Wholesale Management System

Abstract

This project focuses on developing a software for wholesale management. The system implements the defence managing and organizing of wholesaler's business.

The objective of this project is to computerize the whole system of the wholesale, so that the process becomes fast, easy and transparent. The paper work is minimized. It works according to the need and lowers the workload of user.

The system will contain wholesaler's all information. It can also provide different details related to the products and items available at wholesale.

It provides easy management of details of products and their stock management. It would provide easy navigation menu which a layman user can also use. This system clearly aims at reducing the paper work at the cost to be borne of the registers and other things

It will basically speed up the operation and decrease manpower, high cost. Increase security, speed, storing and accuracy.

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Overview

Wholesale management system is developed to aim to improve the efficiency & performance of daily business activity of the wholesaler. The wholesaler did not have any computerized system for now. All the business activities are recorded & documented manually. A lot of time is consumed during the process of the business activity. This project will develop a computerized system for helping the wholesaler in processing the daily business activity efficiently & accurately.

Objective

1. To increase the efficiency & performance of the wholesaler in dealing with daily busuiness activities.
2. To improve the management of the business activities records.
3. To improve efficiency of wholesaler's daily management.

Expected Output

At the final stage of the project, a complete Wholesale Management System with features such as login, add, update, delete & view will be delivered. The system will require the user to login before he can access other functions on the system. After the user has successfully logged in to the system the user can manipulate the records such as add new record, update record, delete record or view record.

Questionnaire

Q. Who will use this Software?

Ans. This software will be used for our convenience & customers can use it to place orders online.

Q. How this software will be beneficial for you?

Ans. Manual work will be reduced & customers will be attracted because of online order placement

Q. Do you need any special feature in this Software?

Ans. Yes, it would be good if the software can tell us complete monthly & annual statistics of sales &

Profit.

Q. In which language this software will be available?

Ans. This software will be in English at the starting & will be made available in more languages soon.

Feasibility Study

A feasibility study is done to examine the possibility or chances of improving the existing system or making a completely new system. It helsps to get an idea of the problem & to get rough assessment of wether feasible solution exists. It is necessary to avoid committing large resources to a project & then repent on it.

1. **Technical Feasibility**
   - It tells if the work of project be done with the present tools, procedures, existing software's technology & available personnel.
   - It determines if technology needed for proposed system is available & how it can be integrated within the Wholesale Management System & technical evaluation must also assess whether existing system can be upgraded to use new technology .

2. **Economic Feasibility**
   - It looks at the financial aspects of the project. It deals with returns from input capital.
   - The wholesale management system plans to acquire the necessary hardware & softwares which are very basic.

3. **Operational Feasibility**
   - It covers 2 aspects. One that the technical performance aspect & 2nd the acceptance within system.
   - In the system it checks, if customer who interacts with the software is able to work with software & if not then further development is of waste.

Components of Wholesale Management System

1. **Purchase record management**
   This feature will allow the wholesaler to manage the purchased order record; purchased product expected received date, purchased return outward, product price enquiry , add new purchase record, delete existing purchase record.

2. **Sales record management**
   This feature will allow the wholesaler to manage the quotation, sales order, invoice return outward at new sales record, delete existing sales record & view existing sales record.

3. **Customer Information management**
   this feature will allow the wholesaler to add new customer information, update existing customer information & delete existing customer information

4. **Manufacturer information management**
   this feature will allow the wholesaler to add new manufacturer information, update existing manufacturer information & delete existing manufacturer information.

5. **Staff Information Management**
   this feature will allow the wholesaler to add new staff information from update existing staff information & delete stuff customer information

6. **Stock Management**

this feature will allow the wholesaler to edit & view the information of product, set pricing for the products, set lowest limit of the amount of products

7. **Payment management**

this feature will allow the wholesaler to add new Payment Record comma update existing Payment Record & delete existing Payment Record

8. **Reporting**

this feature will generate report based on the criteria selected by wholesaler . Report that will be generated are product distribution report, sales record report, sales value report product distribution chart, sales record chart & sales value chart.

9. **Login**

This feature requires user to enter valid username & password before accessing into the system. This feature prevent unauthorised user from accessing the system

High Level project Requirements

Software Requirements

1. **PHP**

PHP hypertext preprocessor or PHP is a scripting environment. PHP provides a means for web developers to activate their websites with dynamic live database driven content. PHP code can mix with standard HTML. PHP code is one of the server side scripting. the benefit of the server side scripting is that the end result is row HTML & can utilise components on server without installing any particular program.

2. **Oracle Database Architecture**

An Oracle database is a collection of data treated as a unit. the purpose of a database is to store & retrieve related information. a database server is key to solving problems of information management. all this is accomplished while delivering high performance. a database server also prevents unauthorised access & provide sufficient solution for failure recovery.

3. Macromedia Dreamweaver MX

Macromedia Dreamweaver MX is a professional HTML Editor for designing, coding & developing websites, web pages & web applications. the visual editing features in Dreamweaver allow users to create pages quickly without writing a line of code. Dreamweaver also includes many coding related tools & features that help users to build dynamic database that web applications using server languages like ASP, ASP.Net, coldfusion markup language & PHP.

System Development Approach

Methodology selected for this project is waterfall model. the Waterfall model is a process of developing information system through preliminary investigate phase, problem analysis phase, requirements analysis phase, decision analysis phase, design phase construction phase & implementation phase

Waterfall model is chosen because this methodology provides flexibility that allows tailoring of the methodology to suit the characteristics of a particular system development effort. a project is divided into faces the phases are conducted sequentially, & the initiation of each phase depends on a decision to continue that is made during a formal review near the end of the immediately preceding phase. This methodology also provides the discipline to the development of the system.

```
                                                              ┌─────────────────────┐
                                                              │         Date        │
                                                              └─────────────────────┘
                                    ┌──────────────────┐      ┌─────────────────────┐
                                    │ Items Purchased  │──────│   Customer /        │
                                    └──────────────────┘      │ Manufacturer Name   │
                                                              └─────────────────────┘
          ┌──────────────────┐                                ┌─────────────────────┐
          │ Purchase & Sales │                                │      Quantity       │
          │   Management     │                                └─────────────────────┘
          └──────────────────┘
                                                              ┌─────────────────────┐
                                                              │         Date        │
                                                              └─────────────────────┘
                                    ┌──────────────────┐      ┌─────────────────────┐
                                    │   Items Sold     │──────│   Customer /        │
                                    └──────────────────┘      │ Manufacturer Name   │
                                                              └─────────────────────┘
┌──────────────────┐                ┌──────────────────┐      ┌─────────────────────┐
│                  │                │   Payment to     │      │      Quantity       │
│                  │                │    Supplier      │      └─────────────────────┘
│   Wholesale      │   ┌──────────┐ └──────────────────┘
│   Management     │───│ Payment  │ ┌──────────────────┐
│   System         │   └──────────┘ │  Payment from    │
│                  │                │    Customer      │
│                  │                └──────────────────┘
│                  │                ┌──────────────────┐
│                  │   ┌──────────┐ │   Place Order    │
│                  │───│  Stock   │ └──────────────────┘
│                  │   └──────────┘ ┌──────────────────┐
└──────────────────┘                │  Process Order   │
                                    └──────────────────┘
                                    ┌──────────────────┐
                                    │ Accounting Report│
                                    └──────────────────┘
                     ┌──────────┐   ┌──────────────────┐
                     │  Report  │───│   Sales Report   │
                     └──────────┘   └──────────────────┘
                                    ┌──────────────────┐
                                    │  Orders Report   │
                                    └──────────────────┘
```
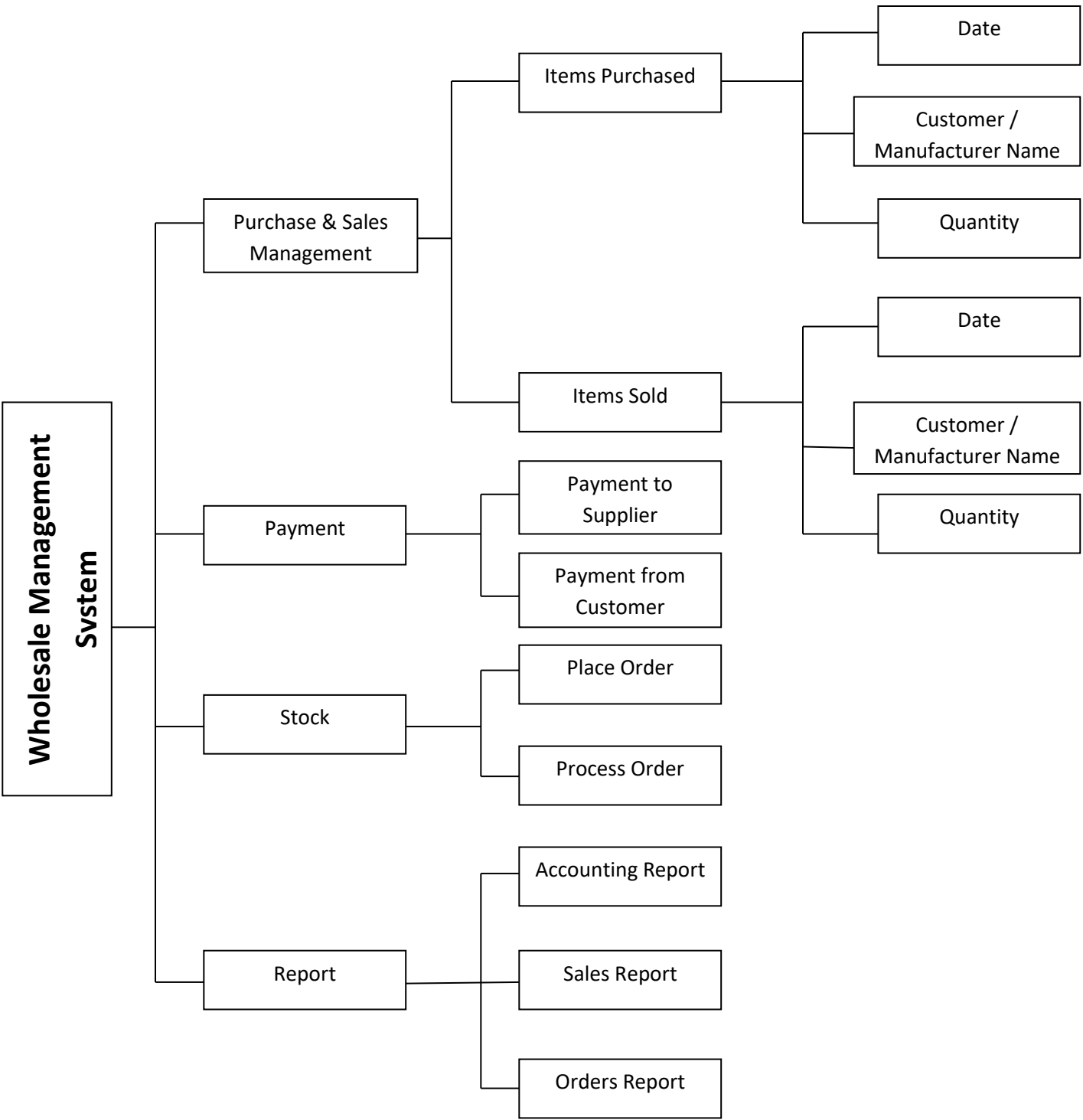
Data Dictionary

Accounts file	[Date+[Customer/Manufacturer Name+Amount]*]
Stocks file	[Product_Name+Quantity]
Orders file	[Date+[Item_name+quantity+cost]*]*
Status	Completion|Incompletion
Sales file	[Date+[item_name+quantity+cost]*]*
Bill	Date+[item_name+quantity+cost]*
Order	Date+[item_name+quantity]*
Money	Cost
supplies	Item_name+quantity
Supplies left	Item_name+quantity
Report	Date+[item_name+quantity+cost]*

DESIGN ENGINEERING

Function Point

Internal Logical files- 4 (Account file, Stock file, orders file, Sales file)

External Inputs- 3 (Order from Customer, Supplies from Supplier, Order from Owner)

External outputs- 5 (Account Report, Sales Statistics, Purchase Statistics, Payment, Bill)

External Inquiries- 3 (Check Stock, Supplies Processing, Orders Processing)

External Interface Files- 1 (Bill)

Information Domain Value	Count	Weighting Average	Result
External Inputs (EI)	3	3	9
External Outputs (EO)	5	4	20
External Inquiries (EQ)	3	3	9

Internal Logical Files (ILF)	4	7	28
External Interface files (EIF)	1	5	5
Total			71

Total Count= 71

∑fi= 44

F.P.= Total Count * [0.65 + (0.01 * ∑fi)]

    = 71 * [0.65 + 0.44]

    = 77.39

Data Design- Database Diagrams

Accounts File

Date	Customer ID	Manufacturer	Amount

Attribute Name	Type	Key	Default Value
Date	Date	-	Null
Customer ID	Integer	Primary Key	-
Manufacturer ID	Integer	Primary Key	-
Amount	Floating Point	-	Null

STOCKS FILE

PRODUCT ID_ST	QUANTITY

Attribute Name	Type	Key	Default Value
PRODUCT ID_ST	INTEGER	PRIMARY KEY	-
QUANTITY	INTEGER		NULL

SALES FILE

Date	PRODUCT ID_SA	QUANTITY	COST

Attribute Name	Type	Key	Default Value
Date	Date	-	Null
PRODUCT ID_SA	Integer	Primary Key	-
QUANTITY	Integer	-	NULL
COST	Floating Point	-	Null

Testing

Test Plan

There are two types of testing which are used In testing the developed software:-

Black Box Testing

In this test, how functional a program is checked & tested. The process of the test involves observing outputs which depend upon some inputs. No attempt is made to analyze the source code. The program is treated as a black box where input is given & ouput are received without seeing the internal process of the program.

White box testing

This testing of software is predicted on close examination of procedural details. Providing test cases which under some certain conditions or loops tests logical paths through the developed software.

Testing procedures:-

We have 3 testing procedures for testing of our developed software:-

Unit Testing-   This is the testing of an individual module & is usually carried out to ensure thes validity of a specific module. It makes use of white box testing technique.

Integrated Testing-   This is the test of system modules. It is done to identify errors, which relate to the interaction of many modules, which cannot be found by unit test but only by an interactive test. It uses the black box test techniques.

System testing-   It is the test of the system against its initial objectives. It is done either in a simulated environment or in a live environment.

Test Cases

Input	Component	Expected Output	Description
Login ID, Password	Login	ID, Alphanumeric, 256 Password, Alphanumeric, 256	Access granted according to privileges, if correct. 3 retries otherwise.
Product ID	Show Stocks	Product ID_ST, Number, 10	Shows the stock of the product & then provides an option to modify stocks if the user has privileges.
Product ID, Quantity	Modify Stocks	Product ID_ST, Number, 10, Quantity, Number, 3	Modifies the stocks in the database if the user has enough privileges.
Date, Customer ID, Manufacturer ID	Place Order	Date , mm/dd/yyyy, Customer ID, Number, 10, Manufacturer ID, Number, 10	Generates a unique Order ID for each order & calculates the total amount of orders placed.
Customer ID	Show Account	Manufacturer ID, Number, 10	Shows the details of the account of a specific customer
Manufacturer ID	Show Account	Manufacturer ID, Number, 10	Shows the details of account of a particular Manufacturer
Product ID	Show Sales	Product ID_SA	Shows the details of the all the sales made of the product till date.
Product ID	Update Product	Product ID_SA, Number, 10	Updates the details of the product i.e. cost etc.
Order ID	View Order	Product ID_OR, Number, 10	Shows the details of order placed.

Output flow diagram

```
Login  ◄─────────────┐
  │                  │
  ▼                  │
Ask For  ◄───────────┼──┐
Purpose              │  │
  │                  │  │
  ▼                  │  │
Pick from database ──┘  │
  │
  ▼
Displays Details
  │
  ▼
End
```