

Synopsis

On

Blood Bank Management System

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Program Name :- Modern Web Programming Tools And Technique

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INTRODUCTION OF PROJECT

1.1 Project Objective

- To allow only authorized user to access various function and processed available in the system.
- Locate any A/C wanted by the user.
- Reduced clerical work as most of the work done by computer.
- Provide greater speed & reduced time consumption.

1.2 Project Benefits

Some benefits are:

- Access to privilege banking zone
- Dedicated Relationship Manager
- International Debit Card with insurance coverage
- Facility to link with current account
- Anywhere Banking with higher limits
- Daily account balance alerts
- Multi-city cheque book with 25 leaves

1.3 Project Scope

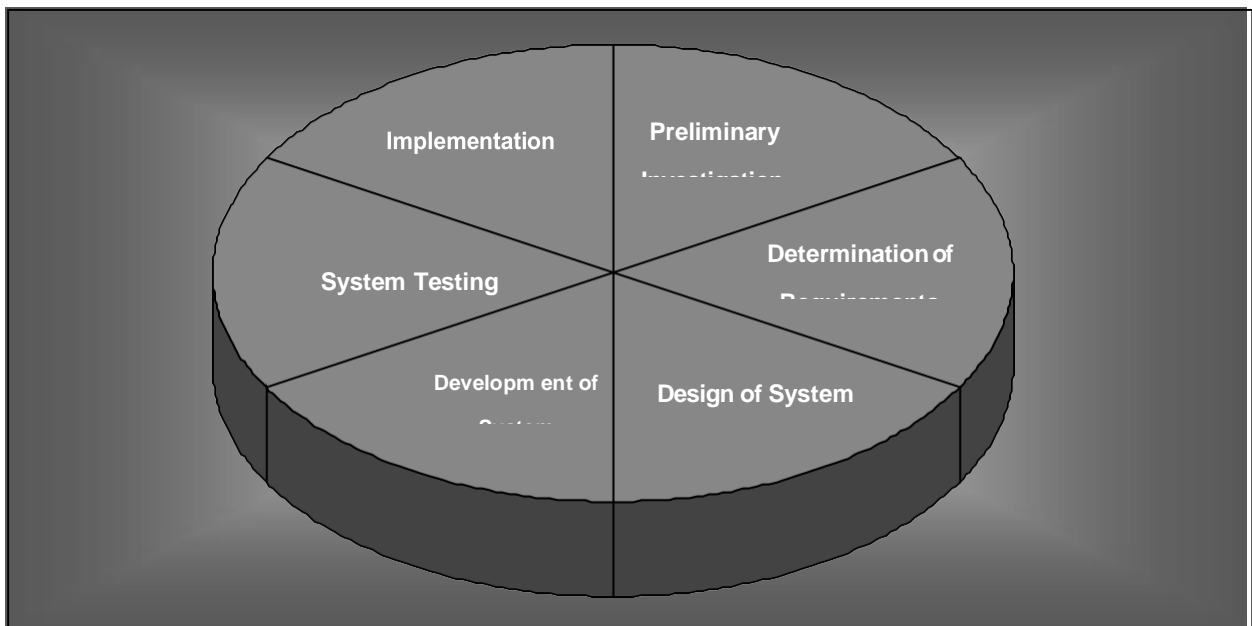
Banking activities are considered to be the life blood of the national Economy. Without banking services, trading and business activities cannot be carried on smoothly. Banks are the distributors and protectors of liquid capital which is of vital significance to a developing country.

Efficient administration of the banking system helps in the economic Growth of the nation. Banking is useful to trade and commerce.

1.4 Project Limitation

- The failure of a larger institution could have serious ramifications for the entire system in that if one universal bank were to collapse, it could lead to a systemic financial crisis.
- Universal bankers may be tempted to take excessive risks.
- Banks may deploy their own assets in securities with consequent risk to commercial and savings deposits.
- Vulnerable to high risks due to investment banking activities coupled with focus on commercial banking activities.
- Unsound loans may be made in order to shore up the price of securities or the financial position of companies in which a bank had invested its own assets.

System Development Life Cycle



System development Life cycle consist of two major steps of System analysis and design. It includes set of activities that analysts, designers and users carry out to develop and implement an information system.

So, here we followed the different stages of system development life cycle to develop Billing Software efficiently.

The systems development life cycle consists of the following activities:

1. Preliminary Investigation
2. Determination Requirements
3. Design of System
4. Development of System
5. System Testing
6. Implementation

Preliminary Investigation

For this, the need arises to understand the viewpoint of two important entities...

Top management and users.

In order to gather pertinent information, I interviewed the Top Management and asked the following questions:

- How the present system works?
- What all drawbacks are in the present system?
- What is their vision about the new system?
- What specific facilities they want from new system, those are currently not in scope of existing system?
- How will data flow in the system?
- Who will be authenticated to access data and his/her access rights?

To find more about present system's working mechanism such as the ways of getting inputs and providing outputs, I interviewed the current users of the system by asking following question:

- Are they comfortable with the present system?
- What flaws exists in the current system?
- Do they feel the necessity of new system?
- What will be their requirements from new system?
- Are they satisfied with their role in new system?

After carrying out these interviews, I drew conclusion about the Top Management's requirements and whether users are in support of the new system.

This activity is consisting of three parts:-

Request Clarification

As previously stated, the requests are made from employees and users in the organization, which are not clearly stated, therefore a

system investigation is being considered. The project request must be examined to determine precisely what the originator wants.

My project is basically meant for Receipt & Revenue section so taking in to consideration of all these tasks; the corresponding development came in to existence.

Feasibility Study

Feasibility study tried to determine whether a given solution would work or not. Its main objective is not to solve the problem, but to acquire its scope. It focuses on following:

- Meet user requirements
- Best utilization of available resources
- Develop a cost effective system
- Develop a technically feasible system

It is further classified into 3 aspects:-

Technical Feasibility

Issues to be studied are, whether the work for the project will be done with current equipment, existing S/W technology and available personnel? If the new technology is required, then what is the likelihood that it can be developed?

This billing software is technically feasible. The primary technical requirement includes the availability of Windows 2000 or higher version of operating systems installed in the network. MS Access is also required which was already installed. To develop programs VB 6.0 was required which was also available. Reliability, access power and data security was also available. The system can also be developed if the new technology is acquired. Thus, through all the ends technical feasibility was met.

The tools that we were requiring were all available to us they are:-

Hardware Requirements

Server Machine:

Minimum p-3, 256 MB RAM, 20 GB Hard Disk

Client Machine:

Minimum p-3, 128 MB RAM, 8 GB Hard Disk

Printer:

132 columns High Speed Dot Matrix Printer with local language support

Software Requirements

Windows OS: Version 2000 and above; Source: Microsoft

Windows OS: Version 2010 or 2007; Source: Microsoft

Visual Studio: Version 2012 or Above Source: Microsoft

MS-Access: Version 2000 and above; Source: Microsoft

Economic Feasibility

Issues to be studied are, whether the new system is cost effective or not? The benefits in the form of reduced cost?

This billing software is economically feasible. As the hardware was installed from quite beginning, the cost on project of hardware is low. Similarly, the software loaded for this project was used even after this project was developed for many other applications. The software cost was under budget. Moreover, the technical requirements were already available so there was no further expenditure for buying software packages.

Operational Feasibility

Issues to be studied are, is there sufficient support for management and users? Is the current method acceptable to users? Will the proposed system cause any harm?

This billing software is operationally feasible. This application provides the necessary information to the user such as how to enter the information regarding different operations performed on the database. The application was planned in such a way that no prior knowledge

was required to go through the various operations. The user just needed to have the basic knowledge of computers.

This software also possesses behavioral feasibility. It's because the users of the system are computer professionals and know the advantages of computer system. Moreover, this application is going to enhance their skills and reduce their workloads.

Request Approval

Not all the requested projects are desirable or feasible. However, those that are both feasible and desirable should be put into scheduled. After the project is approved, its cost, priority, completion time and personnel requirements are estimated and used to determine where to add it to any project list.

Determination of System Requirement

Determination of system requirement means studying the adjacent system in order to collect the details regarding the way it captures data, processes the data, produces the output. I used following techniques for identifying system requirements:

- Reviewing organization documents
- Onsite observations
- Conducting interviews

Reviewing Organization Documents

I first learnt about the organization involved in, or affected by the project, I got to know how the department works and the employees were directly involved/associated with the application. Annual manuals and reports were of great help to me.

Onsite Observations

It is a process of recognizing and observing people, objects and their occurrence to obtain the information. The major objective of the Onsite Observation is to get as close as possible to real system being studied.

Here, I observed the activities of the system directly. I saw the office environment, workload on the system, and workload on the users. The physical layout of the current system along with the location & movement of staff was analyzed. In this way,

information about the present workflow, objects and people was gathered.

This helped me to understand various procedures & processes, which were to be developed in the new system.

Conducting Interviews

Written documents and onsite observation just tell that how the system should operate. They do not include enough details to allow a decision to be made about the merits of system proposal, nor do they present user views about the current system.

I conducted interviews of the staff, which were directly involved with the application. Also the regular users of the application were interviewed. Based on their viewpoints, crystal clear system requirements were jolted down. These interviews were of great help.

Design of System

Interface Design

A well-designed interface improves the user perception of the content or services. It needs not to be flashy but it should be ergonomically sound. Two main types of design interface, which I considered, are:

- User Interface
- Communication Interface

User Interface

The various documents that are maintained by the RR section that have been used to analyze the user interfaces that will interact with the billing software.

The billing software consists of many modules and these modules consist of various sub modules, which provides the user with various facilities.

Communication Interface

The software may either be installed on a client server based setup with a Local Area Network (using the Ethernet Interface, one to one connection and TCP/IP) or on a standalone machine whereby client and server components resides on the same machine.

Detailed Design Specification

Complete design specification serves the following purposes:

- It should be able to adequately serve as training material for new project members, imparting them enough information and understanding about the project implementation.
- It should serve as “Objective Evidence” that the designers and/or implementers are following through on their commitment to implement the functionality described in their requirements specifications.

Testing & Debugging

Testing is a process of executing the program with the intent of finding errors and it establishes confidence that the program does what it is suppose to do. Testing can be performed in two ways:-

Unit Testing:

It is testing of individual module. Before initiating unit testing, it must be ensured that the code is peer previewed.

Integration testing

Integration testing is performed after all the software units are combined together. The objective here is to test the software interfaces. Project team conducts the integration testing. Before entering integration testing, it may be ensured that code review and unit testing have been performed on the individual software modules.

I conducted the unit testing for finding errors and the results of the unit testing are recorded and action initiated for rectification of the errors/defects.

VALIDATION

Almost every field in the database which is sensitive i.e. responsible for some important changes are validated. Basically we validated the field as such is numeric and the length in case of the primary keys and also used the Data base to complete most of the details once entered at the data entry time,

So that while performing the transaction at faster rate also the user is not going to face any problems or can make any sort of blunders in the fine, status, book no that can be issued, and other important fields.

Mostly the validation is carried out in the lost focus, click, change and other similar events where the entered value is compared with the one stored in the database and if there is duplication to occur or no match with the database then the entry is to be removed and user is prompt to reenter it.

Implementation & consequently maintenance was not included as part of our project.

