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INTRODUCTION

During the past several decades personnel function has been transformed from a relatively obscure record keeping staff to central and top level management function. There are many factors that have influenced this transformation like technological advances, professionalism, and general recognition of human beings as most important resources.

A computer based management system is designed to handle all the primary information required to calculate monthly statements of customer account which include monthly statement of any month. Separate database is maintained to handle all the details required for the correct statement calculation and generation.

This project intends to introduce more user friendliness in the various activities such as record updation, maintenance, and searching. The searching of record has been made quite simple as all the details of the customer can be obtained by simply keying in the identification or account number of that customer. Similarly, record maintenance and updation can also be accomplished by using the account number with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record absolutely up-to-date.

The entire information has maintained in the database or Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be easily be accessible from the file.

OBJECTIVE OF THE PROJECT

A computer based management system is designed to handle all the primary information required to calculate monthly statements of customer account which include monthly statement of any month. Separate database is maintained to handle all the details required for the correct statement calculation and generation.

This project intends to introduce more user friendliness in the various activities such as record updation, maintenance, and searching. The searching of record has been made quite simple as all the details of the customer can be obtained by simply keying in the identification or account number of that customer. Similarly, record maintenance and updation can also be accomplished by using the account number with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record absolutely up-to-date.

The main objective of our project is providing the different typed of customers facility, the main objective of this system is to find out the actual customer service. Etc.

- It should fulfill almost all the process requirements of any Bank.
- It should increase the productivity of bank by utilizing the working hours more and more, with minimum manpower.

This project includes the entire upgraded feature required for the computerization banking system. This system is very easy to use, so that any user can use without getting pre-knowledge about this. Its very much user friendly and meet almost all daily working process requirements. This system is completely GUI based and can be use by mouse and as well as keyboard. This system is melded in such a way that has got all features to upgrade without making much change in existing components.

FEASIBILITY ANALYSIS:-

Depending on the results of the initial investigation, the survey is expanded to a more detailed feasibility study. A feasibility study is a test of a system proposal. According to its workability, impact on the organization, ability to meet user's needs and effective use of the resources its main task done during the feasibility study are:-

- 1. Evaluation of existing system and procedures. Our group went to various Banking Professionals to gather information about the software system. They are using and evaluating those system and the procedures invoked in it during the period of feasibility study.
- 2. Analysis of alternative candidate systems after studying the various systems we derived various alternatives through which we develop our project and evaluated the alternative. The most appropriate is selected.

FEASIBILITY STUDY

The only tangible benefit provided by the proposed system is that the paper work is reduced to the minimum and hence the reduction in cost incurred on Stationary and its storage. The system provides many benefits that can't be measured in terms of Money for e.g. user's friendliness, more user response being more efficient.

✓ TECHNICAL FEASIBILITY:-

The proposed system is technically feasible as it can be developed easily with the help of available technology. The proposed system requires MS – VISUAL Studio 2005 using VB.Net as a Interface for Programming & back-end as MS-SQL Server 2000 for storing/maintaining database. The database can be easily interconnected using MS-SQL Server 2000.

✓ OPERATIONAL FEASIBILITY:-

Automation makes our life easy. The proposed system is highly user friendly and is much easily able to interact with the system. Therefore the users will readily accept the system as data entry and making queries can be easily done.

SYSYTEM REQUIREMENTS SPECIFICATIONS

Hardware specifications

Hardware is a set of physical components, which performs the functions of applying appropriate, predefined instructions. In other words, one can say that electronic and mechanical parts of computer constitute hardware.

This package is designed on a powerful programming language Visual Basic. It is a powerful Graphical User Interface. The backend is ACCESS, which is used to maintain database. It can run on almost all the popular microcomputers. The following are the minimum hardware specifications to run this package: -

Personal Computer: -

It minimum contains P-III

Processor with 128 MB RAM

Software Requirements:

The software is a set of procedures of coded information or a program which when fed into the computer hardware, enables the computer to perform the various tasks. Software is like a current inside the wire, which cannot be seen but its effect can be felt.

- 1. Operating System- Windows NT / 2000 / XP
- Application Software- Application software uses front end visual basic and database access etc.

Editor- Visual basic.

INTRODUCTION TO FRONT END TOOL

- ➤ Visual programming aims at providing the user with an interface that is intuitive and easy to use. In developing such an interface, the programmer employs user-friendly features such as windows, menus, buttons and list boxes.
- Its Environment provides all features that are required to develop a graphical user interface as ready -to- use components. The programmer does not have to write code to create and display commonly required user-friendly features each time around.
- ➤ When the programmer needs a specific user interface feature such as button, he selects the appropriate ready-to-use component provided by the visual programming environment. These components can be moved, resized and renamed as required.

For Example:-

If the programmer needs to have a button then the visual programming environment provides him with one. All that, the programmer does this selec the button and place it on screen at the required position.

- > Typically the mouse is used to select and place the necessary components. Thus, the visual programming environment is also called a point and click environment.
- A visual programming environment automates the process of creating a user interface. The interface provided by the visual programming environment to the programmer designs the user interface visually instead of writing code.
- ➤ In addition it also provides a means of associating code with each component. In each case of calculator, for each button, we can specific that the code is to execute when we click on it.

NEED FOR VISUAL PROGRAMMING:-

- There are several programming tools that allow us to build such visually appealing and intuitive interface. These tools allow us to design interface that employ user friendly features such as menus, buttons, windows etc.
- ➤ However, the disadvantage of such tools is that the interface is designed using code. The programmer has to code the user interface features specifying the size, position etc. this makes designing the user interface a major task in itself.

ADVANTAGES OF VISUAL PROGRAMMING:-

- ➤ Visual development of graphical user interface which are easy to use and easy to learn.
- A programmer need not write code to display the required component.

➣ For Example:-

The visual programming environment displays a list of available components. The programmer picks up the required component from this list to display it.

- The component can be moved, resized and even deleted, if so required.
- There is no restriction on the number of controls that can be placed on a form.
- > The interface components provided by the visual programming environment have some code built into them.

For example:-

A button' knows' when it has been clicked upon. In the case of conventional programming tools, the programmer has to write code to determine the component that has been clicked and then execute the appropriate code.

➤ Visual Basic is one of the most popular programming tools available today. And it's also secret that there have been massive changes in it as it became Visual Basic.Net.

- The reason of that change is Visual Basic itself, which has now become Visual Basic.Net. The difference between Visual Basic.Net and the previous version. Visual Basic 6.0 is revolutionary and far reaching. Visual Basic.Net has been more than four years in the marking and it represents entirely new directions for Visual Basic. Besides the biggest change integrated support for web development the very syntax, of techniques that you've probably learned carefully are now completely different such as data handling and many controls; project types and other aspects of Visual Basic 6.0 are no longer available at all.
- ➤ Visual Basic has a long and so far glorious history. When it first appeared, it created a revolution in windows programming. Visual Basic introduced unheard of ease to windows programming just builds the program you want right before your eyes, and then run it. In so doing it changed programming form a chore to something very like fun.

INTRODUCTION TO BACK END TOOL

Introduction to SQL: -

SQL is a standard computer language for accessing and manipulating databases.

- SQL stands for Structured Query Language.
- SQL allows you to access a database.
- SQL is an ANSI standard computer language.
- SQL can execute queries against a database.
- SQL can retrieve data from a database.
- SQL can insert new records in a database.
- SQL can delete records from a database.
- SQL can update records in a database.
- SQL is easy to learn.
- ➤ SQL is an ANSI (American National Standards Institute) standard computer language for accessing and manipulating database systems. SQL statements are used to retrieve and update data in a database. SQL works with database programs like MS Access, DB2, Informix, MS SQL Server, Oracle, Sybase, etc.
- ➤ Unfortunately, there are many different versions of the SQL language, but to be in compliance with the ANSI standard; they must support the same major keywords in a similar manner (such as SELECT, UPDATE, DELETE, INSERT, WHERE, and others).

SQL Data Manipulation Language (DML)

- ➤ SQL (Structured Query Language) is syntax for executing queries. But the SQL language also includes syntax to update, insert, and delete records.
- These query and update commands together form the <u>Data Manipulation Language</u>

 (DML) part of SQL: -
 - ❖ **SELECT** extracts data from a database table
 - **UPDATE** updates data in a database table
 - **❖ DELETE** deletes data from a database table
 - **INSERT INTO** inserts new data into a database table

SQL Data Definition Language (DDL)

➤ The Data Definition Language (DDL) part of SQL permits database tables to be created or deleted. We can also define indexes (keys), specify links between tables, and impose constraints between database tables.

> The most important DDL statements in SQL are: -

- **CREATE TABLE** creates a new database table
- **ALTER TABLE** alters (changes) a database table
- **DROP TABLE** deletes a database table
- **CREATE INDEX** creates an index (search key)
- DROP INDEX deletes an index MS SQL SERVER 2000

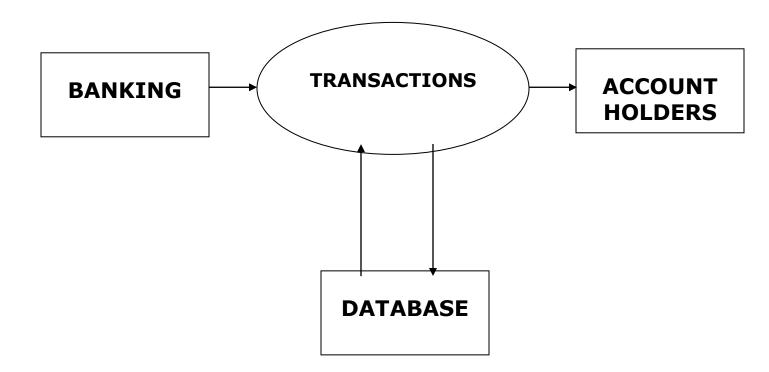
DATA FLOW DIAGRAM

■ **DATA FLOW DIAGRAM:** -The data flow diagram is also known as "bubble chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design so it is the starting point of specification down to the lowest level of detail. A DFDs consists of a series if bubbles joined by lines. The bubbles represent data transformation and the lines represent the data flow in the system.

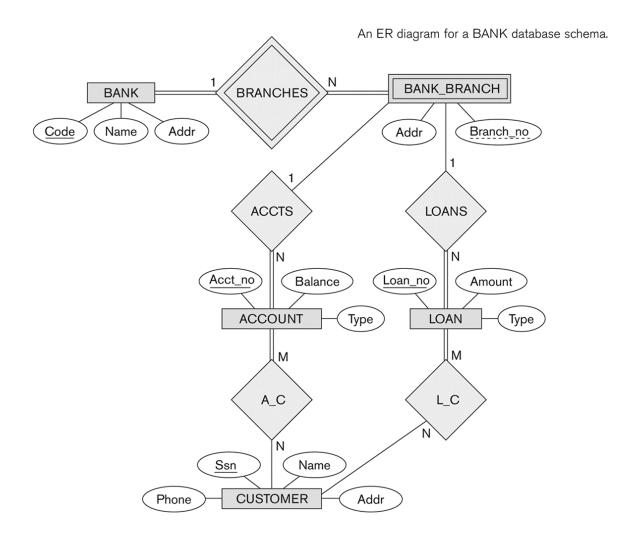
DFD SYMBOLS:

- ✓ A system defined a source or destination of data.
- ✓ An arrow identifies data flow, data in motion.
- ✓ A circle represents the process that transforms incoming data flow to outgoing data flow.
- ✓ An open rectangular is data store-data at rest or a temporary repository of data.

SYSTEM DATA FLOW DIAGRAM



E-R DIAGRAM



ER-modeling is a data modeling technique used in software engineering to produce a conceptual data model of a information system. Diagrams created using this ER-modeling technique are called Entity-Relationship Diagrams, or ER diagrams or ERDs. So you can say that Entity Relationship Diagrams illustrate the logical structure of databases.

Dr. Peter Chen is the originator of the Entity-Relationship Model. His original paper about ER-modeling is one of the most cited papers in the computer software field.

Currently the ER model serves as the foundation of many system analysis and design

methodologies, computer-aided software engineering (CASE) tools, and repository

systems.

The original notation for ER-Diagrams uses rectangles to represent entities, and

diamonds to represent relationships.

There are three basic elements in ER-Diagrams:

• Entities are the "things" for which we want to store information. An entity is a

person, place, thing or event.

Attributes are the data we want to collect for an entity.

• Relationships describe the relations between the entities.

ERDs show entities in a database and relationships between tables within that database. It

is essential to have ER-Diagrams if you want to create a good database design. The

diagrams help focus on how the database actually works.

Entity (Instance)

An instance of a physical object in the real world.

Entity Class

: Group of objects of the same type.

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E.g. Entity Class "Student", Entities "John", "Trish" etc

Attributes

Properties of Entities that describe their characteristics.

Types:

Simple

: Attribute that is not divisible, e.g. age.

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Composite

: Attribute composed of several simple attributes,

e.g. address (house number, street, district)

Multiple

: Attribute with a set of possible values for the same entity, e.g. Phone (home, mobile etc.) or email Key

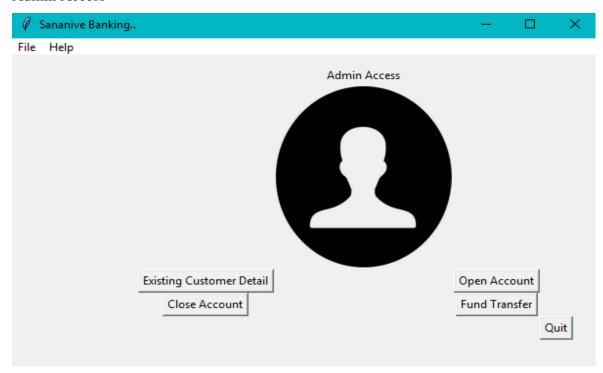
: Uniquely Ids the Entity e.g. PPSN, Chassis No.

Each simple attribute associated with a VS that may be assigned to that attribute for each individual entity,

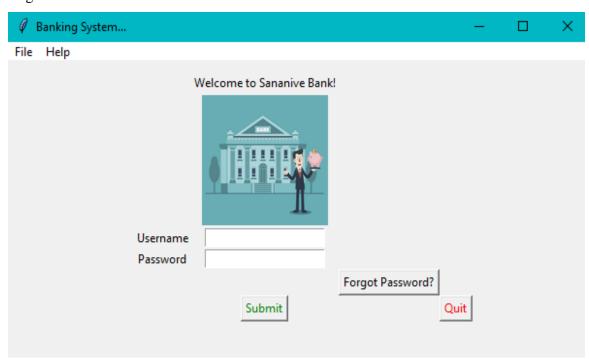
e.g. age = integer

DESIGN

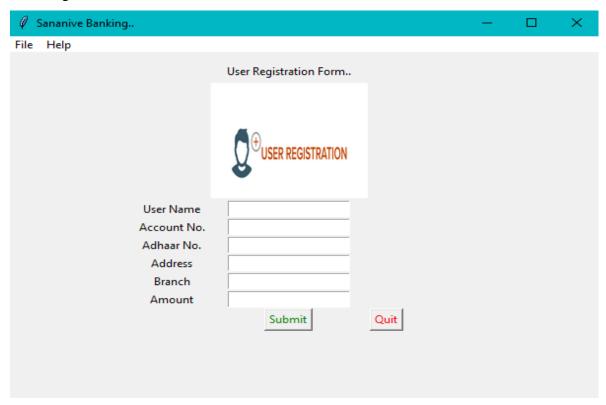
Admin Access



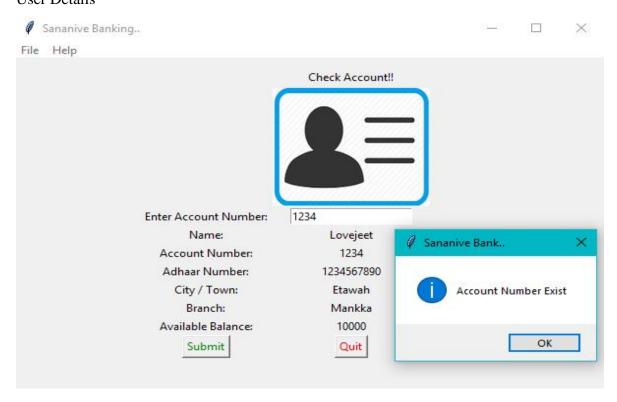
Login



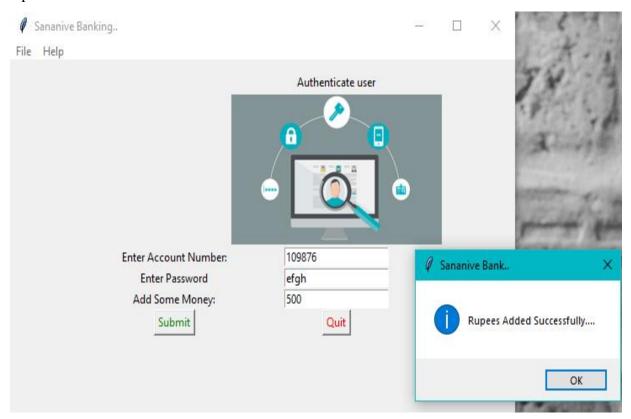
User Register



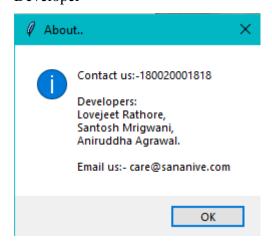
User Details



Update



Developer



Database

Name	Account_Number	Adhaar_Number	Address	Branch	Avail_Balance	Password
Lovejeet User_X Star_Boy	1064104000 1064 109876	1234565 9879 9876789	Etawah Agra Munger	Near Mamta Press Saint_Nagar Patna	16500 12500 15600	abcd NULL efgh
rows in se	et (0.11 sec)					
ysql> sele	t * from adduser					
Name	Account_Number	Adhaar_Number	Address	Branch	Avail_Balance	Password
Lovejeet User_X Star_Boy	1064104000 1064 109876	1234565 9879 9876789	Etawah Agra Munger	Near Mamta Press Saint_Nagar Patna	16500 12500 15600	abcd NULL efgh
rows in se	et (0.00 sec)					
ysql> sele	t * from adduser					
Name	Account_Number	Adhaar_Number	Address	Branch	Avail_Balance	Password
Lovejeet User_X Star_Boy	1064104000 1064 109876	1234565 9879 9876789	Etawah Agra Munger	Near Mamta Press Saint_Nagar Patna	16500 12500 15600	abcd NULL efgh

FUTURE SCOPE OF THE PROJECT

This project can be handled in future by doing various modifications like: -

- > We can go further for Online Banking.
- ➤ We can establish and start various Branches and available help centers for Account Holder's Queries.
- ➤ We can also deal through internet by creating web pages and a banking website for internet dealing.
- > To attract Account Holder's we can offer various offers during festivals months.
- We can also deal in various types of Banking Transactions.
- > To have more and more customer satisfaction we will emphasize more and more on our dealings.

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