

Research Paper

Engineering

A Study on Online Purchase and Sales Process

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ABSTRACT

The purpose of this website is developed for electronics goods whole sell dealers online purchase and sales process. The main category of the product is smart card system, cellular phone and like this. The client of this website has more than ten branches all over the UK. They can control their ordering process and availability of the product on the online. The

supplier and customer of the dealer can get the order requests through E-Mail and in mail they will send corresponding user id and password.

The supplier and customer can login the website by using given user id and password. In their login they can know how many orders and request they have and their payment details.

KEYWORDS:

INTRODUCTION

In this website we have four modules; those are administrator login, branch login, supplier login and customer login.

In Administrator Login

We can create branches depending upon their requirement. Every branch registration page contains the branch name, branch id, address, bank details along with their user id and password.

Here we can view and edit the branch list purchase order list, invoice list, cleared and uncleared bill details, branch wise stock and profit details.

In Branch Login:

The branch user can create and alter the supplier master, supplier discount, and customer master and customer discount. This user can send the purchase request to supplier and can receive the sales request while purchasing and selling. This user can accept or reject the purchase order and sales request with or without alteration. The supplier and customer can get acknowledge through the email. In this mail they know login user id, password and requested details.

In Supplier Login:

Supplier can send the purchase orders details in online to the corresponding branch as well as the supplier can view the purchase order requests. To login the site, supplier can get the user id and password through the E-mail. After that they can change the user id and password according to their wish.

In Customer Login:

Customer can send the sales request details in online to the corresponding branch as well as the customer can view the invoice details. To login the site, customer can get the user id and password through the E-mail. After that they can change the user id and password according to their wish

Hardware Requirements

Processor
 Hard Disk
 RAM
 Floppy Disk
 Intel Pentium III
 20 GB
 RAM
 256 MB
 1.44 MB

IO Devices : Mouse and Keyboard.

Software Requirements:

Operating System : Windows 98/2000/XP/NT
 Web Browser : Internet Explorer / Mozilla Firefox
 Front-End Tool : ASP.NET with C# / ASP.NET with VB

Back-End Tool : SQL Server

LOGICAL DEVELOPMENT Data Flow Diagram:

A data flow diagram is graphical tool used to describe and analyze movement of the data through a system. These are the central tool

and the basis from which the other components are developed. The transformation of the data from the input to output, through processed, may be described logically and independently of physical components associated with the system. These are known as the logical dataflow diagram. The physical data flow diagram show actual implements and movement of the data between people, departments and workstation, a full description of system actually consists of set of data flow diagrams. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams. Each component in DFD is labeled with a descriptive name. Process is further identified with number that will be used for identification purpose. The development of DTD's is done in several levels. Each process in lower level diagram can be broken down into a more detailed DFD in the next level. Top-level diagram is often called context diagram. It consist a single process bit, which plays vital role studying the current system. The process at the first level DFD.

The idea behind the explosion of a process into more process is that understanding at one level of details is exploded into greater detailed at the next level. This is done until further explosion is necessary and an adequate amount of detail is described for analyst to understand the process.

Larry Constantine first developed the DFD as a way of expressing system requirements in a graphical form, this lead to the modular design.

A DFD is also known as a "Bubble Chart" has the purpose of clarifying system requirements and identifying major transformation the will become program in system design. So it is the starting point of the design to lowest level of details. A DFD consists of series of bubbles joined by data flows in the system.

DFD SYMBOLS:

In the DFD, there are four Symbols

- A square define a source or destination system data
- An arrow identified data flow. It is the pipeline through which the information flow
- A circle or a bubble represents a process that transforms
- Incoming data flow into outgoing data flows
- An open rectangle is a data store, data at rest or a temporary of data

Process that transformation data flow

Source or Destination of data

Constructing a DFD:

Several rules of thumb are used in drawing DFD's

Process should be named and numbered for an easy reference. Each name should be representative of the process.

The direction of flow is top to bottom and from left to right. Data traditionally flow from source to the destination although they may flow back to the source. One way to indicate this is to draw long flow line back to the source. An alternative way is to repeat the source symbol as a destination. Since it is used more than once in the DFD it is marked with a short diagonal.

When a process is exploded into lower level details, they are numbered.

The names of data stores and destinations are written in capital letters. Process and dataflow names have the first letter of each work capitalized.

A DFD typically shows the minimum contents of data store. Each data store should contain all the data elements that flow in and out.

Questionnaires should contain all the data elements that flow in and out. Missing interface redundancies and like is than accounted for often through interviews.

Features of DFD's

The DFD shows flow of data, not of control loops and decision are controlled consideration do not appear on a DFD.

The DFD does not indicate the time factor involved in any process whether the data flows take place daily, weekly, monthly or yearly.

The sequence of events is not brought out on the DFD.

Types Of Data Flow Diagrams

- Current Physical
- Current Logical
- New Logical
- New Physical

Current Physical:

In current physical DFD processes label include the name of people or their positions or the names of computer system that might provide some of the overall system processing label includes an identification of the technology used to process the data. Similarly data flows and data stores are often labels with the names of the actual physical media on which data are stored such as file folders, computer files, business from or computer tapes.

Current Logical:

The physical aspects at the system are removed as much as possible so that the current system is reduced to its essence to the data and the processors that transforms them regardless of actual physical form.

New Logical:

This is exactly like a current logical model if the user were completely happy with the user were completely happy with functionality of the current system but had problems with how it was implemented typically through the new logical model will differ from current logical model while having additional functions, absolute function removal and inefficient flows recognized.

New Physical:

The new physical represents only the physical implementation of the new system.

Rules Governing The DFD's Process

No process can have only outputs

No process can have only inputs. If an object has only inputs than it must be a sink.

A process has a verb phrase label.

Data Store :

Data cannot move directly from one data store to another data store, a process must move data.

Data cannot move directly from an outside source to a data store, a process, which receives, must move data from the source and place the data into data store.

A data store has a noun phrase label.

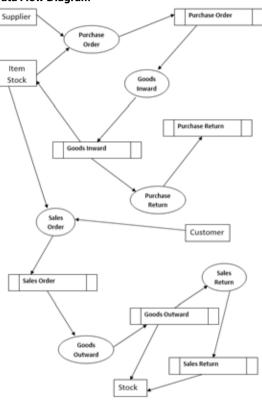
Source or sink:

The origin or destination of data Data cannot move direly form a source to sink it must be moved by process A source and or sink has a noun phrase land

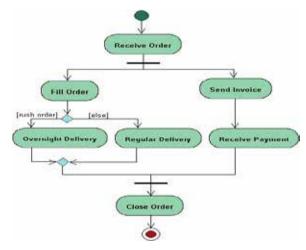
Data Flow

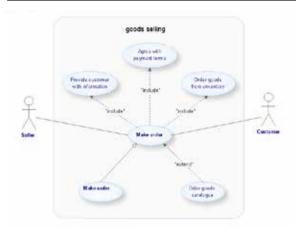
A data flow has only one destination of flow between symbols. It may flow in both directions between a process and a data store to show a read before an update. The later is usually indicated however by two separate arrows since these happen at different type.

Data Flow Diagram

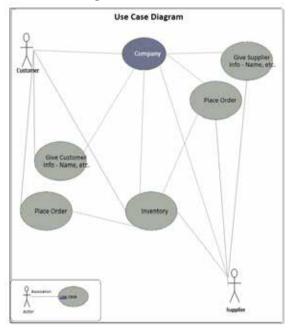


ARCHITECTURAL DESIGN:



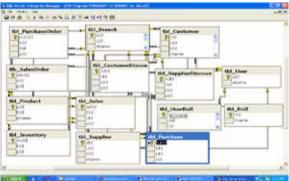


UML Use case Diagram:



DATABASE DESIGN:

E-R DIAGRAM



PROGRAM DESIGN INPUT DESIGN:

Input design is the link between the information system
and the users and those steps that are necessary to put
transaction data in to a usable form for processing data entry. The activity of putting data into the computer for processing can be activated by instructing the computer to
read data from a written printed document or it can occur
by keying data directly into the system. The designs of input

focusing on controlling the amount of input required controlling the errors, avoid delay extra steps, and keeping the process simple. System analyst decides the following input design details

- What data to input?
- What medium to use?
- How the data is arranged and coded?
- The dialogue to guide the users in providing input.
- Data items and transaction needing validation to detect errors.

Methods for performing input validation and steps to follow when error occurs

OUTPUT DESIGN:

Designing computer should proceed in well thought out manner. The term output means any information produced by the information system whether printed or displayed. When analyst design computer output they identified the specific output that is needed to meet the requirement. Computer is the most important source of information to the users. Output design is a process that involves designing necessary outputs that have to be used by various users according to requirements. Efficient intelligent output design should improve the system relationship with the user and help in decision making. Since the reports are directly required by the management for taking decision and to draw the conclusion must be simple, descriptive and clear to the user. Options for outputs and forms are given in the system menus.

When designing the output, system analyst must accomplish the following:

- Determine the information to present.
- Decide whether to display, print, speak the information and select the output medium
- Arrange the information in acceptable format.
- Decide how to distribute the output to intended receipt

TESTING

Testing is the major quality measure employed during the software engineering development. Its basic function is to detect error in the software. Testing is necessary for the proper functioning of the system. Testing has to be done at four levels

Unit Testing

Unit testing focuses verification effort on the smallest unit of the software, design the module. Here, using the detail design as a guide, important control paths are tested to uncover errors within the boundary of the module. Unit testing is always white-box oriented, and the step can be conducted in parallel for multiple modules.

Integration Testing

Integration testing is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors, associated with interfacing .The objective is to take the unit tested modules and build program structure that has been directed by the design.

Validation Testing

Validation testing demonstrates the traces the requirements of the software. This can be achieved through a series of black box tests.

System Testing

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. Although each test has a different purpose, all works should verify that all system elements have been properly integrated and perform allocated functions. The various tests include recovery testing, stress testing, and perform testing.

CONCLUSION

By developing this web-based application the administrator can enjoy the task, doing it ease and also by saving the valuable time.

The entire website has been developed and deployed as per the re-

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quirements stated by the user, it is found to be bug free as per the testing standards that are implemented. Any specification untraced errors will be concentrated in the coming versions, which are planned to be developed in near future. The system at present does not take care off the money payment methods, as the consolidated constructs need Secure Socket Layer standards and are critically to be initiated in the first face; the application of the credit card transactions is applied as a developmental phase in the coming days. The system needs more elaborative technicality for its inception and evolution.

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