirement earlier. Roots' vision is to become a world class company manufacturing world class product, excelling in human relation.

Quality Policy

ROOTS is committed to manufacture customer-centric and technology-driven products on par with international quality standards. For example, the horns manufactured undergo a rigorous life-cycle test and are subjected to an endurance of over 200,000 cycles of performance while the industry norm requires only 100,000.

What's more, Roots believes in a quality culture that goes beyond just products. Equal emphasis is given to quality in human relation and quality in service. ROOTS in its journey towards Total Quality Management have reached important milestones: ISO 9001, QS 9000, VDA 6.1, ISO/TS 16949 and ISO 14001 Certification, presently in the process of obtaining NABL accreditation for our Metrology lab. The Group's TQM policy has a well-integrated Quality Circle

Mission

We will stand technologically ahead of others to deliver world-class innovative products useful to our customer. ROOTS Industries Limited has entered into technical collaboration with Robert Bosch, South Africa to further enhance into Technical competence. ROOTS vision is to become a world class company the manufacturing world class product , excelling in human relation.

The popular products of roots are:

1. Electronic Horns
2. Air Horns, Switches Controllers
3. Cleaning Machines
4. Plastic components
5. Dies, Tools, Jigs&Fixtures

1.2 OBJECTIVE

The “PURCHASE AUTOMATOR SYSTEM “is a system that provides a place for those businesses to purchase their inventories at a reasonable price. This software designed to assist in the process of purchasing goods. The project is fully automating the requisition to reconciliation process and reduces paper piles.

It captures a complete trail of all purchasing related activity and track materials once they are purchased. The main objective of the Purchase Automator System is to computerize the manual work of transactions and production thereby ensuring consistent data.

CHAPTER 2

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

The various aspects of the existing system are thoroughly analyzed and the need for the proposed system is taken into account. In general the existing system is developed using visual basic. Existing system is having lot of drawbacks.

2.1.1 Drawbacks

- Time Consuming manipulations.
- Searching and verifying data are time consuming.
- Simultaneous data entry is not possible.
- Many files have to be maintained to record the daily transactions.
- Very Expensive.
- Less Efficient in accessing Data.
- Consumes lot of man power.
- Inconsistent updates.

2.2 PROPOSED SYSTEM

The proposed system is developing after a detailed study about the requirement requested by user. Proposed system is an advanced computerized one, where all the limitations of previous system. The System can be used to automate the workflow of data maintenance and transactions. The more option gives a clear picture to the end user as what actions to be performed. It provides multiuser accessibility, excellent updating facilities as per needs.

2.2.1 Advantages

- It is highly interactive and user friendly.
- Quick and any time access.
- Accurate and provides up-to-date information.
- Very good at repeated calculations
- Simultaneous data entry is possible.
- Storage and retrieval of data is easier.
- Cost Effective.
- Record maintenance is made easy and simple.
- Views based on the user type.
- Less time consumption.
- Consistent updates.

2.3 FEASIBILITY STUDY

Feasibility analysis is the measured for this application, Purchase Automator System to know how beneficial or practical the development of this application will be to the Organization technically, financially and operationally.

2.3.1 Economic Feasibility

The Economic feasibility of the application is measured to know the cost-effectiveness of the proposed system. The investment to be made in the proposed system is proved a good investment to the organization by returning benefits equal to or exceeding the cost incurred in developing the system.

The proposed benefits of the system outweigh the cost to be incurred during the system development. The system does not require any special hardware facilities since the system is going to be implemented in the company's internal website, it is economically feasible. It is only one time development expense. In addition capability of the system to incorporate future enhancements will improve the

2.3.2 Technical Feasibility

Technical Feasibility of the application is judged to measure of the practicality of the technical solution and the availability of technical resources and expertise. It centers on the existing computer system (hardware, software, etc.) and to what extent it can support the new addition.

The system is developed using ASP.NET and SQL Server as back end. The tools used for this project are:

- Microsoft Visual Studio 2005

This application is not required to take high load as the maximum users expected to be logged in simultaneously is 10 scalable up to 15. The client does not require a very fast system but is particular on ease of use as his staff is not tech-savvy. Hence the design of the application is simple to use with ease of navigation.

2.3.3 Operational Feasibility

The resources that are required to implement are already with the organization. The personnel of the organization already have exposure to computers. So the project is operationally feasible. The proposed system has found encouraging support from the management as it will be great use to them. The users of the organization are also committed to have the system operational as it will save time and reduce their workload.

CHAPTER 3 SYSTEM REQUIREMENTS

3.1 HARDWARE SPECIFICATION

To develop the project titled “Purchase Automator System” the following hardware specification is used.

Processor	INTEL Core 2 Duo
Hard Disk	160 GB
RAM	2GB

3.2 SOFTWARE SPECIFICATION

To develop the project titled “Purchase Automator System” the following software specification is used.

Operating System	Microsoft Windows Vista
IDE	Microsoft Visual Studio 2005
Front End	ASP.NET
Back End	SQL Server 2005
Internet Tool	HTML

CHAPTER 4

SOFTWARE DESCRIPTION

4.1 ASP.NET

ASP.NET is a server side scripting technology that enables scripts embedded in web pages to be executed by an Internet server. It is a Microsoft Technology. An ASP.NET file is just the same as an HTML file. It can contain HTML, XML, and scripts. Scripts in an ASP.NET file are executed on the server. An ASP.NET file has the file extension ".aspx". When a browser requests an HTML file, the server returns the file. The ASP.NET engine reads the file, line by line, and executes the scripts in the file. Finally, the ASP.NET file is returned to the browser as plain HTML

The Microsoft .NET Framework

The .NET Framework is the infrastructure for the Microsoft .NET platform. The .NET Framework is an environment for building, deploying, and running Web applications and Web Services. Microsoft's first server technology ASP (Active Server Pages), was a powerful and flexible "programming language". But it was too code oriented. It was not an application framework and not an enterprise development tool.

The .NET Framework consists of 3 main parts; Programming languages such as C#, Visual Basic and J# ; Server technologies and client technologies like ASP .NET, Windows Forms, Compact Framework for mobile solutions

Microsoft Visual Studio 2005

Microsoft Visual Studio is an Integrated Development Environment (IDE) from Microsoft. It can be used to develop console and graphical user interface applications along with Windows Forms applications, web sites, web applications, and web services in both native code together with managed code for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET

4.2 SQL SERVER

SQL Server 2005 is a relational model database server. It has defined an xml data type that could be used either as a data type in database columns or as literals in queries. XML columns can be associated with XSD schemas; XML data being stored is verified against the schema. XML is converted to an internal binary data type before being stored in the database. Specialized indexing methods were made available for XML data. XML data is queried using XQuery. CLR Integration was the main features with this edition where one could write SQL code as Managed Code these are those code which are being executed by CLR(Common Language Runtime).

4.3 FEATURES

The common language runtime manages memory; thread execution, code execution, code safety verification, compilation, and other system services these are all run on CLR.

- Security.
- Robustness.
- Productivity.
- Performance.

Security

The runtime enforces code access security. The security features of the runtime thus enable legitimate Internet-deployed software to be exceptionally feature rich. With regards to security, managed components are awarded varying degrees of trust, depending on a number of factors that include their origin to perform file-access operations, registry-access operations, or other sensitive functions.

Robustness

The runtime also enforces code robustness by implementing a strict type- and code-verification infrastructure called the common type system (CTS). The CTS ensures that all managed code is self-describing. The managed environment of the

time eliminates many common software issues

Productivity

The runtime also accelerates developer productivity. For example, programmers can write applications in their development language of choice, yet take full advantage of the runtime, the class library, and components written in other languages by other developers.

Performance

The runtime is designed to enhance performance. Although the common language runtime provides many standard runtime services, managed code is never interpreted. A feature called just-in-time (JIT) compiling enables all managed code to run in the native machine language of the system on which it is executing. Finally, the runtime can be hosted by high-performance, server-side applications, such as Microsoft® SQL Server™ and Internet Information Services (IIS).

CHAPTER 5

PROJECT DESCRIPTION

5.1 PROBLEM DEFINITION

The Purchase Automator System for Roots is used to reduce the increasing complexity in maintaining data pertaining to various aspects and also aid in planning. The system is accessible from all systems within the company premises. The Users can login with their respective user name and password to get access to the system and use the salient features based on their privileges.

OPERATIONS/USERS	Administrator	Supplier
Insert	✓	x
Edit	✓	✓
Edit All	✓	x
Delete	✓	✓
View	✓	✓
View All	✓	x
Stock Update	✓	x
Transactions	✓	✓
Quality Checking	✓	x
Billing Details	✓	✓
Reports	✓	✓

Table 5.1 User Access Rights

The project is categorized into the following modules:

Admin Module

- Product Master
- Item Master
- Stock Master

- Purchase Order Entry
- Quality Management
- Billing Entry
- Purchase Return

Supplier Module

- Supplier Master
- Quotation Entry
- Order Response



Product Master

This is to manage the information of the Product details in the organization. Such as adding product information, viewing information and retrieving information. This module contains all the basic functionality of the product can have in an organization.

Item Master

This is to manage the information of the Item details in the organization. Such as adding item information, viewing information and retrieving information. This module contains all the basic functionality of the item can have in an organization.

Stock Master

The various item and product details are managed in this module. The various details pertaining to an item such as the category, quantity, cost, number of components needed for the making of the item and the reserve stock kept for the ongoing production. The product details for the items along with the specifications are managed.

Purchase Requests

Here the request for the product or item which is sent to the all supplier. The purchase requests are undertaken from the administrator with the details about the product to be quantity required, the date of order and the date of despatch.

Purchase Order Entry

The purchase order details are managed in this module. The product or items as per the requirement are purchased from the vendor. And the stock is updated in the corresponding item in the stock management module.

Quality Management

The quality aspects for the items are calculated and stored in this module. The tolerance value and the corresponding quality status are maintained for quality check reference.

Billing

The billing module deals with preparing receipts for purchase order. The tax parameters are taken into account for billing.

Purchase Return

If in case of any wrong delivery of products the purchased product or item should be returned.

Supplier Master

This is to manage the information of the Supplier details. Such as adding supplier information, viewing information and retrieving information. This module contains all the basic functionality of the supplier can have in an organization.

Quotation Entry

The quotation details are managed in this module. The product or items as per the requirement are quotation and display to administrator. Based on the quotation supplier will be selected.

Order Response

Based on the purchase order entry supplier will be response to administrator. The order response details are managed in this module.

5.2 OVERVIEW OF THE PROJECT

The “PURCHASE AUTOMATOR SYSTEM“is a system that provides a place for those businesses to purchase their inventories at a reasonable price. This software designed to assist in the process of purchasing goods.

In the purchase requests the user requests for the items or products to be issued to the supplier. The quotation deals with what company costs for a particular product. Then the order for the product can be done through purchase order. The stock level is maintained by administrator.

The payment is done through credit card, check. The products quality is verified by the quality control department. The delivery of goods is to be carried out within the specified period to maintain the perfection in delivering of goods.

Here, only the authorized users are permitted to maintain the information about the purchase of the system. The system administrator takes care of all the process. The various services incorporated in this project are easy and user friendly. The authentication is provided according to the necessity of the users by the system administrator.

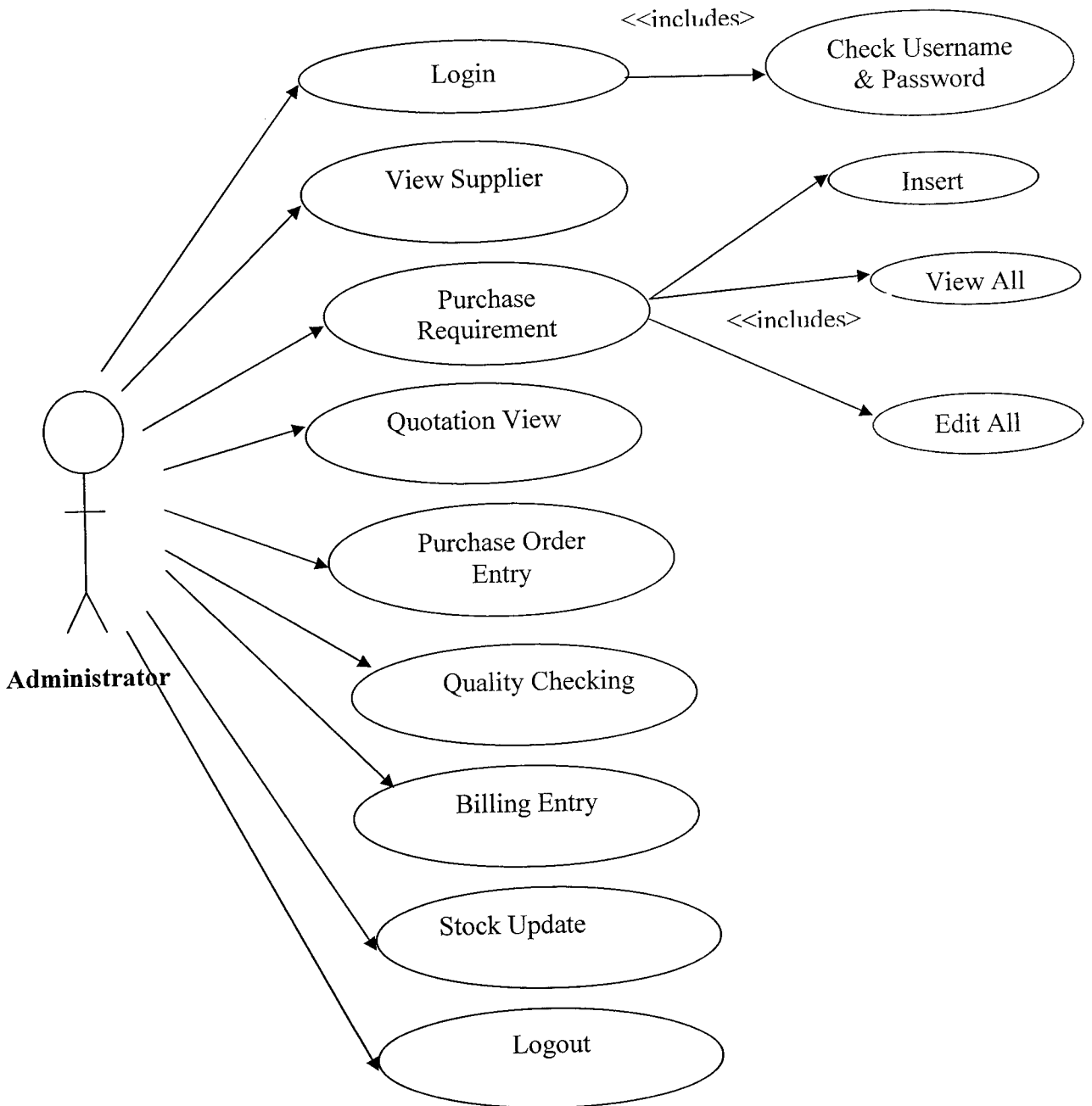
5.3 USE CASE DIAGRAM

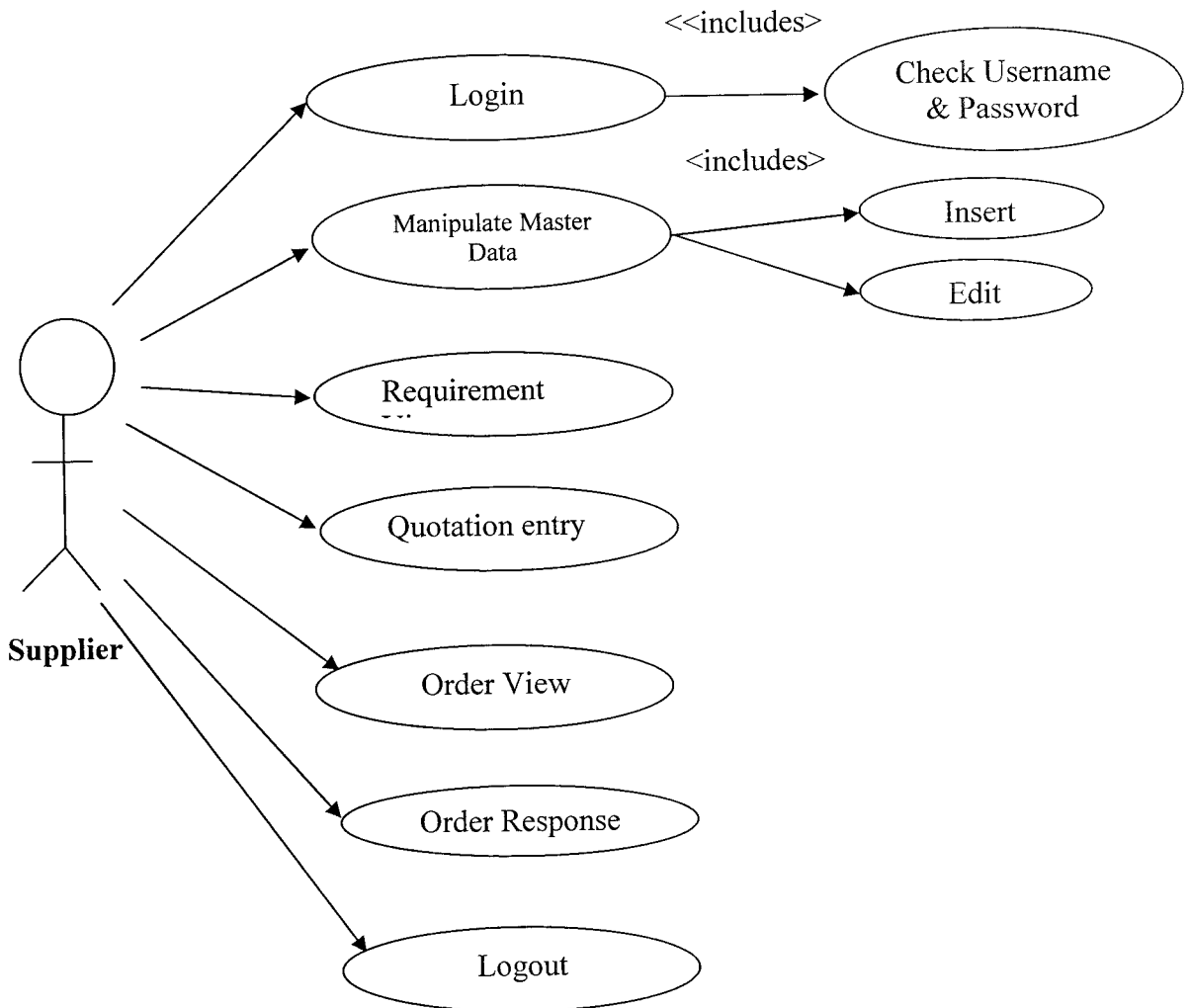
The requirements are represented using the use case diagram.

Actors

This system will be used by the following actors:

1. Administrator

Administrator**Figure 5.3.1 Administrator Functions**

Supplier**Figure 5.3.2 Supplier Functions**

5.4 DATABASE DESIGN

The system will use SQL Server 2005 database for data storage.

5.4.1 Table Structure

The database design is as follows:

Product Details

ProductID: Primary Key

Attribute	Data Type	Description
ProductID	Varchar	Product id
ProductName	Varchar	Product name
MinQty	Int	Minimum quantity
MaxQty	Int	Maximum quantity
MFGDate	Datetime	Manufacturing date

Table 5.4.1.1 Product Details

Item Details

ItemID: Primary Key

Attribute	Data Type	Description
ItemId	Varchar	Item id
Item Name	Varchar	Item name
MinQty	Int	Minimum quantity
MaxQty	Int	Maximum quantity
Category	Varchar	Item category

Stock Master Details

Stocknumber: Primary Key

ProductID: Foreign Key

ItemID: Foreign Key

Attribute	Data Type	Description
StockNumber	Varchar	Stocknumber
ProductID	Varchar	Product id
ProductName	Varchar	Name of product
PrdQty	Int	Available quantity
Prodottype	Varchar	Product type
ItemID	Varchar	Item id
ItemName	Varchar	Item name
Category	Varchar	Item category
Quantity	Int	Available quantity

Table 5.4.1.3 Stock Master Details

Quotation Details

SupplierID: Foreign Key

ProductID: Foreign Key

Attribute	Data Type	Description
SupplierID	Varchar	Supplier id
SupplierName	Varchar	Supplier Name
ProductID	Varchar	Product id
ProductName	Varchar	Product name
Quantity	Int	Available quantity
Rateperquantity	Int	Rate per quantity

Supplier Master Details

SupplierID: Primary Key

Attribute	Data Type	Description
SupplierID	Varchar	Supplier id
SupplierName	Varchar	Supplier name
CompanyName	Varchar	CompanyName
Address	Varchar	Address
State	Varchar	State
PhNo	Int	Phone number
MobileNo	Int	Mobile number
EmailID	Varchar	Email id
ContactPerson	Varchar	Whom to contact
Designation	Varchar	Designation
Username	Varchar	Username of supplier
Password	Varchar	Password
CnPwd	Varchar	Confirm password

Table 5.4.1.5 Supplier Master Details

ReturnProduct Details

ProductID: Foreign Key

Attribute	Data Type	Description
ProductID	Varchar	Product id
ProductName	Varchar	Product name
ReceivedQuantity	Int	Quantity
ReceiveDate	Datetime	Date of return
Reason	Varchar	Reason for reason

Requirement Details

RequirementNumber: Primary Key

ProductID: Foreign Key

Attribute	Data Type	Description
RequirementNumber	Varchar	Requirement number
ProductID	Varchar	Product id
ProductName	Varchar	Product name
NeededQuantity	Int	Require quantity
DateofNeeded	Datetime	Date of needed

Table 5.4.1.7 Requirement Detail

Quality Verifying Details

ProductID: Foreign Key

Attribute	Data Type	Description
ProductID	Varchar	Product id
ProductName	Varchar	Product name
SupplierName	Varchar	Supplier name
CompanyName	Varchar	Company name
DateofOrder	Datetime	Date of order
DateofReceive	Datetime	Date of receive
Quantity	Int	Purchased quantity
TotalCost	Int	Total amount
QualityStatus	Varchar	Product status

Table 5.4.1.8 Quality Verifying Details

Purchase Order Details

PoNo: Primary Key

ProductID: Foreign Key

Attribute	Data Type	Description
PoNo	Varchar	Purchase order number
ProductID	Varchar	Product id
ProductName	Varchar	Product name
DateofOrder	Datetime	Date of order
NeededQuantity	Int	Need to purchase quantity
DateofReceive	Datetime	Date of receive
CompanyAddress	Varchar	Company address for supplier
MailID	Varchar	Mailed of supplier

Table 5.4.1.9 PurchaseOrder Details

Billing Details

BillNumber: Primary key

ProductID: Foreign Key

Attribute	Data Type	Description
BillNumber	Varchar	Bill number
BillDate	Datetime	Bill date
ProductID	Varchar	Product id
ProductName	Varchar	Product name
SupplierID	Varchar	Supplier id
Quantity	Int	Quantity
TotalCost	Int	Total cost
AccountNumber	Int	Account number

OrderReceive Details

SupplierID: Primary key

ProductID: Foreign Key

Attribute	Data Type	Description
OrderNumber	Varchar	Order number for product
OrderDate	DateTime	Order receive date
ProductID	Varchar	Product id for order receive
ProductName	Varchar	Name of the product
Quantity	Int	Quantity of needed product
RatePerQuantity	Float	Rate per quantity
Totalcost	Float	Total cost of needed product
DeliverDate	DateTime	Delivery date of product
SupplierName	Varchar	Whom to prepare order for product

Table 5.4.1.11 OrderReceive Details

5.5 INPUT DESIGN

The input design is the process of converting the user-oriented inputs in to the computer-based format. The goal of designing input data is to make the automation as easy and free from errors as possible.

The input design requirements such as user friendliness, consistent format and Interactive Dialogue for giving the right message and help for the user at right time are also considered for the development of the project.

The input design requirements such as user friendliness, consistent format and Interactive Dialogue for giving the right message and help for the user at right time are also considered for the development of the project.

The following are the features of the input design:

- ✘ Input design mainly includes options and links.
- ✘ The same format is used with related screens; users can identify easily where the selections are made.
- ✘ The consistent terminology is used which in designs.
- ✘ The screen is not over crowded.
- ✘ It facilitates the user to identify the required information easily and enter the data.
- ✘ Hence the input design will be easy to follow and does not induce errors.

5.6 OUTPUT DESIGN

Output of the system can be defined as the information being processed and then generated by the system in a specified format for the user view. Output design serves the best to provide information to the users of the system. Once the output is designed it would serve for present and future references. Outputs are carefully designed such that it gives an error free output format.

CHAPTER 6

SYSTEM TESTING

6.1 UNIT TESTING

In purchase automator system, each pair of modules was tested before it could be integrated and packaged. Each module pair has been tested for their functionality. They were originally developed to run to undergo Black Box testing, White Box Testing.

6.2 INTEGRATION TESTING

The purchase automator system is tested after all its modules are put together. The problem, of course, is “putting them together” that is interfacing. Data can be lost across when sub-functions are combined and it may not produce the desired major function individually may be magnified to unacceptable levels and global data structures can present problems. The objective is to take unit-tested modules and build a program structure that has been dictated by design. Thus each module was integrated and tested to avoid any data inconsistencies.

6.3 TEST PLAN

6.3.1 Test Environment

Testing was done by executing the web page in different browsers like Internet Explorer, Google Chrome and Mozilla Firefox.

6.3.2 Features to be tested

The following functional features will be tested:

- Login
- Enter master Details

- Enter or View all transactions
- Edit transactions
- Prepare and View Receipts
- View All Reports
- View Specific Reports
- Logout

6.4 TEST CASES

USE CASE	TEST CASE	EXPECTED RESULT
Login	Log in as admin with correct user name and password	Admin home page with menus for master, transaction, receipts, and reports.
	Log in as supplier with correct user name and password	Supplier home page with menus for master.
	Log in with incorrect user name and password	Display error message and does not redirect to any page.
Enter master Details Precondition: admin or supplier logged in	Add correct details in the respective tables.	The data is added in the corresponding tables. The details are shows up when the user request to view the details.
	Add the same details again.	The data is not added, an error message is displayed.
	Add incorrect details in the tables.	The data is not added, an error message is displayed.

	Update the details added.	The details get updated and are displayed for the user to verify.
View all master data Precondition: Supplier or Admin logged in	The Supplier or Admin can view all the details of various tables.	The various details are retrieved from database and displayed.
Enter or View all transactions Precondition: Supplier or Admin logged in	The Supplier or Admin enters correct details for transactions.	The transaction is successfully saved. The details are shows up when the user request to view the details.
	The Supplier or Admin enters incorrect details for transactions.	The transactions fail and display an error message.
Edit transactions Precondition: Admin logged in	Edit the details added.	The details get updated and are displayed for the user to verify.
Create User Precondition: Supplier logged in	The Supplier enters correct data.	The Supplier details are successfully saved. The user login is created.
	The Supplier enters incorrect data.	The Supplier details are not saved.

		The user login is not created.
Prepare and View Receipts	The Supplier or Admin enter details for the respective receipt.	The receipt is saved.
Precondition: Supplier or Admin logged in	The Supplier or Admin selects to view receipt details.	The various receipt details are displayed.
View All Reports	The Supplier or Admin selects to view report details.	The various report details are displayed.
Precondition: Supplier or Admin logged in		
View Specific Reports	The Supplier selects to view report details.	The report details are displayed.
Precondition: Supplier logged in		
Logout	Select the logout option.	Facilities are no longer available.
Precondition: Admin or Supplier logged in		Displays the login page.

CHAPTER 7

SYSTEM IMPLEMENTATION

System Implementation is the part of the software engineering life cycle, where, the design artifacts are converted to a working application. The tested product if successful is deployed in the user environment. The result of this phase consists of source code, together with documentation to make the code more readable. The stage of systems development in which hardware and software are acquired developed and installed the system is tested and documented, people are trained to operate and use the system.

7.1 SYSTEM VERIFICATION

System Verification answers the question “Am I building the product right?” It includes the review of interim work steps and interim deliverables during a project to ensure they are acceptable. In data access, it verifies the right data is being accessed, in terms of the right place and in the right way.

The system purchase automator system is verified according to the administrator requirements and verification is done for the products purchased and then maintenance is done according to the requirements needed.

7.2 SYSTEM VALIDATION

Validation answers the question “Am I building the right product?” This checks whether the developer is moving towards the right product, whether the development is moving towards the actual intended product that was agreed upon in the beginning. It is traditional and is performed at the end of the project. In access, it checks whether we are accessing the right data, in terms of data required to satisfy the requirement.

The system purchase automator system is validated according to administrator requirements and dispatched, if the product is build. Validation for each independent product is done separately. It determines the correctness of the final software product development project with respect to the user needs and requirements.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

The project “Purchase Automator System” is done effectively and found to be efficient with the live data recordings and daily transactions within the company and the suppliers. The project is a boom for the company since it helps them to buy their product online from wherever they are. Database is structured with minimum redundancy.

While placing the order the availability of the raw material is checked rapidly. Starting from the administrator placing the orders for materials the process is analyzed till the end process. During the transaction the system traces every stage of the material so it is very easy to identify the status of the material whether it has reached to the suppliers.

Quality check is the significant process of the system. Payments are done with the help of the credit card logic, cash, demand draft and cheque.

The solution developed is free from bugs and executable with all different modules to the utmost satisfaction of the company. Now the software is ready to submit to the company for further process.

8.2 FUTURE ENHANCEMENTS

“Purchase Automator System” for Roots is designed in such a way that it can incorporate the future enhancements that may improve the performance to suit the future needs of the user.

Some future enhancements can be done as follows:

Product categories can be added

CHAPTER 9

APPENDICES

9.1 SAMPLE CODE

Login

```

using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using System.Data.SqlClient;
public partial class Login : System.Web.UI.Page
{
    SqlConnection con = new SqlConnection("");
    SqlCommand cmd;
    string qry;
    protected void Page_Load(object sender, EventArgs e)
    {

    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        if (DropDownList1.SelectedItem.Text == "Company")
        {
            if (TextBox1.Text == "admin")
            {
                if (TextBox2.Text == "admin")

```

```

        Response.Redirect("HomePage.aspx");
    }
}
else

    Response.Write("Invalid User name and Password");
}

else
{
    con.Open();
    str = "select count(*) from SupReg where UN='" + TextBox1.Text + "' and
UPwd='" + TextBox2.Text + "'";
    cmd = new SqlCommand(str, con);
    if (Convert.ToInt32(cmd.ExecuteScalar()) > 0)
    {
        Response.Redirect("SupplierQuotation.aspx");
    }
    else
    {
        Label3.Visible = true;
        Label3.Text = "Invalid User Name and Password";
    }

    con.Close();
}
}
protected void Button2_Click(object sender, EventArgs e)
{
    Response.Redirect("SupplierRegistration.aspx");
}
}

```


Supplier Registration

```

using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using System.Data.SqlClient;
public partial class SupplierRegistration : System.Web.UI.Page
{
    SqlConnection con = new SqlConnection("Data Source=(local);Initial
Catalog=mrp;User ID=sa");
    SqlCommand cmd;
    string str, str1;
    protected void Page_Load(object sender, EventArgs e)
    {

    }
    protected void Button3_Click(object sender, EventArgs e)
    {
        con.Open();
        str = "insert into SupReg values('" + @TextBox10.Text + "','" +
@TextBox9.Text + "','" + @TextBox8.Text + "','" + @TextBox7.Text + "','" +
@TextBox6.Text + "','" + @TextBox5.Text + "','" + @TextBox4.Text + "','" +
@TextBox3.Text + "','" + @TextBox1.Text + "','" + @TextBox2.Text + "')";
        cmd = new SqlCommand(str, con);
        cmd.ExecuteNonQuery();
        con.Close();
    }
}

```

Supplier Product Entry

```

using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using System.Data.SqlClient;
public partial class SupplierQuotation : System.Web.UI.Page
{
    SqlConnection con = new SqlConnection("Data Source=(local);Initial
Catalog=mrp;User ID=sa");
    SqlCommand cmd;
    string query;
    protected void Button1_Click(object sender, EventArgs e)
    {
        con.Open();
        query= "Insert into supplier values('" + @TextBox1.Text + "','" +
@TextBox2.Text + "','" + @TextBox3.Text + "','" + @TextBox4.Text + "','" +
@TextBox5.Text + "','" + @TextBox6.Text + "','" + @TextBox7.Text + "','" +
@TextBox8.Text + "')";
        cmd = new SqlCommand(query, con);
        cmd.ExecuteNonQuery();
        con.Close();
        Label9.Visible = true;
        Label9.Text = "Your Quotation has been Submitted";
    }
    protected void Button2_Click(object sender, EventArgs e)
    {
        Response.Redirect("SupplierQuotation.aspx");
    }
}

```

9.2 SCREEN SHOTS

The screenshot shows a Mozilla Firefox browser window displaying the home page of ROOTS Industries Limited. The browser's address bar shows the URL `http://localhost:2116/POC/Login.aspx`. The page header includes the title "Purchase Automator System" and a navigation menu with links for "Home", "About Us", "Contact Us", and "Sign Out".

The main content area is divided into two columns. The left column contains the following text:

ROOTS Industries Ltd. is a leading manufacturer of HORNS. in India and the 11th largest Horn Manufacturing Company in the world.

Headquartered in Coimbatore - India, ROOTS has been a dominant player in the manufacture of Horns and other products like Castings and Industrial Cleaning Machines

Since its establishment in 1970, ROOTS has had a vision and commitment to produce and deliver quality products adhering to International Standards.

OUR VISION We will stand technologically ahead of others to deliver world-class innovative products useful to our customers. We will rather lose our business than our customers' satisfaction. It is our aim that the customer should get the best value for his money. Every member of our company will have decent living standards. We care deeply for our families, for our environment and our society. We promise to pay back in full measure to the society by way of selfless and unintended service.

In a dynamic world that is driven by technology, a successful presence depends on the way you would that technology to fit popular needs. Indigenous talent, a daring attitude, courage to accept and learn new things... and the simple spark

The right column features a "Login Form" with the following fields:

- Role Type: Administrator (dropdown menu)
- Login Name: admin (text input)
- Password: masked with six dots (password input)

At the bottom of the login form are two buttons: "Submit" and "New Supplier". The footer of the page reads "All Rights Reserved. Copyright@2010." The Windows taskbar at the bottom shows the Start button and several open applications, including "document1.kation", "document1 - POC...", "POC - Running...", and "Login Page - Mozilla".

Fig. 9.2.1 Home Page

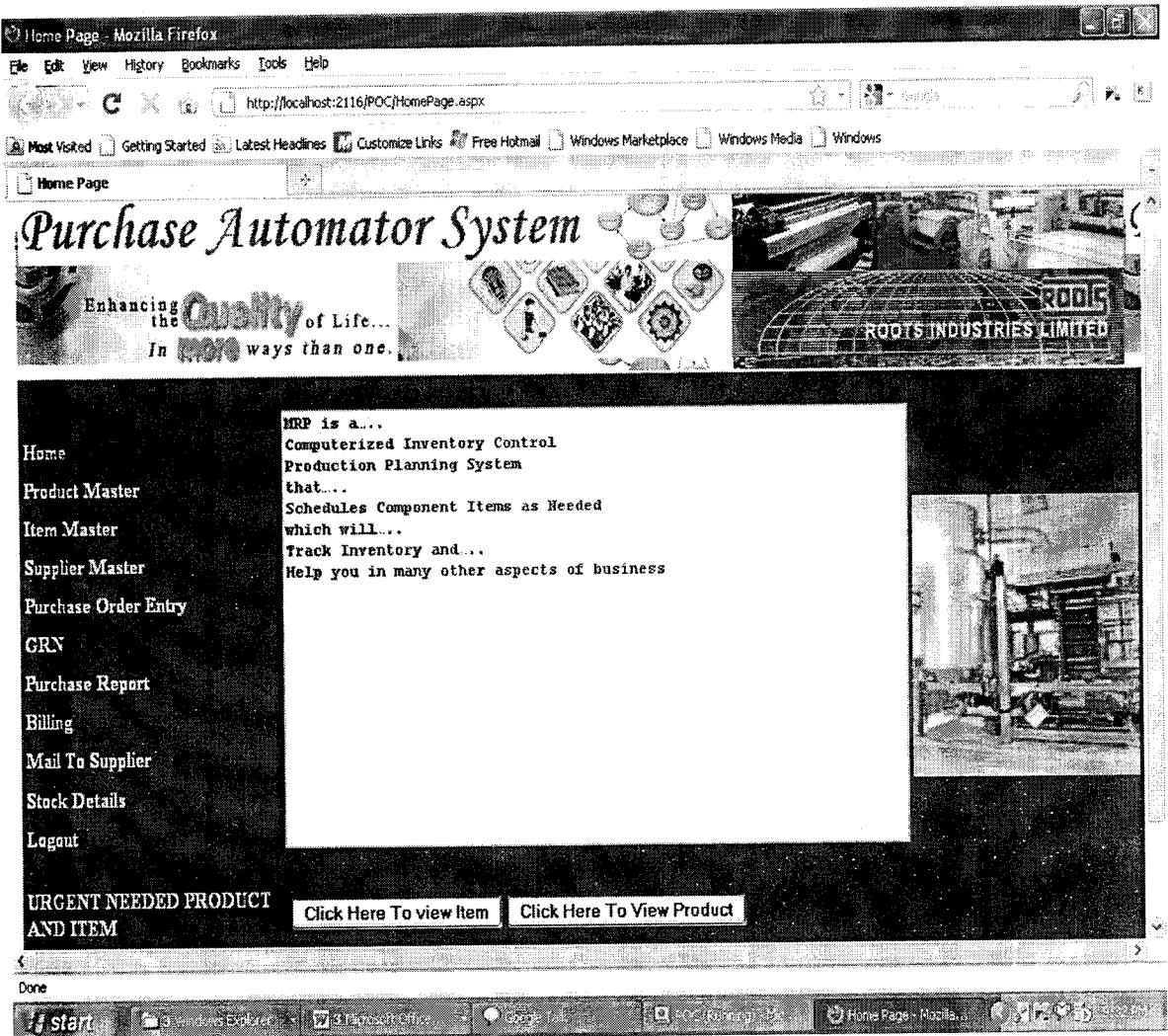


Fig. 9.2.2 Administrator Home Page

Reorder Form Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/ReorderForm.aspx


Most Visited Getting Started Latest Headlines

Reorder Form Page

Do you want Firefox to remember the password for "admin" on http://localhost:1039? Remember Never for This Site Not Now

Purchase Automator System

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In **more** ways than one.



ROOTS INDUSTRIES LIMITED

Stock Details		Reorder Level Checking	
Product ID	Prd002 <input type="button" value="Click"/>	Minimum Quantity	500
Product Name	Handle	Maximum Quantity	5000
Availability	300	<input type="button" value="Check Here"/>	
MFG Date	12/12/2010 12:00:00 AM	Reorder Level	
Company	ABC Enterprise	Order	Yes
			<input type="button" value="Home"/>

All Rights Reserved. Copyright©2010.

Done

start

POC (Ubuntu) C:\Program Files\... Reorder Form P... Screen 2008

Fig. 9.2.3 Reorder Level Checking

Untitled Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

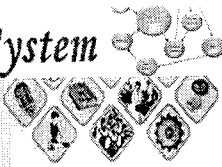

http://localhost:1039/POC/RequirementAnalysis.aspx

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Untitled Page

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Requirement Analysis

Requirement Number	<input type="text" value="Req004"/>	Needed Quantity	<input type="text" value="200"/>
Product ID	<input type="text" value="Prod002"/> <input type="button" value="Click"/>	Date of Needed	<input type="text" value="02/21/2010"/>
Product Name	<input type="text" value="Handle"/>	Prepared By	<input type="text" value="admin"/>
Quantity	<input type="text" value="300"/>	Prepared Date	<input type="text" value="02/28/2010"/>
		Unit of Measurement	<input type="text" value="200"/> <input type="text" value="Numb"/>

Your Query has been submitted to Purchase Order Department

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Fig. 9.2.4 Requirement Analysis

Purchase Order Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/OrderEntry.aspx


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Purchase Order Page

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RequirementNumber	ProductID	ProductName	Quantity	NeededQuantity	DateofNeeded	PreparedBy	PreparedDate	units/Mea
0Req0011	Prd001	Wizard	200	200	2/12/2010 12:00:00 AM	hg	2/10/2010 12:00:00 AM	200 Nos
Req001	Prd001	Handle	200	500	12/21/2010 12:00:00 AM	deva	12/12/2010 12:00:00 AM	500 Nos
Req0011	Prd001	Wizard	200	500	2/2/2010 12:00:00 AM	deva	1/20/2010 12:00:00 AM	500 Nos
Req0111	Prd002	Handle	300	500	2/2/2010 12:00:00 AM	admin	2/12/2010 12:00:00 AM	500 Nos
Req1111	Prd002	Handle	300	200	2/21/2010 12:00:00 AM	admin	2/28/2010 12:00:00 AM	200 Nos

Quotation View

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Done

Start [Taskbar icons: Firefox, Run, SQL 2008, Admin, Purchase Order]

Fig. 9.2.5 Requirement View Page

Purchase Query Page Mozilla Firefox

File Edit View History Bookmarks Tools Help


http://localhost:1039/POC/PurchaseQuerySending.aspx

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Purchase Query Page

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Purchase Query

General Details			
Purchase Order Number	<input type="text" value="PO08"/>	Rate per Quantity	<input type="text" value="3000"/>
Date of PO	<input type="text" value="09/09/2010"/>		
Requirement Number	<input type="text" value="Req1111"/> Click Here	VAT Charges	<input type="radio"/> Non <input checked="" type="radio"/> Applicable Applicable <input type="text" value="Vat Charge"/>
Product ID	<input type="text" value="Prd002"/>		<input type="text" value="12 %"/> <input type="button" value="Calculate"/>
Product Name	<input type="text" value="Handle"/>	Total Cost	<input type="text" value="72000"/>
Needed Quantity	<input type="text" value="200"/>	Date of Needed	<input type="text" value="05/20/2010"/>
Unit of Measurements	<input type="text" value="200Ncs"/>	Ordered By	<input type="text" value="admin"/>

Supplier Details:

Supplier ID: [Get mail Id for above Suppli](#)

Supplier Mail ID:

Your Mail Has been Successfully sent

Done

start | POC Business | SQL Server 2008 | Screen Shots | Purchase Query... | 5:58 PM

Fig. 9.2.6 Purchase Order Entry

Supplier Order View Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/SupplierOrderView.aspx

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Supplier Order View Page

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Order View

PO Number	Date of PO	Req No	Product ID	Product Name	Needed Quantity	UOM	Rate per Qty	VAT	Total
PO01	2/20/2010 12:00:00 AM	Req01	Prd001	Handle	200	200nos	200	Available	20
PO02	1/12/2010 12:00:00 AM	Req001	Prd001	Handle	500	500 Nos	200	Available	12
PO06	9/12/2009 12:00:00 AM	R111	IT003	Bolt	200	300 Nos	200	Available	40
PO07	2/2/2010 12:00:00 AM	Req001	Prd001	Handle	500	500 Nos	500	Available	30
PO03	9/9/2010 12:00:00 AM	Req1111	Prd002	Handle	200	200Nos	3000	Available	72

Accepted Home

Done

start

Fig. 9.2.7 Order View

Supplier Quotation Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/SupplierQuotation.aspx

Most Visited Getting Started Latest Headlines

Supplier Quotation Page

Remember Never for This Site Get Now

Do you want Firefox to remember the password for "deva" on http://localhost:1039?

IT013	Screw	7 inch	300
IT014	Screw	8 inch	345
IT015	Nut	9 inch	345
IT016	Nut	1 inch	300
IT017	Nut	2 inch	200
IT018	Nut	3 inch	300
IT019	Nut	5 inch	200
IT020	Nut	6 inch	259
IT021	Screw	3 inch	200
IT022	Screw	5 inch	300
IT023	Bolt	3 inch	200
IT024	Bolt	2 inch	300

Quotation Entry

Supplier Name
Supplier Number
Company Name
Product ID
Product Name
Manufacturing Date
Quantity
Rate Per Quantity

deva	Get
sup134	
ABS	
prd001	
Handle	
12/4/2010 12:00:00 AM	
2000	
400	

Submit Cancel Update

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Done

Start

Fig. 9.2.8 Quotation Entry

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Order Response Detail

Order Number	PO08	Click
Order Date	9/9/2010 12:00:00 AM	
Product/Item ID	Prd002	
Product/Item Name	Handle	
Quantity	200	
Rate Per Quantity	3000	
Total Cost	72000	
Delivery Date	02/12/2010	
Supplier name	deva	

Your Product has been sent.

[Submit](#) [Cancel](#) [Home](#) [Back](#)

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Done

start

Supplier Re...

Fig. 9.2.9 Order Response

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Denied Product View

ProductID	ProductName	ReturnDate	Quantity	Reason
prd001	Wizard	12/9/2010 12:00:00 AM	200	Late Response
prd012	Air Horn	12/12/2010 12:00:00 AM	900	Late Response
IT003	Bolt	2/12/2010 12:00:00 AM	200	Late Response

[HOME](#)

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Fig. 9.2.10 Denied Product View

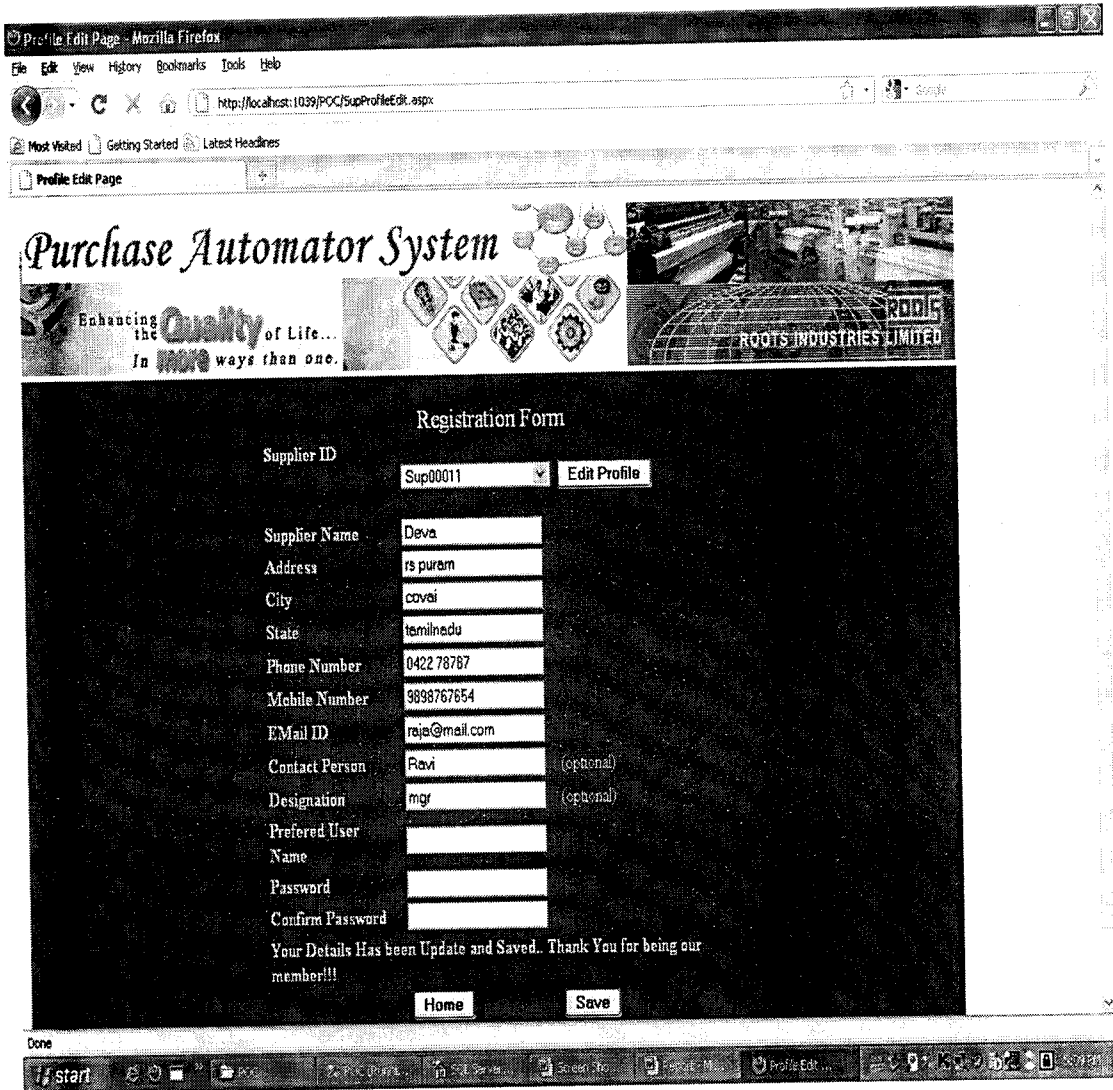


Fig. 9.2.11 Supplier Registration

Goods Received Note Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/GPN.aspx

Most Visited Getting Started Latest Headlines

Goods Received Note Page

Purchase Automator System

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GOODS RECEIVED NOTE:

OrderNumber	OrderDate	ProductID	ProductName	Quantity	RatePerQuantity	TotalCost	DeliverDate
PO01	1/20/2010 12:00:00 AM	Pr4001	Handle	200	200	2000	3/20/2010 12:00:00 AM
PO02	1/12/2010 12:00:00 AM	Pr4001	Handle	500	200	12000	2/21/2010 12:00:00 AM
PO06	9/12/2009 12:00:00 AM	IT003	Bolt	200	200	4000	2/10/2010 12:00:00 AM
PO07	1/2/2010 12:00:00 AM	Pr4001	Handle	500	500	30000	2/12/2010 12:00:00 AM
PO08	9/9/2010 12:00:00 AM	Pr4002	Handle	200	3000	72000	2/12/2010 12:00:00 AM

Send To QA HOME

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Fig. 9.2.12 Goods Received Note

Order Receive Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/QualityAnalyzing.aspx

Order Receive Page

Do you want Firefox to remember the password for "admin" on http://localhost:1039? Remember Never for This Site Not Now

OrderNumber	OrderDate	ProductID	ProductName	Quantity	RatePerQuantity	TotalCost	DeliverDate
PO01	2/20/2010 12:00:00 AM	Prd001	Handle	200	200	2000	3/20/2010 12:00:00 AM
PO02	1/12/2010 12:00:00 AM	Prd001	Handle	500	200	12000	2/21/2010 12:00:00 AM
PO06	9/12/2009 12:00:00 AM	IT003	Bolt	200	200	4000	2/10/2010 12:00:00 AM
PO07	2/2/2010 12:00:00 AM	Prd001	Handle	500	500	30000	2/12/2010 12:00:00 AM
PO08	9/9/2010 12:00:00 AM	Prd002	Handle	200	3000	72000	2/12/2010 12:00:00 AM

Quality Analysis

Product ID: Prd002

Product Name: Handle

Supplier Name: deva

Date of Order: 9/9/2010 12:00:00 AM

Date of Recieve: 9/9/2010 12:00:00 AM

Quantity: 200

Rate Per Quantity: 3000

Total Cost: 72000

Quality Status: Good

Approved By: admin

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Done

start

Fig. 9.2.13 Quality Analysis

Billing Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:1039/POC/BillingProcess.aspx

Most Visited Getting Started Latest Headlines

Billing Page

prd123	cloth	3-12-2010 12:00:00 AM	4-12-2010 12:00:00 AM	200	20	4000	hj	hgj
prd123	clorh	3-12-2010 12:00:00 AM	4-12-2010 12:00:00 AM	200	20	4000	hj	hgj

1 2 3

Billing Detail

Bill Number: EL1

Product ID: Prd002

Product Name: Handle

Supplier Name: deva

Purchase Date: 9/9/2010 12:00:00 AM

Received Date: 9/9/2010 12:00:00 AM

Quantity: 200

Total Cost: 72000

Paid Amount: 20000

Balance: 52000

Paid By: admin

Paid through: Cheque Cash

Account Number: 123123

Holder Name: deva

Bank and Branch Name: SBI
sb

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Done

start

Fig. 9.2.14 Product Billing Process

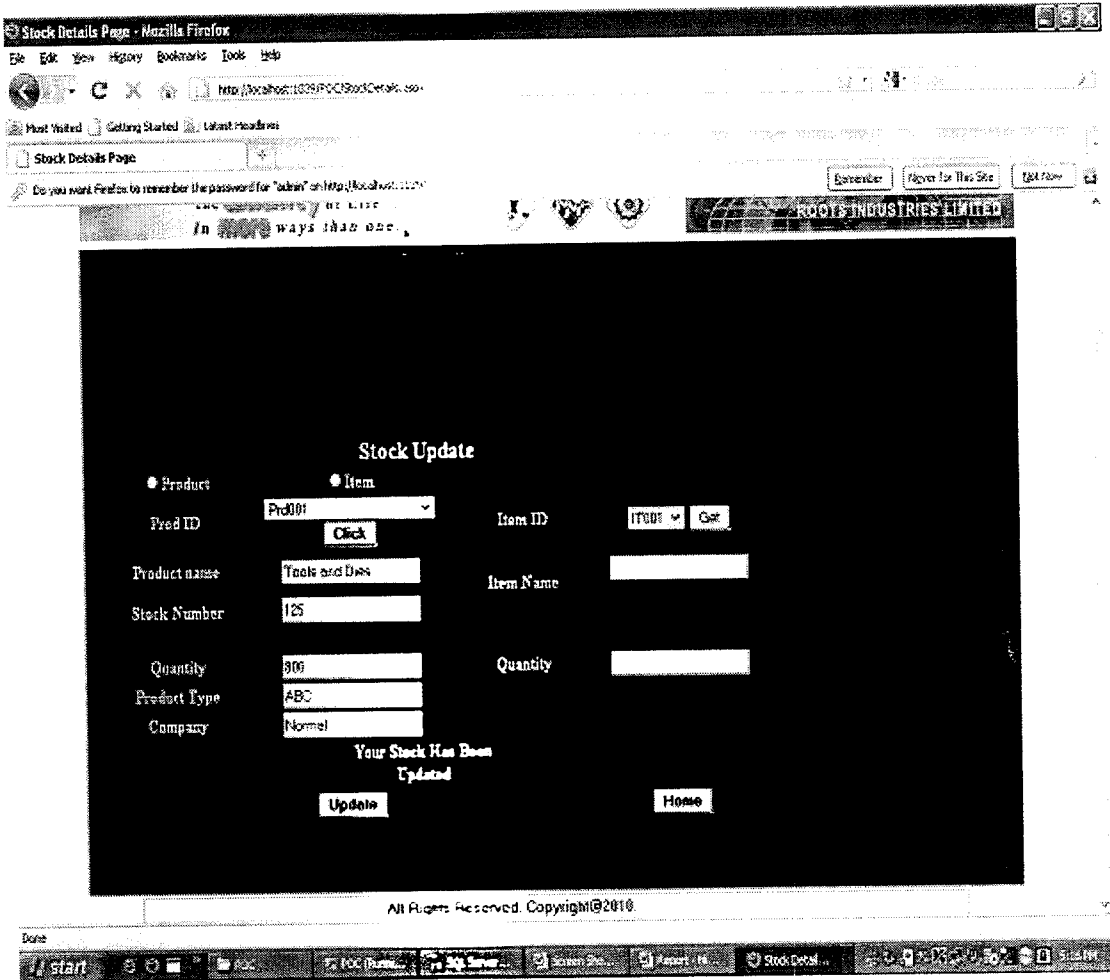


Fig. 9.2.15 Stock Details

CHAPTER 10

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- 1) <http://www.campusconnect.infosys.com>
- 2) <http://msdn.microsoft.com/library/default.jsp?url=/library/en-us/dnasp/html/asptutorial.jsp>
- 3) <http://www.w3schools.com>