SYMBIOSIS INSTITUTE OF COMPUTER STUDIES AND RESEARCH

BCA – 2011-2014

BUSINESS VERTICALS

HOTEL MANAGEMENT

By,

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CAFE PETER DONUTS

Cafe Peter Donuts is a small food joint cum cafeteria located at Aundh,Pune. It is run by a korean family and employes around workers including managers and cooking staff. It has a semi-automated work environment. It has a seating capacity of around 30 people at a time.

Teams AND Role play:

Creation of gantt chart:- Shourya Sohaney, Raunak Agarwal, Richa Sharma

Requirements Gathering and process descriptions:- Richa Sharma, Shourya Sohaney

Data Flow Diagrams:- Created By:-Shivani Agarwal

Data Flow Diagrams Reviewed and Corrected By: Richa Sharma and Shourya Sohaney
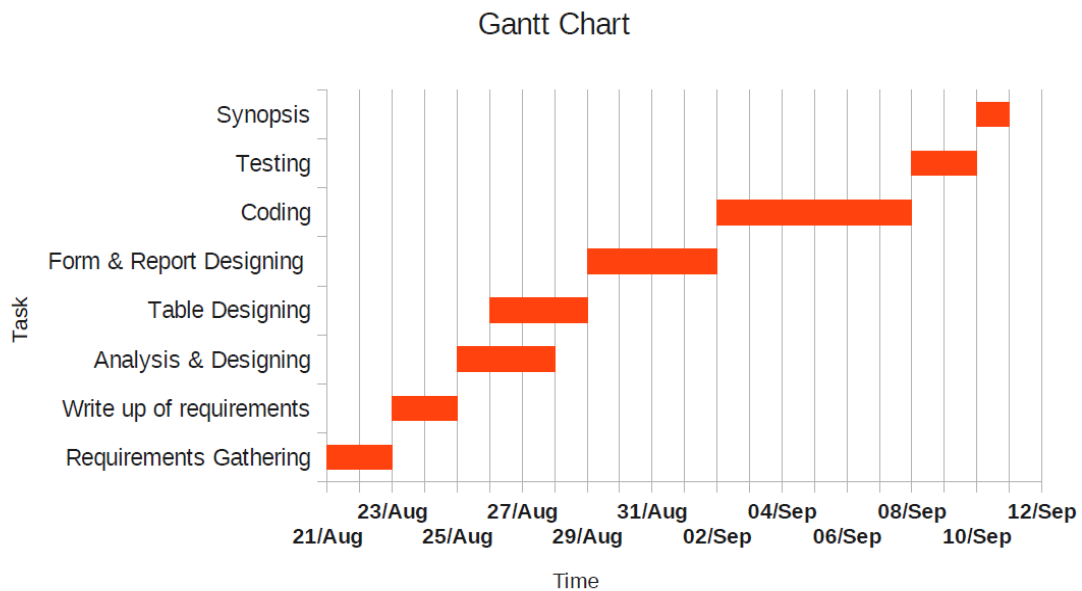
Table Design :- Raunak Agarwal

Forms and Reports:- Richa Sharma

Coding:- Shourya Sohaney and Raunak Agarwal

Synopsi Created By:-Raunak Agarwal

Edited By: Shourya Sohaney and Richa Sharma

Gantt chart

The above gantt chart illustrates the schedule for the current project.

Existing System:

Store Management:

❖ The Store Manager checks the stock every Monday and identifies which products have gone below the minimum stock level.

❖ The cafe has three different wholesalers situated at Pune, Mumbai and Korea from where they buy their products.

❖ After manually identifying which products have gone below the minimum stock level, the store manager places the order to the respective wholesaler by sending mails manually.

❖ The ordered products when received, Store Manager updates the same in the database.

Sales:

❖ The products are sold on the First In First Out (FIFO) basis i.e. the older stock is cleared first because the products are perishable.

❖ Whenever there is a sale of product, bill is generated through a computer program and the product database is updated.

Proposed System:

❖ Every Monday the system will check the stock level from the database.

❖ After identifying the products which are below minimum stock level, the application will create a purchase order for different wholesalers.

❖ The Store Manager reviews the purchase order prepared by the application, makes any changes (if necessary) and approves it.

❖ After receiving the approval from the user, the application will send the mail to the respective wholesalers.

Strategy of software development:

We used WATERFALL MODEL for developing the software for café peter donuts.

Steps:

1) Preliminary investigation – We took the interview form one of their representatives.

2) Analysis – We analyzed the existing system and found what can be automated.

3) Design – We did the designing part using PENCIL TOOL and made the prototype.

4) Development – We did the actual coding using JSP.

5) Testing – The White-box and Black-box testing is done after the software is developed.
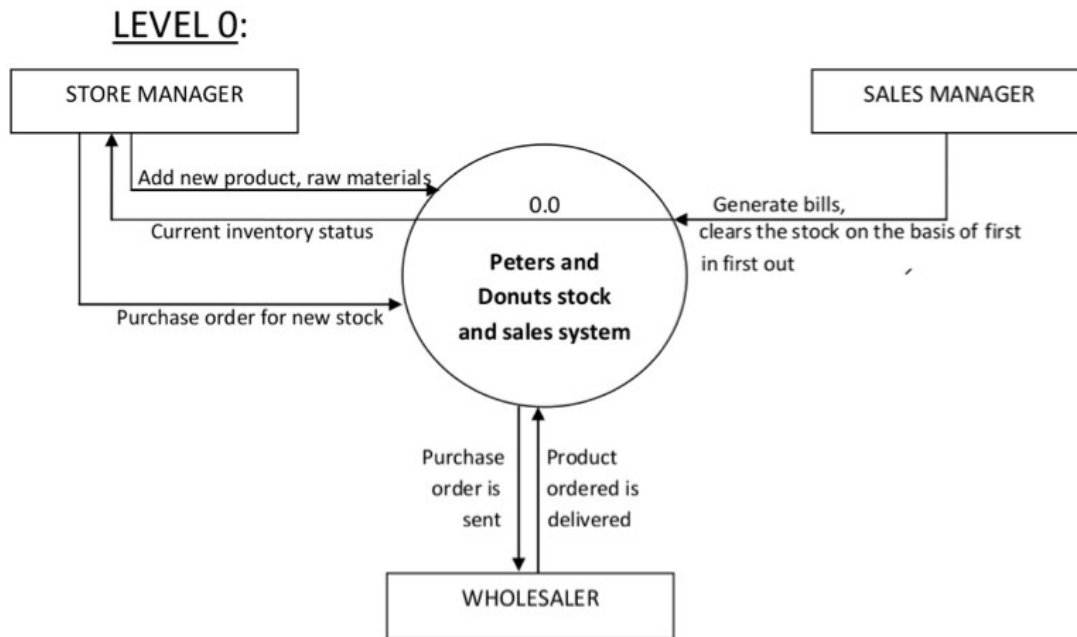
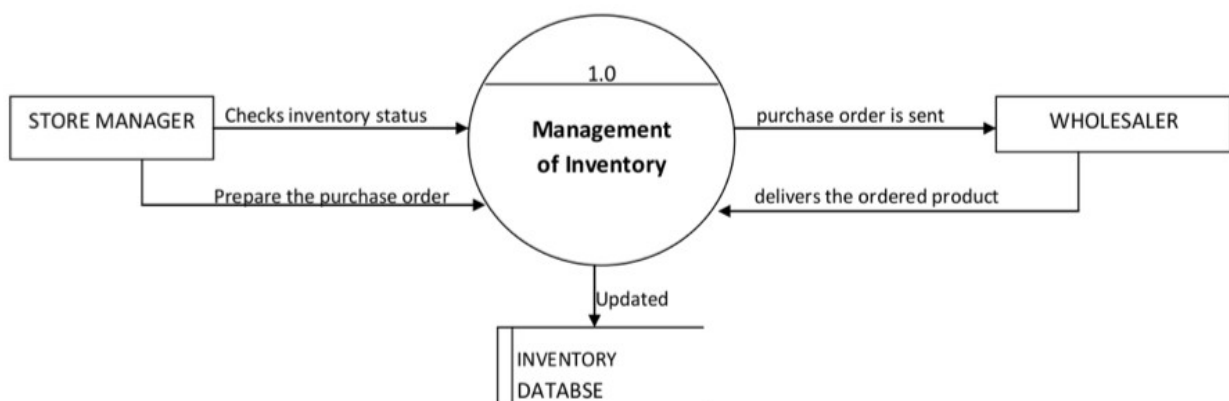# Requirements:

Hardware:

1) **A Computer System**

Software:

1) **Tomcat Web Server**

2) **Java**

3) **Any Web Browser**

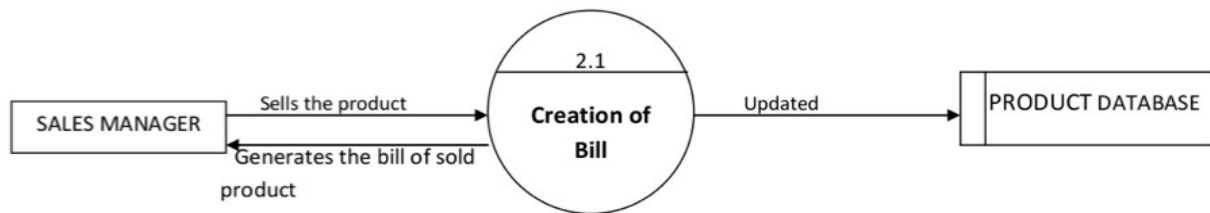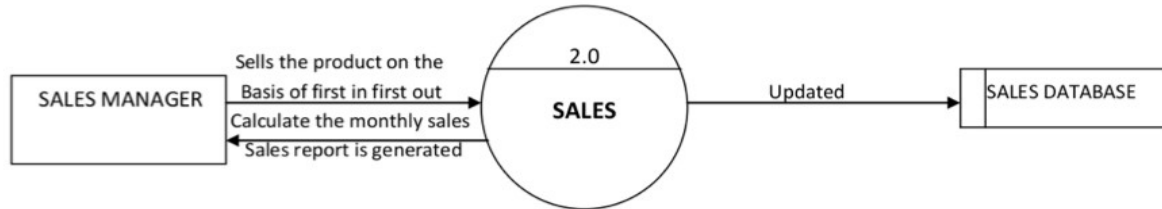# Data Flow Diagram:

Level 0:

LEVEL 0:

STORE MANAGER

Add new product, raw materials

Current inventory status

Purchase order for new stock

0.0

Peters and Donuts stock and sales system

SALES MANAGER

Generate bills, clears the stock on the basis of first in first out

Purchase order is sent

Product ordered is delivered

WHOLESALER

LEVEL 1: Stock Management

STORE MANAGER

Checks inventory status

Prepare the purchase order

1.0

Management of Inventory

purchase order is sent

delivers the ordered product

WHOLESALER

Updated

INVENTORY DATABSE

Sales Management

SALES MANAGER	Sells the product on the Basis of first in first out → Calculate the monthly sales → ← Sales report is generated	**2.0** SALES — Updated → SALES DATABASE

SALES MANAGER	Sells the product → ← Generates the bill of sold product	**2.1** Creation of Bill — Updated → PRODUCT DATABASE

Table Design:

Product Table					
Product ID	Product Name	Critical Quantity	Stock Quantity	Wholesaler ID	Restock Level
Number(4)	String(20)	Number(10)	Number(10)	Number(4)	Number(10)
Not Null	Not Null	Not Null	Not Null	Not Null	Not Null
Primary Key				Foreign Key	

Wholesaler Details Table			
Wholesaler ID	Wholesaler Name	Email ID	Location
Number(4)	String(20)	String(20)	String(20)
Not Null	Not Null	Not Null	Not Null
Primary Key			

Order Details Table				
Order No.	Date	Product ID	Wholesaler ID	Order Quantity
Number(4)	Date()	Number(4)	Number(4)	Number(20)
Not Null	Not Null	Not Null	Not Null	Not Null
Primary Key		Foreign Key	Foreign Key	

Form Design:

COMPANY LOGO

CAFE PETER DONUTS

PRODUCT ENTRY FORM

DATE : 2-aug-2013

NAME OF PRODUCT : Monin Coffee Packet ▼

QUANTITY RECIEVED : 10

EXPIRY DATE : 1-mar-2014

SAVE   RESET   CANCEL

Footer Information

COMPANY LOGO

CAFE PETER DONUTS

PURCHASE ORDER FORM

DATE : 2-aug-2013

SUPPLIER NAME : RAM SHARMA

Sr. no	Product Name	Quantity
1	Monin Coffee Packet	30
2	Ice Tea Flavour	30
3	Coffee Mug Black	15

RESET   SEND   CANCEL

Footer Information

Report Design:

CAFE PETER DONUTS

COMPANY LOGO

CURRENT STOCK SUMMARY REPORT

DATE : 2-aug-2013

TO : 1-mar-2013   FROM : 1-apr-2013

Sr. no	Product Name	Current Stock Quantity
1	COFFEE PACKET	12
2	ICE TEA	24
3	COFFEE MUGS	8
4	FLAVOURS	11
5	GREEN TEA	3

CAFE PETER DONUTS

COMPANY LOGO

PRODUCT ORDER SUMMARY REPORT

DATE : 2-aug-2013

TO : 1-mar-2013   FROM : 1-apr-2013

Sr. no	Product Name	No. of times Product Ordered	Total Quantity Ordered
1	COFFEE PACKET	3	40
2	ICE TEA	5	45
3	COFFEE MUGS	3	15
4	FLAVOURS	5	25

Coding:

File name: Order.jsp

```html
<html>

<body>

<CENTER><h1>CAFE PETER DONUTS</h1></CENTER>

<hr/>

<center><h2><u>PURCHASE ORDER FORM</u></h2></center>

<br/><br/>
```

```jsp
<%@ page import="java.sql.*" %>


<%!

String url ="jdbc:mysql://localhost/shourya";

String user= "root";

String password= "";

String wname;

int flag=0;

%>


<%
```

```jsp
        Class.forName("com.mysql.jdbc.Driver");

        Connection con= DriverManager.getConnection(url, user, password);

        Statement smt=con.createStatement();
%>


<%
if(flag== 0)
{


out.println("<center><form action ='order.jsp'>Select The Supplier:<select
name='wname'>");

String query2="select wname from wtable ";

        ResultSet rs2= smt.executeQuery(query2);

        while(rs2.next())

        {

        String name=rs2.getString("wname");

        out.println("<option value='"+name+"'>"+name+"</option>");

        }

        flag=1;

    out.println("</select><br/> <input type='submit' ><center></form>")    ;


}
%>


<%
```

```jsp
if(request.getParameter("wname")!= null)

{

%>

<form action="mail.jsp">

<div align="center">

<table>

<tr><td></td><td>

<%

flag=0;

                wname=request.getParameter("wname");




                String query2="select email from wtable where wname='"+wname+"'";

                ResultSet rs2= smt.executeQuery(query2);

                rs2.next();

                String email=rs2.getString("email");



                out.println("<input type='text' name='email' hidden
value='"+email+"'>");



                String query="select pname,restock-squantity as oquantity from ptable
where squantity < cquantity and wid=(select wid from wtable where
wname='"+wname+"')";

                ResultSet rs= smt.executeQuery(query);
```

```
java.text.DateFormat df = new java.text.SimpleDateFormat("dd/MM/yyyy");

out.println("<div align='right'>Date: <input type='text' name='time' value='"); %>

<%= df.format(new java.util.Date()) %>

<%

out.println("'></td></tr><tr>");


out.println("<td>SUPPLIER NAME:<input type='text' name='wname' value='"
+wname+"'disabled > </td><td></td></tr>");


out.println("<td colspan='2'><textarea rows='20' cols='60' name='body' >");

out.println(" Sr.\t \t \tProductName\t \t  Quantity");

out.println("_____
_____");

out.println();


while(rs.next())
        {
                int count =1;

                String pname= rs.getString("pname");

                int oquantity= rs.getInt("oquantity");


                out.println(" 0"+count+"\t \t \t"+pname+"\t \t \t \t"+oquantity);


                count++;
```

```
            }
```

```
 out.println("</textarea></td></tr>");
```

```
%>
```

```html
<tr><td colspan="2" align="center"><input type="reset" value ="RESET" > <input
type="submit" value="SEND" ><input type="button" value="CANCEL"></td></tr>
```

```html
</form>
```

```html
</table>
```

```
<%}%>
```

```html
<hr>
```

```html
<center>FOOTER INFORMATION</center>
```

```html
</body>
```

```html
</html>
```

File name: mail.jsp

```jsp
<%@ page import="java.io.*,java.util.*,javax.mail.*"%>

<%@ page import="javax.mail.internet.*,javax.activation.*"%>

<%@ page import="javax.servlet.http.*,javax.servlet.*" %>

<%

final String username = "<username>";

final String password = "<password>";

String email=request.getParameter("email");

String mailSub="Purchase Order@ Cafe Peter Donuts";

String mailBody=request.getParameter("body");


Properties props = new Properties();

props.put("mail.smtp.auth", "true");

props.put("mail.smtp.starttls.enable", "true");

props.put("mail.smtp.host", "smtp.gmail.com");

props.put("mail.smtp.port", "587");


Session s = Session.getInstance(props,

    new javax.mail.Authenticator() {

        protected PasswordAuthentication getPasswordAuthentication() {

            return new PasswordAuthentication(username, password);

        }

    });
```

```
try {

    Message message = new MimeMessage(s);

    message.setFrom(new InternetAddress(username));

    message.setRecipients(Message.RecipientType.TO,

            InternetAddress.parse(email));

    message.setSubject(mailSub);

    message.setText(mailBody);


    Transport.send(message);


    System.out.println("Done");


} catch (MessagingException e) {

    throw new RuntimeException(e);

}

%>
```

Conclusion:

During the course of the project all the members of the team experienced the real time software product development life cycle. During the requirements gathering phase we learned the business model of a actual business. We experienced the problems and their solution during a team project. We also understood the importance of deadlines during a product development and how to complete the work within the deadlines.

The team also got to practice different techniques of project management which helped us to develop better understand of them and their use in real time projects.

For the purpose of the undertaken project the team visited a business facility, studied and understood their business model and processes. Identified a opportunity in form of a process that can be automated by an application. And successfully developed the above said application going through different phases of product development lifecycle.