

Billing System

Synopsis

TEAM GROUP - 04

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PROJECT GUIDE

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1. Introduction

The project “Billing system” is an application to automate the process of ordering and billing of a “Departmental store” .This web based application is designed considering the chain of departmental store which is located in various cities. This application also administrates its users and customers.

2.Objective

This project will serve the following objectives:-

- 1 Add and maintain records of available products.
- 2 Add and maintain customer details.
- 3 Add and maintain description of new products.
- 4 Add and maintain new entered category of products.
- 5 Provides economic/financial reports to the owner monthly or weekly and yearly.
- 6 Provides a convenient solution of billing pattern.
- 7 Make an easy to use environment for users and customers.

3. Project category

RDBMS:

The project is based on the concept of RDBMS (i.e. Relational Database Management System).

“ A database which store data in the form of tables which has related with each other in as particular manner ”.

4.Types of reports

1. Daily Sales Report
2. Monthly Customer Report
3. Daily Product Report
4. Due Date Report (Report of a particular Day)
5. Billing Report

5.Technologies and Tools

- 1 Web Technology: Asp.net (Microsoft visual studio 2005 framework 2.0)
- 2 Database: MySQL Server-2005
- 3 Development Tool: MS Visual Studio 2005
- 4 Web Server: IIS
- 5 Web browser: Internet Explorer service pack 1
- 6 Languages Used: C#.net, JavaScript
- 7 Others: Themes, CSS

6.Hardware

CPU configuration

- AMD processors 4000+ series
- RAM 1 GB DDR2

Monitor

-17" color

Operating System

-Windows XP with service pack 2

7.Future Scope

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- 1 This project will help the store keeper in fast billing
 - 2 This project enable store keeper to maintain a great database of all customers visited and purchase product from store.
 - 3 Project will enable to see report regarding product and category.
 - 4 Easy to maintain in future prospect.

8.ANALYSIS OF PRESENT SYSTEM

Before we begin a new system it is important to study the system that will be improved or replaced (if there is one). We need to analyze how this system uses hardware, software, network and the people resources to convert data resources, such as transaction data, into information products, such as reports and displays. Thus we should document how the information system activities of input, processing, output, storage and control are accomplished.

9.PROBLEM OF EXISTING SYSTEM

- 1. Inability of modification of data:** The managing of huge data effectively and efficiently for efficient results, storing the details of the consumers etc. in such a way that the database can be modified as not possible in the current system.
- 2. Not user friendly:** The existing system is not user friendly because the retrieval and storing of data is slow and data is not maintained efficiently.
- 3. Difficulty in reports generating:** Either no reports generating in a current system or they are generated with great difficulty reports take time to generate in the current system.
- 4. Manual operator control:** Manual operator control is there and lead to a lot of chaos and errors.
- 5. Lot of paperwork:** Existing system requires lot of paper work and even a small transaction require many papers fill. Moreover any unnatural cause (such as fire in the organization) can destroy all data of the organization. Loss of even a single paper led to difficult situation because all the papers are interrelated.
- 6. Inability of sharing the data:** Data cannot be shared in the existing system. This means that no two persons can use the same data in existing system. Also the two departments in an organization cannot interact with each other without the actual movement of data.
- 7. No support in decision-making:** Existing system does not support managerial decision-making.

8. **No support in strategic competitive advantage:** Existing system do not support strategic competitive advantages.

10.CHARACTERSTIC OF THE PROPOSED SYSTEM

1. **Easiness in modification of data:** The proposed system provides managing of huge data effectively and efficiently for efficient results, storing the details of the customers, employees etc. in such a way that the database can be modified.
2. **User friendly:** The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the graphical user interface is provided in the proposed system, which provides user to deal with the system very easily.
3. **Reports are easily generated:** Reports can be easily generated in a proposed system. So any type of reports can be generated in a proposed system, which helps the managers in a decisions-making activity.
4. **Sharing the data is possible:** Data can be shared in proposed system. This means that two or more persons can use the same data in existing system provided that they have right to access that data. Also the two or more departments in an organization can easily interact with each other without the actual movement of data.
5. **No or very few paperwork:** The proposed system either does not require paper work or very few paper works is required. All the data is feted into the computer immediately and various bills and reports can be generated through computers. Since all the data is kept in a database no

data of the organization can be destroyed. Moreover work becomes very easy because there is no need to keep data on papers.

6. **Support strategic competitive advantage:** Proposed system supports strategic competitive advantages. Since the proposed systems provide easiness in reports generating it will provide strategic advantages among competitors.
7. **Computer operator control:** Computer operator control will be there no errors. Moreover storing and retrieving of information is easy. So work can be done speedily and in time.

11.FEASIBILITY ANALYSIS

Title: Feasibility report for the computerization of the various activities of the company.

Background: The Company facing the problem of inconsistent and out of time information in its activities. Very much time is consuming for report generation, which is not very helpful for decision making. So we want a system, which provide immediate information.

Method of study: The analysis procedure comprised of field trips in the various departments of the company. The following documents and sources were looked up:

- The purchase order that contain items to be purchased.
- The accounts register.
- Purchase order issues to vendors.
- Bills receive from vendors.

- Bills give to the customers.
- Purchase return forms (if any) give to vendors.

NEED FOR FEASIBILITY STUDY

The feasibility study is carried out to test whether the proposed system is worth being implemented. Feasibility study is a test of system proposed regarding its work ability, its impact on the organization ability to meet user needs and effective use of resources. It is usually carried out by a small number of people who are familiar with the information system techniques, understand the part of the business or organization that will be involved or effected by the project and are skilled in the system analysis and design process.

The key consideration involve in the feasibility study are:

1. Technical
2. Behavioral
3. Economic

1. TECHNICAL FEASIBILITY

Technical feasibility centers on the existing computer system (hardware, software etc) and to what extent it can support the proposed system addition. For example, if the current system is operating at 70% capacity (an arbitrary value), then another application could overload the system or require additional hardware. If the budget is serious constrain then the project is judged not feasible.

The technologies ant the environment which are used in this project are

SOFTWARE

Front End

1. Language used: ASP.NET. We use this language is supports event driven programming feature.
2. ADO.NET

Back end

Supporting Software: SQL Server 2005. This is used to storing data in the form of tables. It is easy to use.

OPERATING SYSTEM:

Platform: Windows XP . Our system requires window operating system, which is easily available.

HARDWARE:

Intel based processor-run computer system, which have keyboard and mouse as input devices. This has been decided for its case of availability and up-gradation.

The various registers maintained at the different department have enough information recording, which will help in digitizing the available data.

2.BEHAVIOURAL FEASIBILITY:

An evaluation of the behavior of the end users, which may effect the envelopment of the system. People are inherently resistant to change and computers have to know to facilitate changes and computers have to known to facilitate changes. An estimate should be made of how strong a reaction the user staff is likely to have towards the development of a computerized system. It is a common knowledge that a computer installation has

something to do with turnover, transfer, retraining and changes in employee job status, therefore the introduction of a candidate system requires special effort to educate, sell and train the staff on new ways of conducting business.

The personal of the user organization will be affected by the proposed system. As the aim of the system is only to satisfy the information needs, no employees will loose their position by the proposed system. In fact the proposed system will help the organization in reducing the voluminous work involved. Also the involvement of users in every stage of the project is going to increase the success factor.

The staff in not well educated for running a computerized system. They are adamant in perceiving a mechanical process of working as they have long been used to the manual entry system. This aspect needs considerable amount of attention.

Our system is also feasible for organization because it supports of the organization and its strategic plan.

3.ECONOMIC FEASIBILITY:

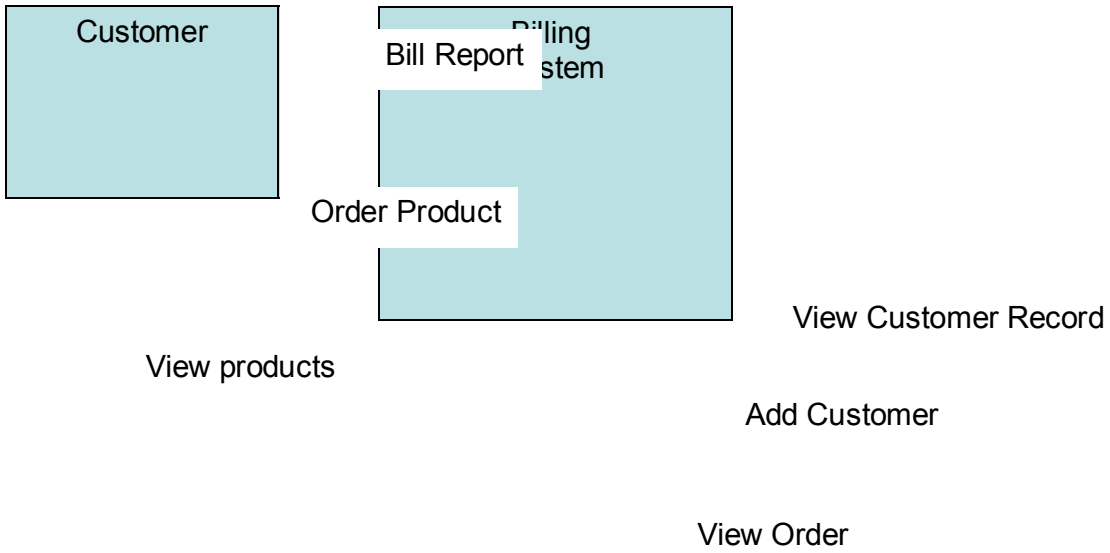
The procedure is to determine the benefits and savings that are expected from a candidate system and compare it with the costs. If a benefit outweighs costs, then the decision is made to design and implement the system. Otherwise further alterations are made in the proposed system

1. Manpower cost
2. Hardware and software cost

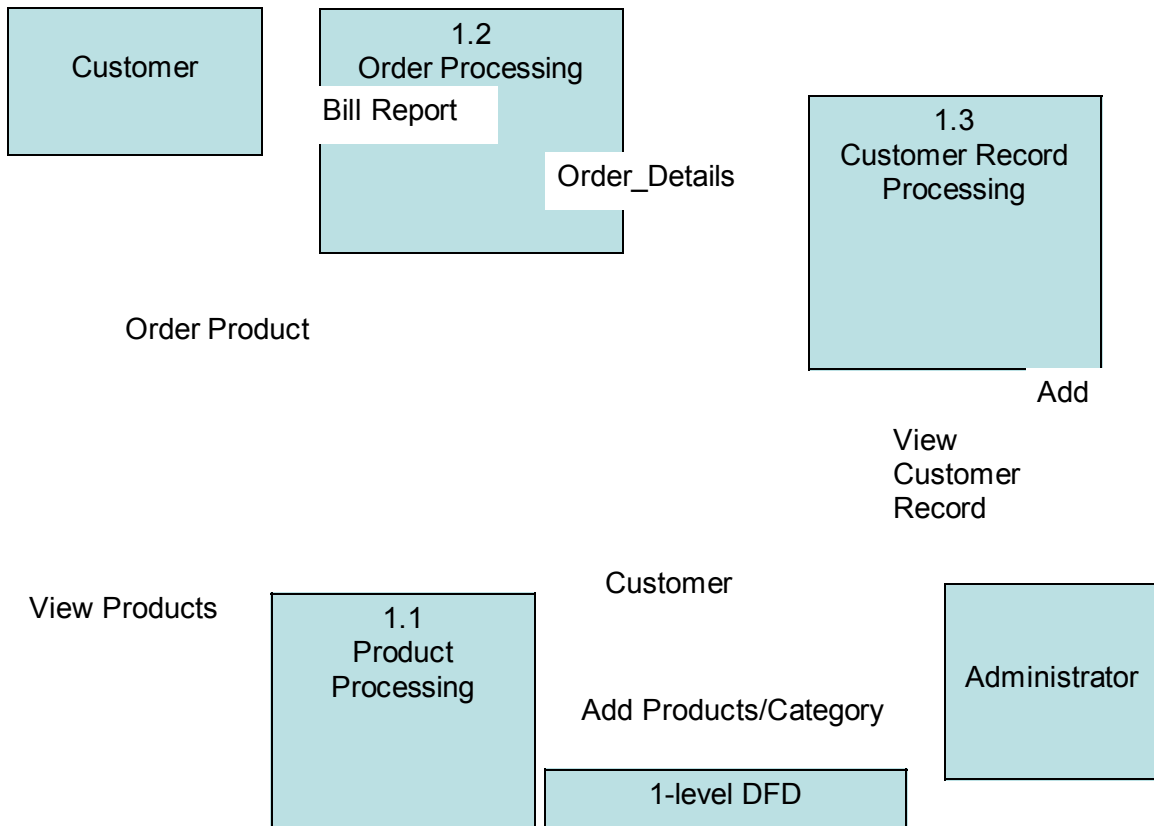
12. Data flow diagram

A data flow diagram is graphical representation that depicts the information flow and the transforms that r applied as date moves from input to output. It can be used to represent a software at any level of abstraction. In fact DFDs may be partitioned in to levels. That represents increasing information flow and functional details.

DFDs are defined in levels with every level decreasing the level of abstraction as well as defining a greater detail of the functional organs of the system. A zero level DFD also known as context or fundamental system model represents the entire software elements as a single bubble with input and output data entities which are indicated as incoming and outgoing arrows. Data Flow Diagram help understanding the basic flow of data from one process to another process. This 0 level DFD represents fundamental overview of the billing system.



This is the 1-Level DFD for the billing system in between the processes of the billing system. It is more describes the flow information. Billing system concern customer's choice of product so there Product processing process the customer according to the choice. **0-LEVEL** Add Product the detailed of the data flowing of with the is a order of Two another process is there for further processing of the order and customers information in billing system database.



13. Entity Relation Diagram

Entity Relation Diagram represents the object relationship pairs in graphical forms thus we can say that the primary goal of ER diagrams is represent data objects along with their relationships.

ER model for data uses three features to describe data:

- **Entities** which satisfy distinct real world items in an application
- **Relationships** connecting different entities and representing meaningful dependencies between them
- **Attributes** which specify various properties of entities and relations involved in a system.

Customer

Cust_ID C_Name Address

Pro_ID Pro_Name
Pr_Category

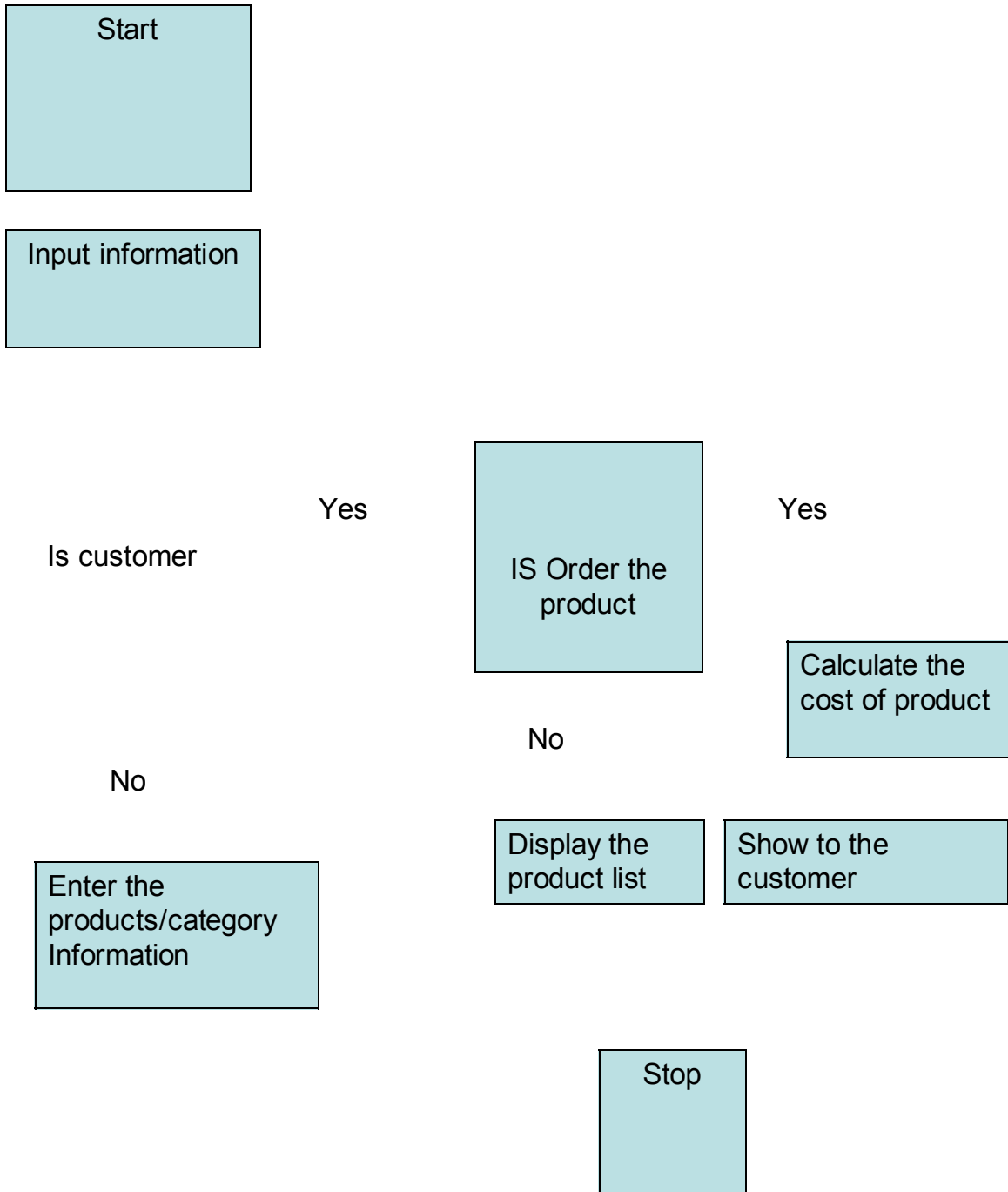
Has Order

Product

E-R Diagram

8. Flow chart

Flow chart is a graphical representation using symbol to show the step by step sequence of operation, activities or procedures used in computer system analysis , activity analysis and in program sequence representation. It present the simple flow project.



DATABASE DESIGN

DATABASE NAME - BILLING SYSTEMDB

_CATEGORY_MASTER	
COLUMN NAME	DATA TYPE
ID	INT(PRIMARY KEY)
CATEGORY_NAME	VARCAHR(MAX)

1

_CUSTOMER_MASTER	
COLUMN NAME	DATA TYPE
Customer_ID	INT
Customer_Name	VARCAHR(MAX)
Customer_Address	VARCAHR(MAX)
Date	DATETIME

2

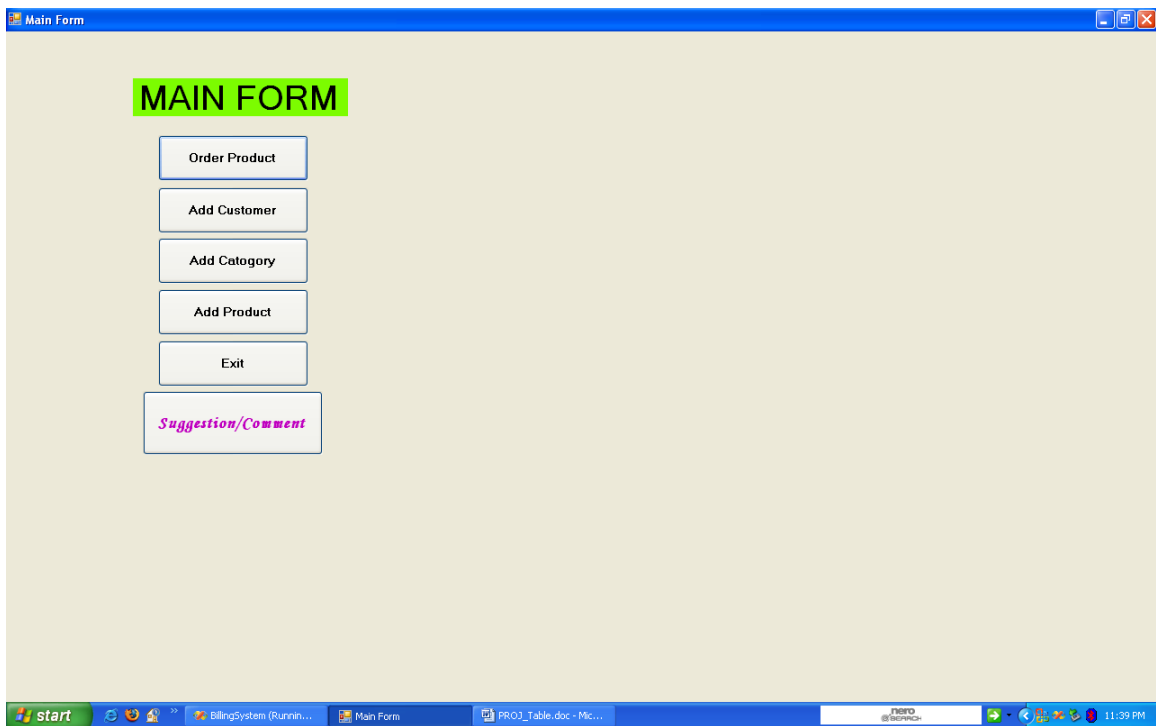
_ORDER_DETAILS	
COLUMN NAME	DATA TYPE
Customer_ID	INT
Order_ID	INT
Units	INT
Price	FLOAT
Discount	FLOAT

3

_PRODUCT_MASTER	
COLUMN NAME	DATA TYPE
_PRODUCT_ID	INT
_PRODUCT_NAME	VARCAHR(MAX)
ID	INT(FOREIGN KEY)
PRICE	FLOAT
STOCK	INT
REORDER_LEVEL	INT

SNAPSHOTS OF FORMS

MAIN FORM



ORDER PRODUCTS

ORDER PRODUCTS

ORDER PRODUCT

Customer Information

Customer ID:

Customer Name:

Address:

Date:

Product Information

Category Name: Product Name: MRP: Discount: Unit:

S_NO	Date	Customer Name	Category Name	Product Name

Total Price: Total Discount: Cash Collect:

Windows taskbar: start, BillingSystem (Runnin..., ORDER PRODUCTS, PRO1_Table.doc - Mic..., nero @ Service, 11:41 PM

CUSTOMER MASTER

CUSTOMER MASTER

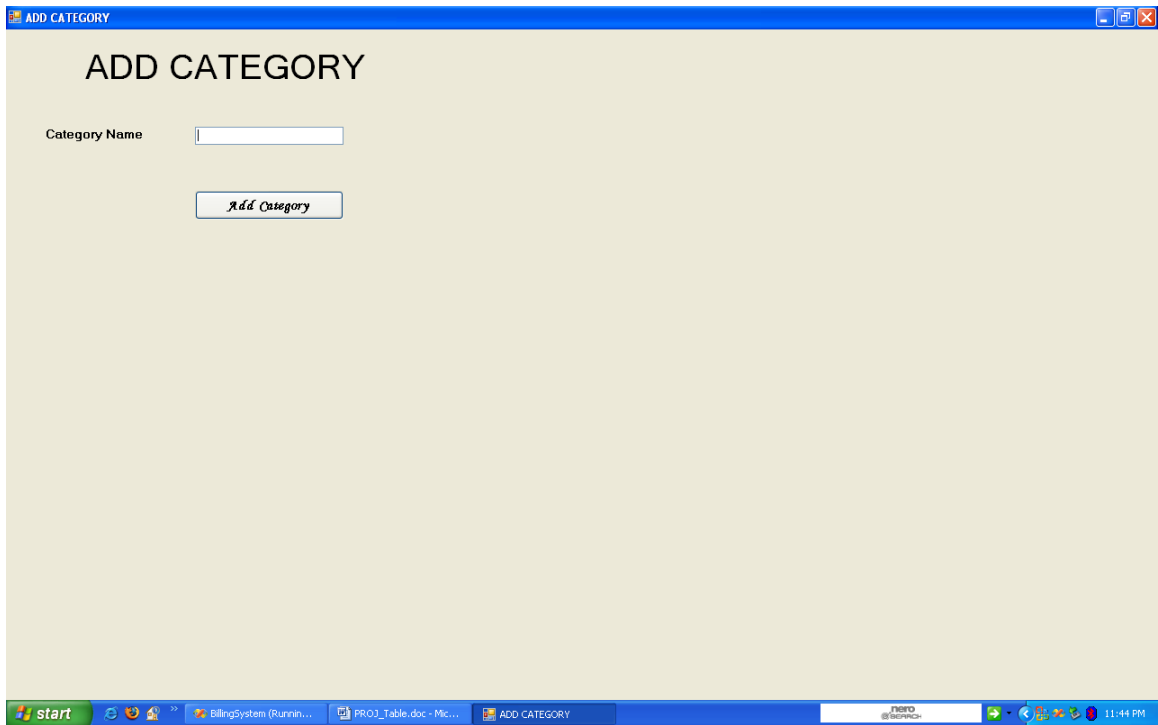
Customer Name

Address

Date

start | BillingSystem (Runnin... | PRO1_Table.doc - Mic... | CUSTOMER MASTER | nero @ home... | 11:42 PM

ADD CATEGORY



The screenshot shows a Windows application window with a blue title bar containing the text "ADD CATEGORY" and standard window control icons. The main content area has a light beige background and features the following elements:

- A large heading "ADD CATEGORY" at the top left.
- A label "Category Name" followed by a text input field.
- A button labeled "Add Category" below the input field.

The Windows taskbar at the bottom includes the Start button, several open application windows (BillingSystem, PRO1_Table.doc, ADD-CATEGORY), the system tray with icons for network, volume, and power, and a clock showing 11:44 PM.

NEW PRODUCT

NEW PRODUCT

Category Name: Milk

Product Name:

Price MRP:

Price Cost:

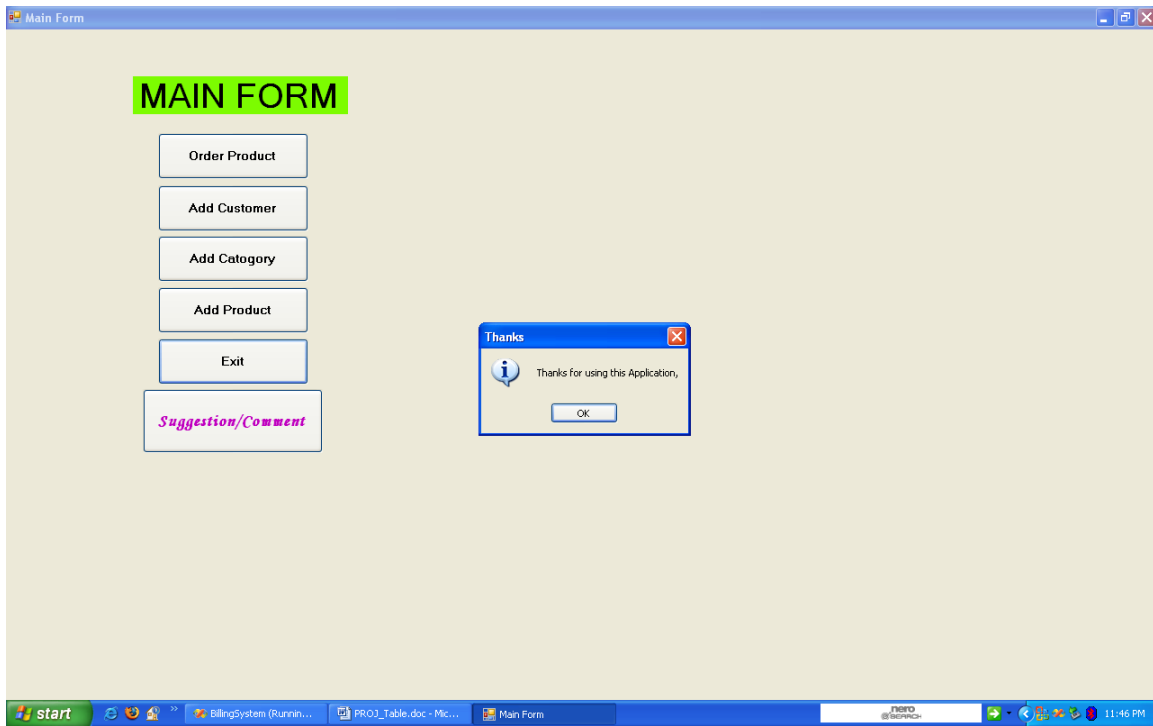
Stock:

Reorder:

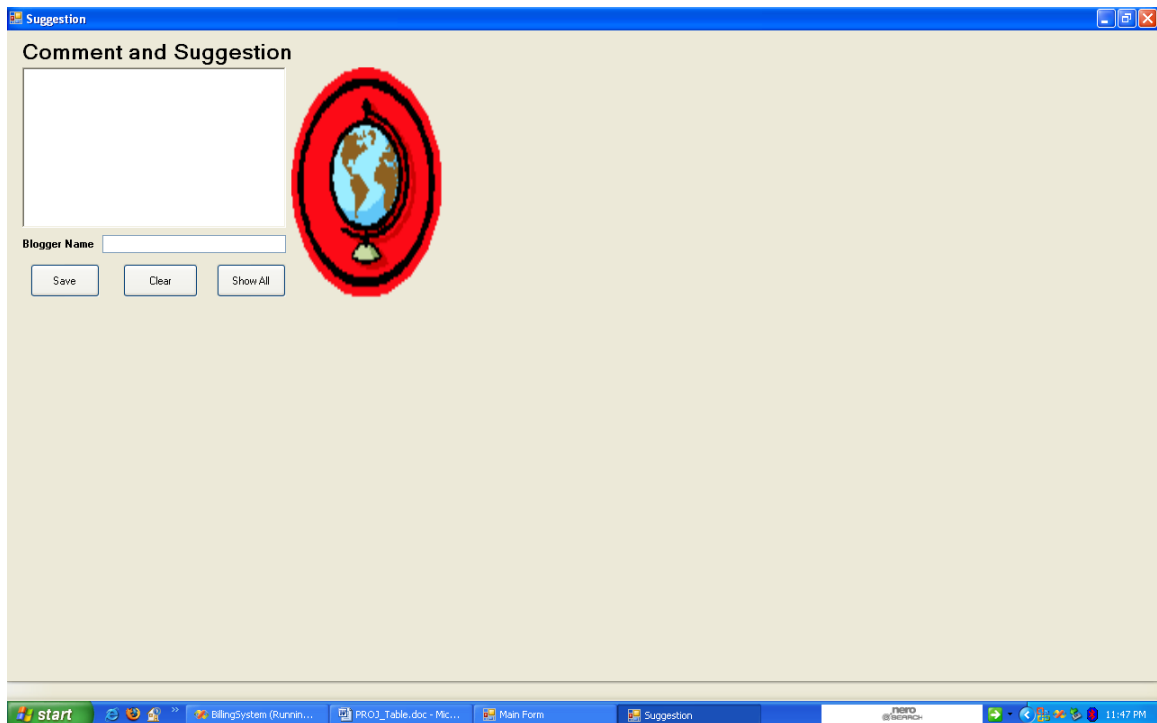
Add Product

start | BillingSystem (Runnin... | PROJ_Table.doc - Mic... | NEW PRODUCT | 11:46 PM

EXIT



SUGGESTION



18. Conclusion

This was our project of System Design Lab about “Billing System”. Development of this System takes a lot of efforts from us. We think this system gave a lot of satisfaction to all of us.

Though every task is never said to be perfect in this development field even more improvement may be possible in this system.

We learned so many things and gained a lot of knowledge about development field.

We hope this will prove fruitful to us.