

Web Based Banking System For Account Department

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ABSTRACT

Information is one of the most valuable resources and it plays a vital role for wealth and development of a nation. In Myanmar, it is using the Web Based Banking System for only officially. Web Based Banking System is a term for performing transactions, payments etc, over the web based through a bank's secure website. It is make activities secure and access account information. The number of customers who choose Web Based Banking as their preferred method of dealing with their finances is growing rapidly and customer can know the balance of their electronic bill payments. In the fast changing world, there is need for timely and accurately information. Therefore, it is necessary to process and use the information effectively and efficiently. Many people appreciate the convenience. This system is implemented by using Java Server Page and MySQL.

1. INTRODUCTION

It organized from the Italian word "Banco" meaning "Bench" in English, as a man called "Lombarts" by using lent his money to people in Germany and Switzerland during the Roman age, the spring time of monetary system started to develop. Later, it become is "Bank".

The existing manual system is very tedious and time consuming. It requires a lot of paper works and to maintain a large amount of files, and it is also very difficult to search a record from a large number of files. The main objectives of this thesis are to reduce manpower by using bank web page, to speed up the flow of banking information, to provide quick response, time can be saved by reducing paper works and to study how to develop web based banking system.

A transaction Processing System (TPS) is a type of information system that collects, stores, modifies and retrieves the data transactions of an enterprise. The success of commercial enterprises depends on the reliable processing of transactions to ensure that customer orders are met on time, and that partners and suppliers are paid and can make payment. The field of transaction processing, therefore, has become a vital part of effective business management, led by such organizations as the Association for Work Process Improvement and the Transaction Processing Performance Council.

Transaction processing systems offer enterprises the means to rapidly process transactions to ensure the smooth flow of data and the progression of processes throughout the enterprise. Typically, a TPS will exhibit several characteristics: Rapid Processing, Reliability, Standardization, Controlled Access.

Web Based banking system make the faster services, less human error and central storage of all data. There will be a need for highly trained computer operations thus stilled people will be needed for the administration and troubleshooting of the networking system. Accounting to our calculation the cost for web based system can be covered within three years. The advantages are look at deposit and withdrawal the money at the anywhere on the computer and faster services and centralized store of all data. Bank is place where money is lent or exchanged or put of safety or to acquire interest. Among these services, this thesis includes user to know their electronic bill payments, and bank statement can be used for future web Based banking system.

2. RELATED WORKS

A bank is an institution where people of business can keep their money, banks also offer services such as lending, exchanging, or transferring money. Banks take a major role in economic relationship among nations. At the present age, one does not need to go shopping person, she can buy what she wants by payment online system and even her goods will delivered to her home in time. It is on of the advantages of virtues of banks. The payment online system is tired to introduce on the market of our country. But we can use traveler's cheques or ATM cards for security of money. The bank is giving many services to it customer such as Current account, Saving account, Call account, Fixed account, payment order, credit card, remittance, loan and etc.

From the study of M.M.T (2003) [7], her used Current account, Saving account, call account of a Bank. Her explained detailed about information system, database system (DBMS) and other statement. From the study of K.K.Z [6] present the basic theory of web-based application. In this section, her explained history of the web and her show in more detail how can be usage of web as publishing medium.

Web-based banking systems have Current account, Saving account, Fixed account, Special Deposit account and other statement. Banks are the most important business centre is international social welfare and economy.

A transaction is any event that passes the ACID test in which data is generated or modified before storage in an information system. Atomicity: atomicity means that a transaction is either completed in full or not at all, Consistency: TPS systems exist within a set of operating rules. If an integrity constraint states that all transactions in a database must have a positive value, any transaction with a negative value would be refused, Isolation: transactions must appear to take place in isolation, Durability: transactions are completed they cannot be undone. To ensure that this is the case even if the TPS suffers failure, a log will be created to document all completed transactions. Especially, this system is applied in Transaction Processing of Web Based Banking System.

3. PROPOSED SYSTEM

According to figure 1, the process flow of the system is described as follows. Firstly, every new customer must create an account in Account Department. If there is no any account (existing account) the user has to create an account in account department. After creating an account, a customer can deposit, withdraw and remittance. There are several deposits such as current account, saving account, fixed account and special deposit account. This system calculates interest daily, monthly, Annual and reports to the customer. When a new customer registers to the account department. Account department gives an account number for customer. Account department and administrator are interacting each other accessing data.

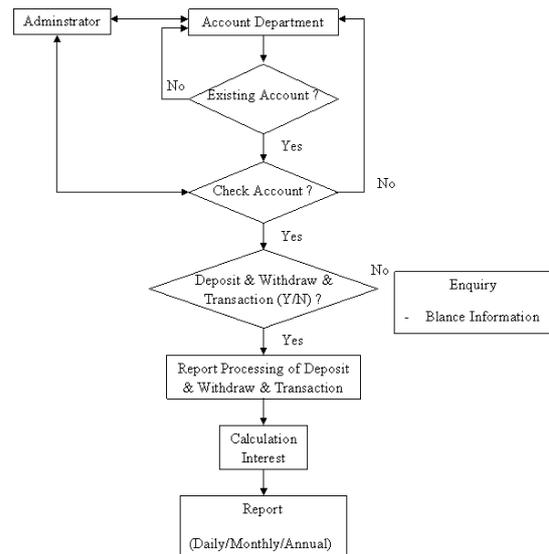


Figure 1. Flow chart of the system of Account Department

3.1 Information System

An information system is a system that collects, stores, retrieves, processed and displays information. These are my thesis that associates information system solely with computers. In fact, many information systems commonly used in our daily lives so not involved computers. Some primitive examples of non-computerized information systems are phone book, Dictionaries, File cabinets, library and catalogs, and other libraries themselves. At the other extreme, some of the most sophisticated information systems do not involve computers either. Most managerial activity can be viewed as information systems. In fact, most human organization and social institutions can be characterized as information systems.

3.2 Java Server Page

Java Server Page is technology for controlling the content or appearance of web pages through the use of servlets, small programs that are specified in the web page and run on the web server to modify the web page before it is sent to the user who requested it.

Where as a Java Server Page calls a java program that is executed by the web server, Server page contains a script that is interpreted by a script interpreter before the page is sent to the user.

A JSP is a web page that contains java code along with the HTML tags. The java code within the

page is executed on the server side, producing textual data. It has a unit URL, which is used by the client to access the page. Java Server Pages is the name of the technology that provides a standard specification for combining java as the scripting language with HTML.

Java Server Pages technology allows you to easily create Web content that has both static and dynamic components.

It projects all the dynamic capabilities of java servlet technology but provides a more natural approach to creating static content. The main features of for technology are a language for developing JSP pages, which are text-based documents that describe how to process a request and construct a response, constructs for accessing server-side objects and mechanisms for defining extension to JSP language.

3.3 MySQL

The MySQL database has become the world's most popular open source database which is probably not an exaggeration. It quickly become the dominant web database thanks to its speed, compact size and comparative ease of use and liberal licensing policy, being distributed from the start as open source and free for many purpose. MySQL's availability for up and coming web-server platforms such as Linux as well as ports for desktop system such as Windows, at a time when the major players in the database system such as Linux as well as ports for desktop system such as Windows, at a time when the major players in the database industry were still concentrating on "big iron" datacenter hardware played an important role as well. It is typically found on web servers as a backend for web applications such as bulletin boards, user tracking and content management systems. One of its most high-profile web applications is as the backend for the very popular Wikipedia wiki-based encyclopedia. MySQL released version of its flagship RDBMs product, providing features such as views and SQL functions, which have long been standard in other relational database.

MySQL enterprise server software is the most reliable secure and up-to-date version of MySQL for cost-effectively delivering E-commerce, Online Transaction Processing. It is fully integrated transaction safe, ACID compliant database with full commit, rollback, crash recovery and row level locking capabilities.

3.4 Web-Based

Any application on the Internet via the browser is called Web-based application. World Wide Web is a collection of host machines or servers which deliver documents, graphics and multi-media to users via the Internet.

Users can inquire the information about the thesis across the Web Browser. The browser requests the inquiry data to the Web Server. Web Server retrieves the requested objects from the local file system. Then, the Web Server sends requested objects back to the Web Browser. The browser parses and displays the retrieved objects. So, the user can see the results on browser as output.

3.5 Client/Server Technology

Client/Server Systems operate in networked environments, splitting the processing of an application between a front-end client and a back-end processor. Generally, the client process requires some resource, which the server provides to the client. Clients and Servers can reside in the same computer, or they can be on different computers that networked together. Both clients and servers are intelligent and programmable, so that the computing power of both can be used to devise effective and efficient applications.

4. ACCOUNT DEPARTMENT

The bank is giving many services to it customer such as current account, saving account, fixed account, Payments order, Credit card, remittance, Loan and etc. This system is emphasized on Current, Fixed Special deposit and Saving account of a Bank.

4.1 Current Account

Current account, if a customer wants, requires the minimum amount of K-300 to open at a bank or the minimum balance of K-100 and an introduce to the bank. The customers holding personal current account are delivered "Bearer Cheque" and others customers, "Order Cheque" by the bank. In fact, it is a non-interest account and widely, used by merchants, businessmen and companies.

Moreover this cheque account is utilized in many others ways such as remittances, bank guarantees, payment orders, cheques clearing among banks etc.

4.2 Saving Account

This is an interest account and most popular in Myanmar. Appropriate rate of interest is allowed Pernnum with facility of 5 day's Grance period. That means, the clients are free the 1st day awards the bank calculate interest on the account on the minimum balance during the month. Bank has ventured by allowing the customer for depositing and withdrawing unlimited amount at any time without any restrictions to both individual suvers and companies. Savings passbooks are supplied to the account holders as means for depositing and withdrawing from their savings accounts. Interest rate is 11.5 percent.

Saving Interest

$$\frac{balance \times 11.5}{12 \times 100} \text{ ----- (1)}$$

4.3 Fixed Account

Customer can deposit at bank by fixed account. The during of fixed accounts are 3, 6, 9 and 12 months. So customer cannot withdraw their deposit before specified period. And they can receive interest rate 12 percent due to their deposit life. Interest will be paid on the date of maturity.

Fixed Interest

$$\frac{balance \times 12 \times 30 (1 \text{ month})}{365 \times 100} \text{ ----- (2)}$$

4.4 Special Deposit

A minimum K-1000 is initially needed for this type of account, in specific interm. The interest rate is 11.65 percent but can't be taken out unless the bank is warned in advance of three weeks twenty-one days. Taking out without any warning will be paid no interest. Interest is valid on the date of opening the account. The interest is added once in six months-twice a year. As the matter of fact, special deposit is intentinnally opened for the safety guarantee of the service personnel's from the cash departments.

Special Deposit Interest

$$\frac{balance \times 11.65}{365 \times 100} \text{ ----- (3)}$$

4.5 Remittances

The remittances between main branch and branches has been successful carried out by providing sales factory services safety to the merchants and business men for sending their money to the places of their trade flows.

4.6 Implementation of the System Customer

If user chooses the customer submenu, Customer file dialog will appear and clicks button in customer's form. User types Customer name, father's name, N.R.C No, E-mail Address, Phone No, and address. After user appends the data, clicks "save" button to save the data. This is operation is as shown in figure 2.

Figure 2. Entry for customer

Figure 3 is the account entry. Account type have saving account, current account, fixed account and special deposit account. If user chooses the saving customer ID account type and deposit amount. Then user clicks "Add" button.

Figure 3. Entry Saving Account

Figure 4 is the saving interest, the user must fill account No. and customer ID. Saving Account is calculated from 1st day to 5th day in one month.

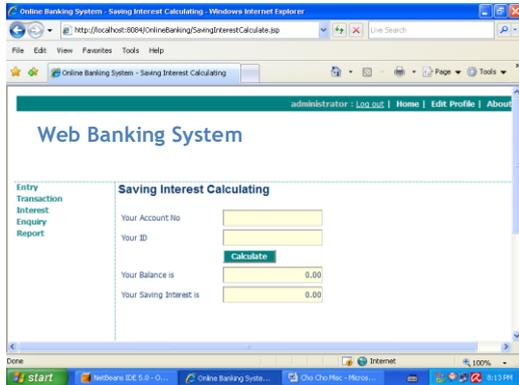


Figure 4. Calculation for Saving Account Interest

Figure 5 is the Saving Account Information submenu, Saving Account Information file dialog will appear. Saving Information includes customer name, father name, phone No. and address.

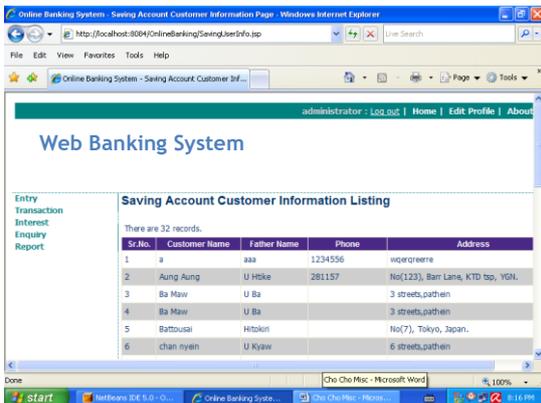


Figure 5. Enquiry for Saving Account Information

Figure 6 is the Deposit account, transaction credit file will appear and the user must fill account No., account name, account type, customer ID and deposit amount. Then user clicks “Deposit” button.

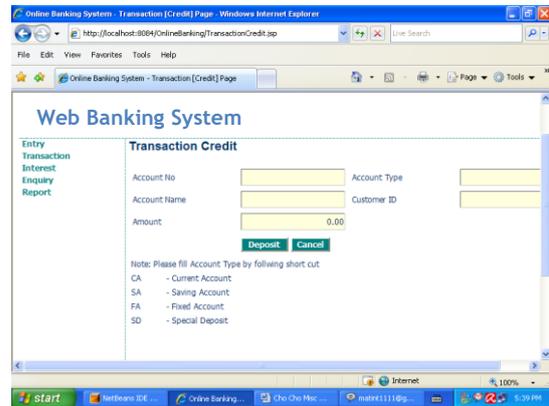


Figure 6. Transaction Credit Account

Figure 7 is the withdraw account, transaction debit file will appear and user must fill account No., account type, account No., customer ID and deposit amount. Then the user clicks “Withdraw” button.

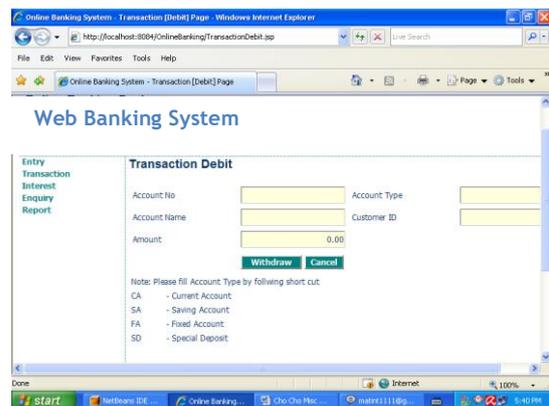


Figure 7. Transaction Debit Account

5. CONCLUSION

Web Based banking system make the faster services, less human error and central storage of all data. The banking system and banks are very important for our country and our Economy and we have many advantages. Users can know up to date account their money amount are present or not using bank web page. This system can make favorable impression and gets more satisfaction to the customers. This system is more quickly than manual system. The business and procedure of the bank web page. Especially this system can be applied like transaction processing system.

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