CHAPTER 1

INTRODUCTION

Online Banking System provides is specifically developed for online banking for Balance Enquiry, Funds Transfer to another account in the same bank, Request for cheque book/ATM Card, payment of cheques, Mini statements (Viewing Monthly and annual statements).

Managing your Online Banking System may seem tricky, but this is a part of Customer Service System (application support direct contact with customer).The Traditional way of maintaining details of a user in a bank was to enter the details and record them. Every time the user needs to perform some transactions he has to go to bank and perform the necessary actions, which may not be so feasible all the time.

It may be a hard-hitting task for theusers and the bankers too. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain. Here, we provide automation for banking system through Internet.Online Banking System project captures activities performed by different roles in real life banking which provides enhanced techniques for maintaining the required information upto-date, which results in efficiency. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain.

Convenience

Say goodbye to bankers' hours. With online savings or checking accounts, you can check your balance, schedule fund transfers, pay bills and more – 24 hours a day, any day of the week.

Not only are your transactions completed more quickly – with just a few clicks of the mouse – you'll also save the time, gas and frustration associated with driving through traffic to your local branch. And, with advancements in smartphone application technology, you may be able to deposit checks right from your phone, which means you may never have to visit a bank branch again.

Cost

Many traditional banks offer an Internet banking component in addition to their brick-and-mortar services. Direct banks, however, operate online and by phone only – and therefore have lower overhead costs. This cost savings is often passed along to consumers in the form of perks like higher interest rates and lower fees. Over time, the savings associated with online checking or savings accounts at a direct bank can really add up. If you're looking to stretch your dollars or reach your savings goal a little faster, these online banking benefits can help.

Control

Perhaps one of the best features of Internet banking is the control over your financial future that it provides. With all your financial information easily accessible in a digital format, you can quickly assess your financial well-being and develop a plan for improvement or investment with the help of some pretty affordable software.

Unlike paper statements, many online banking systems can be easily integrated with personal finance software programs like Quicken®, Microsoft Money® and Mint.com. These programs can help you improve your financial health by budgeting your money, reminding you when to pay bills and tracking your spending. They can also recommend feasible savings and debt reduction plans that can help you reach your financial goals faster. They can even help you prepare your taxes.

Online banking is good for businesses, too. Commercial bank accounts can be integrated with accounting software like Greentree, making it easier to efficiently track and analyze your company's financial records.

Online checking risks

Despite all of the benefits, many people are still hesitant to try Internet banking. Most skeptics cite cases of identity theft and other perceived security risks as the primary reason for their distrust in electronic banking systems.

Today, however, reputable financial institutions use SSL (Secure Sockets Layer), a cryptographic protocol that ensures data integrity and security. Other advanced

security features, like multi-factor authentication (a practice that requires users to verify their identity several times before providing account access), make online banking a safe and reliable alternative to traditional banking.

There is always a need of a system that will perform to done banking i.e debit and credit, ATM/Cheque Book request, mini statement etc. This system will reduce the manual operation required to maintain all the records of transaction. And also generates the various reports for analysis. Main concept of the project is to enter transaction reports and to maintain customer records.

CHAPTER 2

HARDWARE AND SOFTWARE REQUIREMENTS

2.1 INTRODUCTION

In this chapter we mentioned the software and hardware requirements, which are necessary for successfully running this system. The major element in building systems is selecting compatible hardware and software. The system analyst has to determine what software package is best for the **"Online Banking System"** and, where software is not an issue, the kind of hardware and peripherals needed for the final conversion.

2.2 SYSTEM ENVIRONMENT

After analysis, some resources are required to convert the abstract system into the real one. All the resources, which accomplish a robust

The hardware and software selection begins with requirement analysis, followed by a request for proposal and vendor evaluation.

Software and real system, are identified. According to the provided functional specification all the technologies and its capacities are identified. Basic functions and procedures and methodologies are prepared to implement. Some of the Basic requirements such as hardware and software are described as follows: -

Software Requirements

- Linux Ubuntu 8.10 or Microsoft Windows 7/8.
- XAMPP.
- Notepad++.

Hardware Requirements

- Intel Processor 2.0 GHz or above.
- 2 GB RAM or more.
- 160 GB or more Hard Disk Drive or above.

CHAPTER 3

SYSTEM ANALYSTS

3.1 PURPOSE

To manage the online banking. It helps to customers to perform transactions from anywhere at any time. It also helps for keep track of previous transactions.

3.2 PROJECT SCOPE

This Project investigates the entry threshold for providing a new transaction service channel via the real options approach, where the entry threshold is established by using an Internet banking system designed for the use of normal users(individuals), Industrialists, Entrepreneurs, Educational Institutions (Financial sections), Organizations and Academicians under transaction rate uncertainty.

Customer must have a valid User Id and password to login to the system. If a wrong password is given thrice in succession, that account will be locked and the customer will not be able to use it. When an invalid password is entered a warning is given to the user that his account is going to get locked. After the valid user logs in he is shown the list of accounts he has with the bank. On selecting the desired account that he has taken to a page which shows the present balance in that particular account number. Users can request for the details of the last 'n' number of transactions that he has performed.

User can make a funds transfer to another account in the same bank. User is provided with a transaction password which is different from the login password. User can transfer funds from his account to any other account with this bank. If the transaction is successful a notification should appear to the customer, in case it is unsuccessful, a proper message should be given to the customer as to why it failed. User can request for cheque book/change of address/stop payment of Cheque's. User can view his monthly as well as annual statements. He can also take print out of the same.

Generate reports at every section. Administrator can take a back up of the database for every instance that is happening, periodically. All users are authenticated to avail the services .FAQ section is also included for end users benefit.

3.3 Proposed System

The Online Banking system is available in the market that can serve customers to done banking online.

3.4 System Overview

The key features required in the system are as follows:

- Registration for online banking by Admin.
- Adding Beneficiary account by customer.
- Transferring amount to the beneficiary added by customer.
- Staff must approve for beneficiary activation before it can be used for transferring funds.
- Customer gets to know his last login date and time each time when logs in.
- Customer can check last 10 transactions made with their account.
- Customer can check their account statement within a date range.
- Customer can request for ATM and Cheque Book.
- Staff will approve requests for ATM card and Cheque book.
- Admin can add/edit/delete customer as well as staff.
- All three of them (customer, staff & admin) can change their password.
- Staff and Admin Login pages are hidden from customer for security purpose.

CHAPTER 4

IMPLEMENTATION ISSUES

4.1 PHP

PHP can be defined as a programming language for Database access from the web's browser. In other words, it is an HTML-embedded scripting language. It focuses on the logic of how a page responds to user input and not how the page looks that i.e. not the primary appearance of the page.

PHP runs on the server side, which means that the web server that sends an HTML file to a user's browser, will carry out the instructions found in the embedded PHP code first, and then send the output of the PHP code along with the HTML code. The result is a webpage with dynamic content.

Brief History on PHP

PHP is a language for creating website that can be more or less interactive. It was created in 1994 by Rasmus Lerdorf who was a software engineer and who was part of the Apache Team. In the same year, he created a package, added some database support and called it PHP/FI (Form Interpretation).

In 1995, it was called the Personal Home Page Tool then was released as version2 with a name called PHP/FI (a form interpreter responsible for analyzing queries). In mid of 1997, more than 50,000 websites began using PHP and in October, 1998, there was an increase in the number of websites using PHP which was about 100,000.

In 2000, there was a release of PHP 4.0.2. And currently over 1,000,000 sites in the whole world are using PHP.

PHP and its Uses

Php can help read and write files. It also can do basic files and directory maintenance; therefore it basically can help one in editing documents. It can also take content that can be used in the generation of files in various formats which can include HTML (Hypertext Markup Language) and PDF.

It also can help manage graphical content which include charts. Not only can it do the above but can it also read, write information in a database. You can make a PHP script to run it

without any server or browser. You only need the PHP interpreter to use it. PHP's abilities include outputting images, PDF files, and even Flash movies. PHP can help also output easily any text, such as XML.

Advantages and Disadvantages of PHP

It is more or less cost –free in other words, PHP is an Open Source solution, freely available for a wide variety of platforms. It is also easy, as it's a combination of C and Perl. The strongest and most significant feature of PHP is its native database support
for a wide range of databases for example (MySQL, Oracle), which allows access to the databases directly through SQL statements.

There is a cross-platform compatibility (Windows, Macintosh, or a version of Unix,): Compiled and is built on more than 25 platforms. With PHP, you have 'freedom of choice' regarding an operating system and a Web server. The error handling is not as sophisticated as in ASP (Active Server Pages).

4.2 AJAX

AJAX is a relatively new method to create rich internet applications with responsive interfaces that allow the designer to take a lot of the tedium out of using web-based mediums for day-to-day data interaction. The scope of this paper will be to provide information about what AJAX is and what it does, when it should and shouldn't be used and what the future looks like for AJAX in comparison to the present and future alternatives. This will help developers determine the value of using AJAX in their projects and provide information about the proper use of this technology. This report will assume a basic knowledge with web forms and the design of web applications.

AJAX is an acronym for a synchronous JavaScript and XML. It is not a technology in itself, but rather a suite of technologies. The combination of JavaScript and XML allows for a responsive user interface. It requires more development time than a traditional web solution, however a well-designed AJAX user interface makes the traditional form-based web application seem almost archaic.

4.3 CASCADING STYLE SHEET (CSS)

What are Cascading Style Sheets?

Cascading Style Sheets (CSS) are a collection of rules we use to define and modify web pages. CSS are similar to styles in Word. CSS allow Web designers to have much more control over their pages look and layout. For instance, you could create a style that defines the body text to be Verdana, 10 point. Later on, you may easily change the body text to Times New Roman, 12 point by just changing the rule in the CSS. Instead of having to change the font on each page of your website, all you need to do is redefine the style on the style sheet, and it will instantly change on all of the pages that the style sheet has been applied to. With HTML styles, the font change would be applied to each instance of that font and have to be changed in each spot.

CSS can control the placement of text and objects on your pages as well as the look of those objects.

HTML information creates the objects (or gives objects meaning), but styles describe how the objects should appear. The HTML gives your page structure, while the CSS creates the "presentation". An external CSS is really just a text file with a .css extension. These files can be created with Dreamweaver, a CSS editor, or even Notepad.

The best practice is to design your web page on paper first so you know where you will want to use styles on your page. Then you can create the styles and apply them to your page.

CHAPTER 5

ENTITY RELATION DIAGRAM

An entity-relationship (ER) diagram is a specialized graphic that illustrates the interrelationships between entities in a database. ER diagrams often use symbols to represent three different types of information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used to represent attributes

An **entity-relationship model** (ERM) in software engineering is an abstract and conceptual representation of data. Entity-relationship modeling is a relational schema database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion.

The cardinality ratio are as follows:

- Admin: Staff/ Customer is of cardinality **1:N** as admin can add ‘n’ number of Staff/Customer.
- Staff: Passbook/ Beneficial/Atm is of cardinality **N:M** as ‘n’ staff people can update ‘m’ number of Passbook.
- Customer: Atm is cardinality **1:1** as each customer can request one atm card.
- Staff: Cheque book is of cardinality **N:M** as ‘n’ number of staff can approve ‘m’ number of Cheque book.
- Customer: Cheque book is of cardinality **1:1** as each customer can request for one Cheque book.

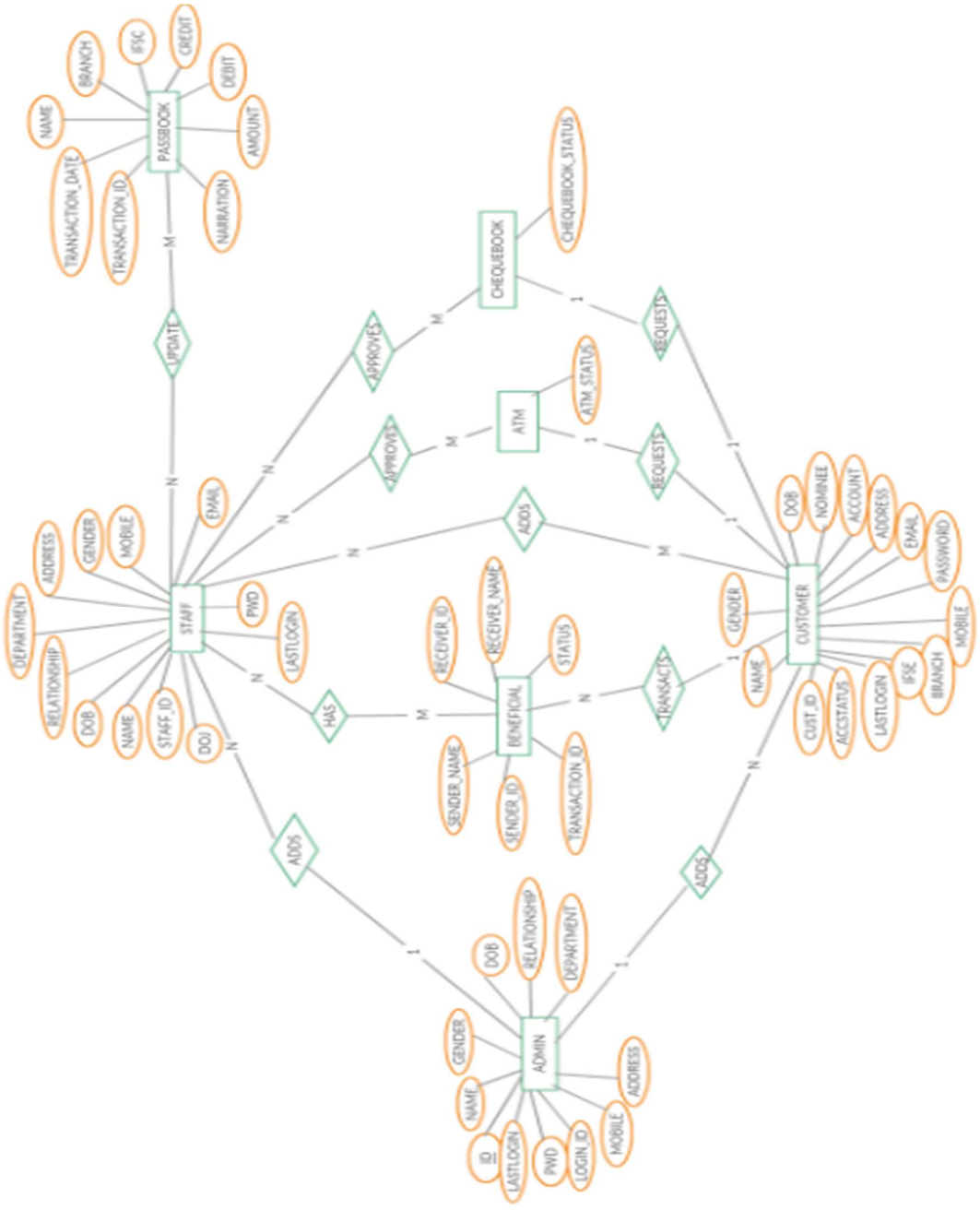

Fig 5.1 ER diagram

CHAPTER 6

RELATIONAL SCHEMA DIAGRAM

The term database schema refers to the description of the database that includes the database structure and various constraints on the database.

The schema diagram is in turn an illustrative display of the database schema.

The primary keys are underlined and the referential integrity constraints are depicted by arrows pointing to the keys they reference.

The list of Tables are:

- Admin: This table stores admin information, login-id and password of admin.
- Customer: This table stores customer information, login-id and password of customer.
- Staff: This table stores staff information, login-id and password of staff.
- Beneficial: This table stores transaction details like transaction id, sender and receiver details.
- Atm: This table stores account no. of the customer and atm status.
- Cheque book: This table stores account no. of the customer and cheque book status.
- Passbook: This table contain all transaction details and balance amount in the bank.

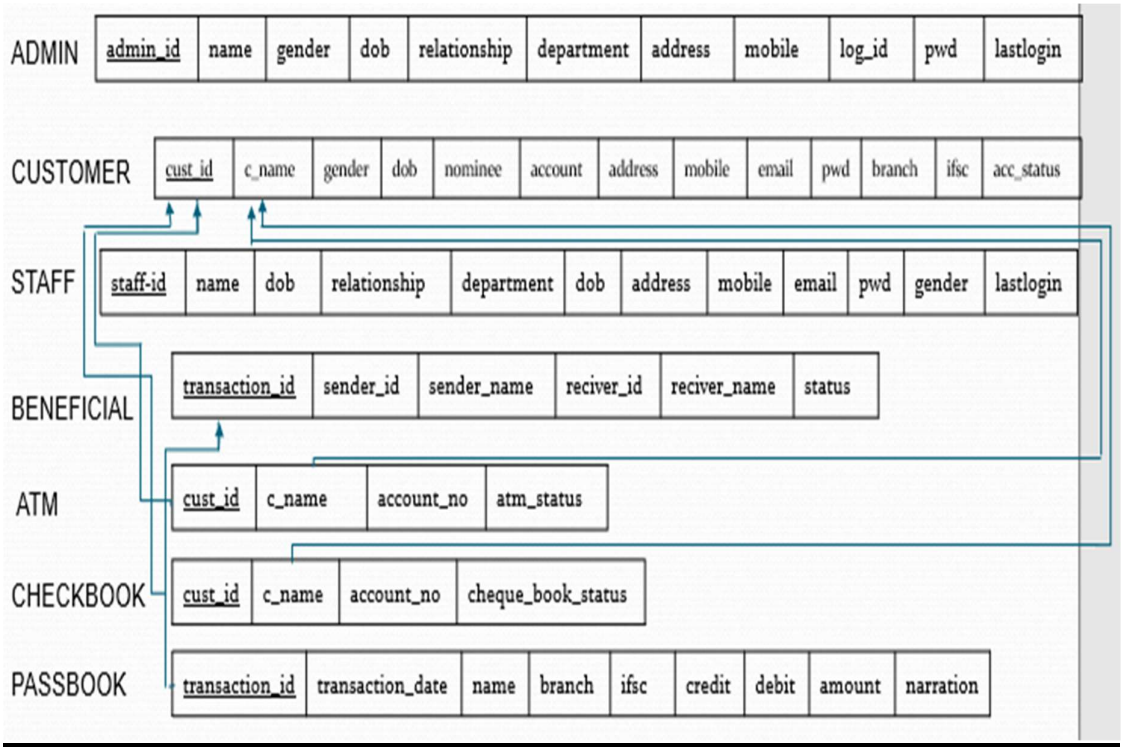

Fig 6.1 Schema diagram

CHAPTER 7

USER SCREENS AND REPORT OUTPUT SCREENS

- **Home Page:** The customer should enter their respective username and password for them to login into their respective portal.

Fig 7.1 Home Page

- **Admin Login Page:** The Admin should enter their respective username and password for them to login into their respective portal.

Fig 7.2 Admin Login Page

- **Staff Login Page:** The Staff should enter their respective username and password for them to login into their respective portal.

Fig 7.3 Staff Login Page

- **Customer Home Page:** Display customer bank account details.

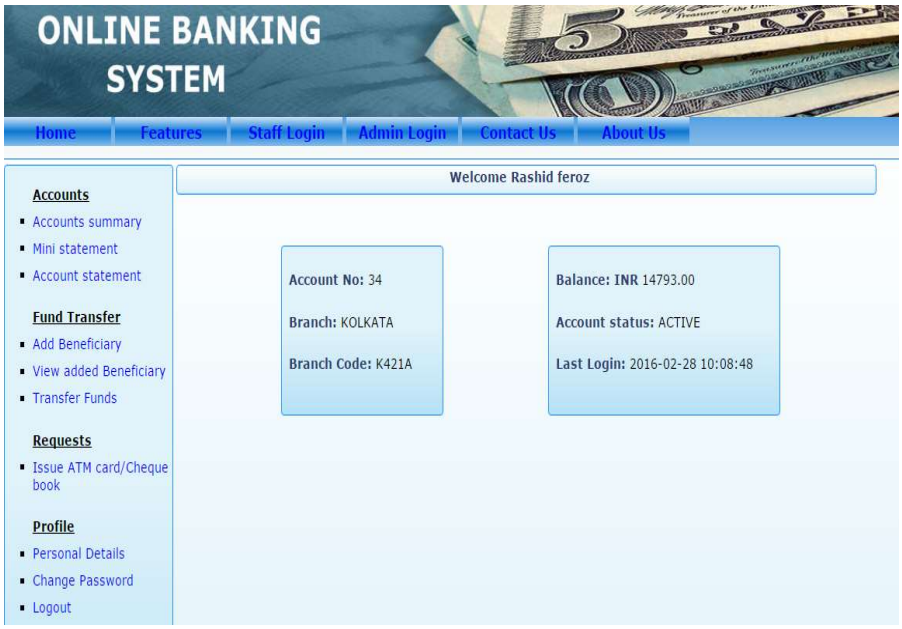

Fig 7.4 Customer Home Page

- **Mini Statements**: It would display last 10 transaction details of the customer.

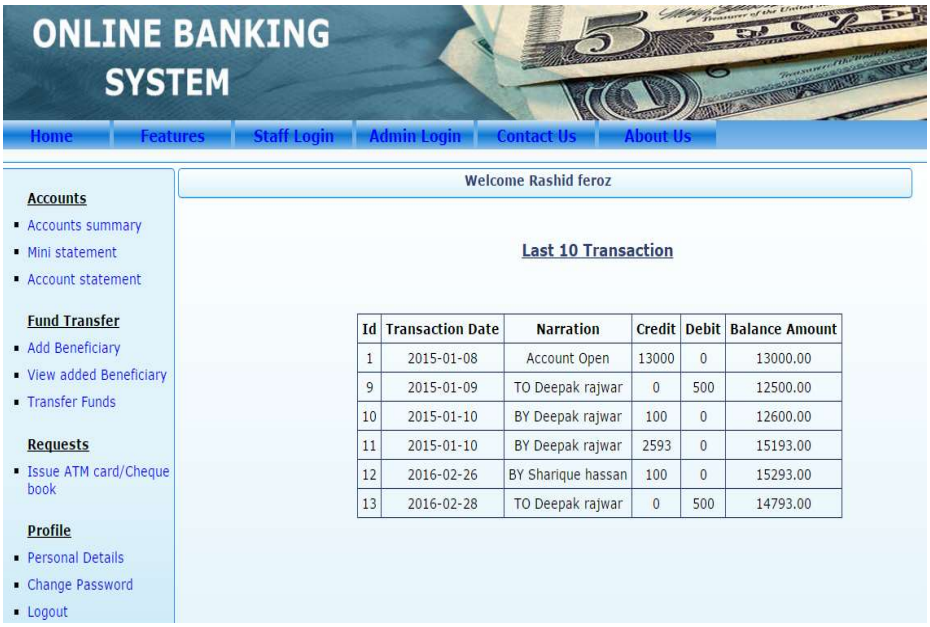

Fig 7.5 Mini Statements

- **Account Summary**: It display account start date and end date.

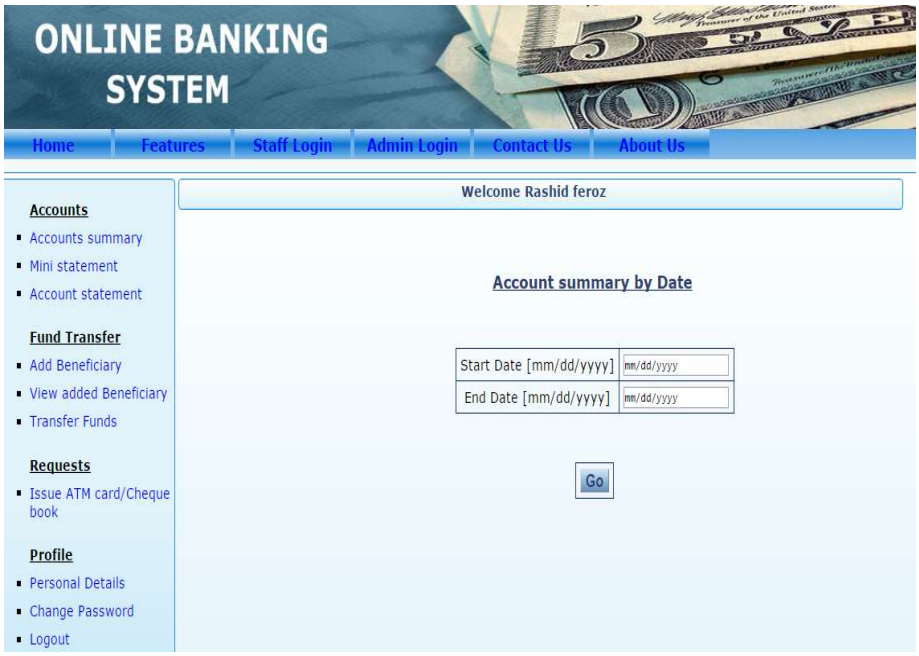

Fig 7.6 Account Summary

- **Add Beneficiary:** Requests for beneficiary account.

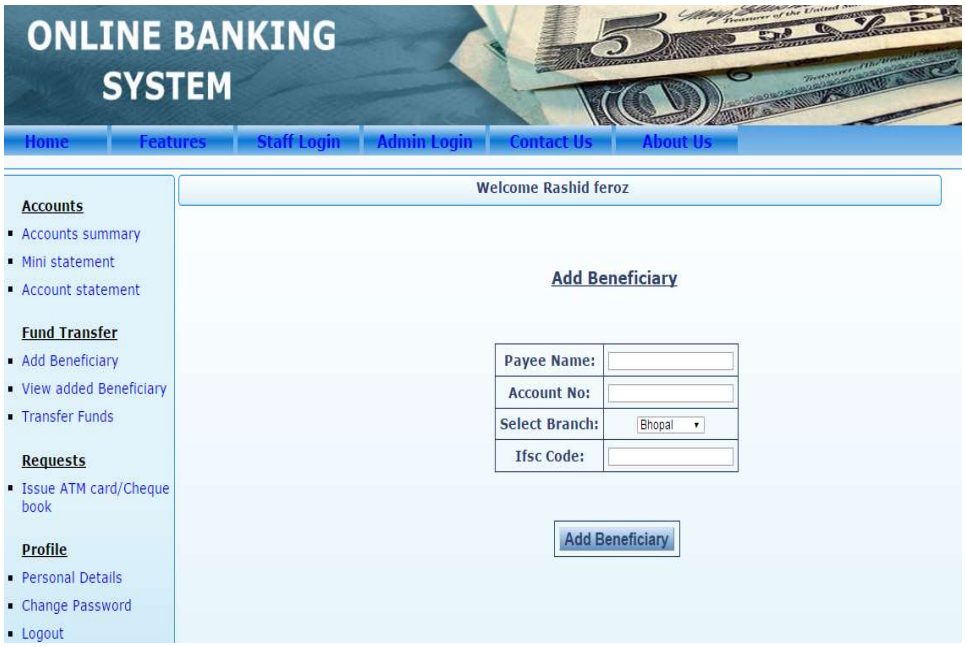

Fig 7.7 Add Beneficiary

- **View Beneficiary**: It display existing Beneficiary account details.

Fig 7.8 View Beneficiary

- **Transfer Funds:** Sending money from beneficiary account to another persons account in same bank.

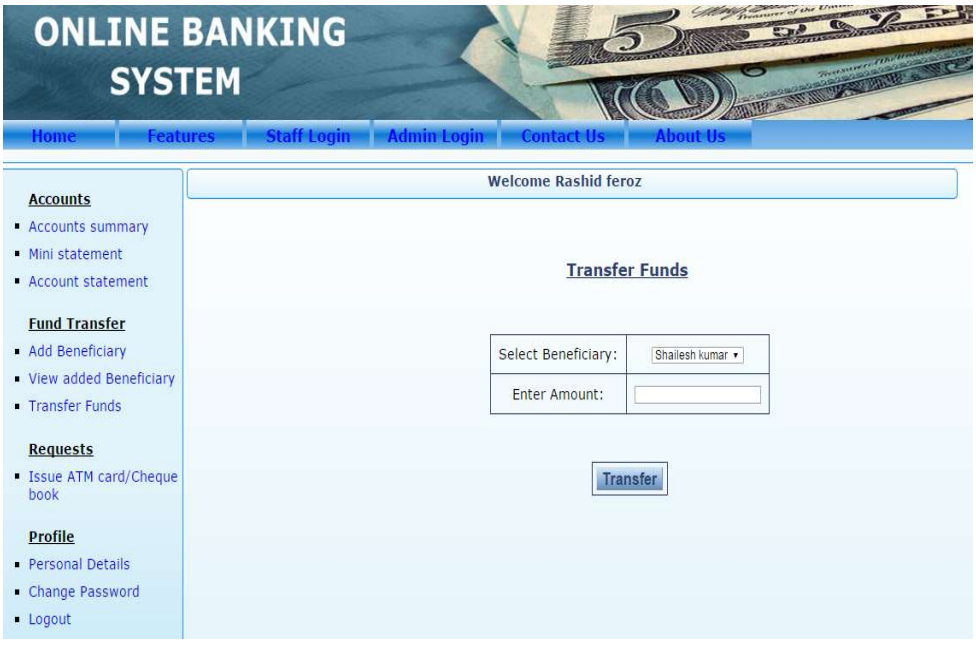

Fig 7.9 Transfer Funds

- **Issue ATM Card/Cheque book:** Requesting for Atm card/cheque book by the customer to bank.

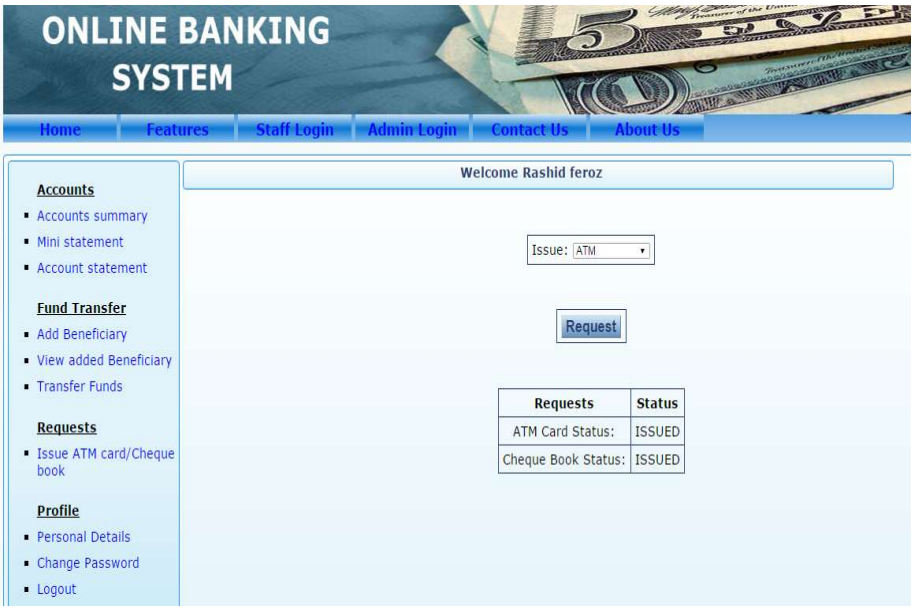

Fig 7.10 Issue ATM Card/Cheque book

- **Customer Account Details:** Displays customer personal details and account details.

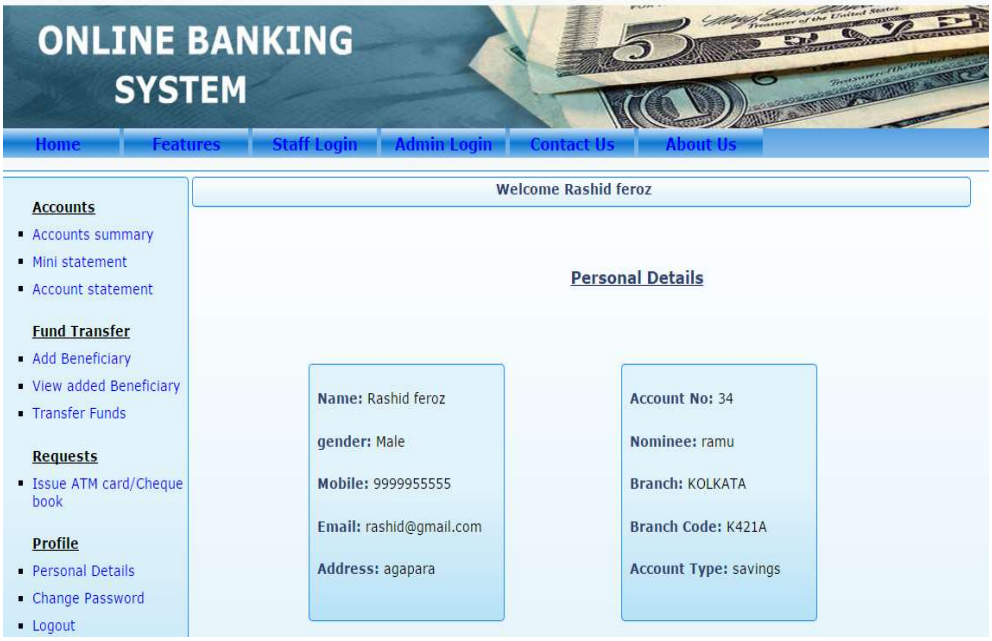

Fig 7.11 Customer Account Details

- **Staff Home Page:** It displays staff details.

Fig 7.12 Staff Home Page

- **Beneficiary Approve Page:** Approving the beneficiary request of the customer by the staff.

Fig 7.13 Beneficiary Approve Page

- **ATM Card Approval Request:** Approving the ATM Card of the customer by the staff.

Fig 7.14 ATM Card Approval Request

- **Admin Home Page:** Admin can add/delete the staff and customer.

Fig 7.15 Admin Home Page

- **Add Staff Page:** Admin takes the details of the person to make them staff.

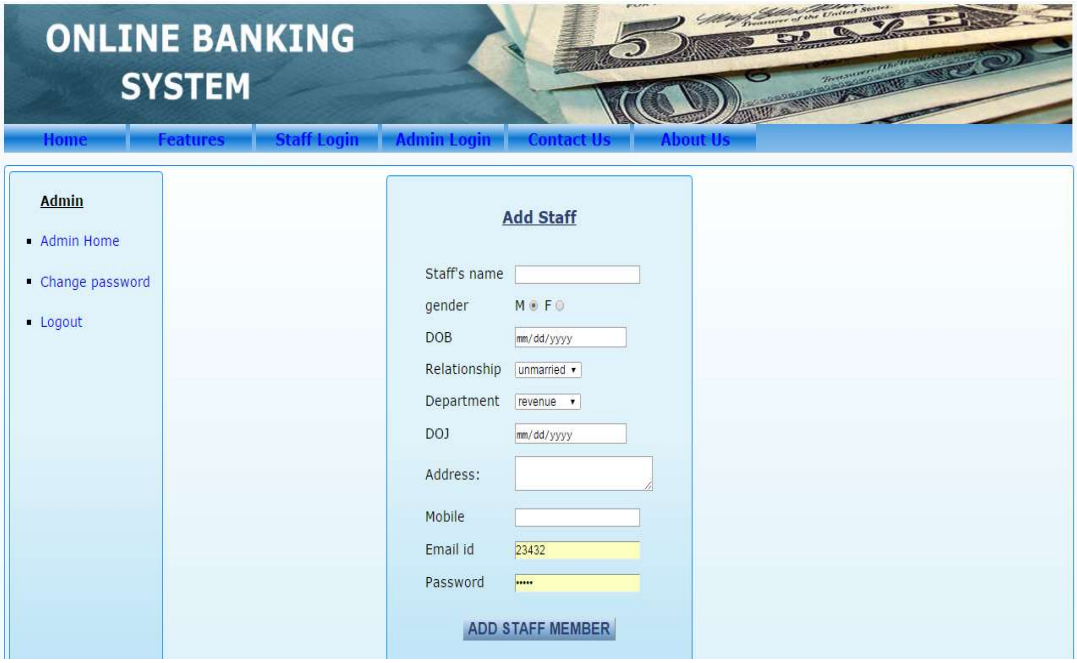

Fig 7.16 Add Staff Page

- **Add Customer Page:** Admin takes the details of the customer to create a bank account.

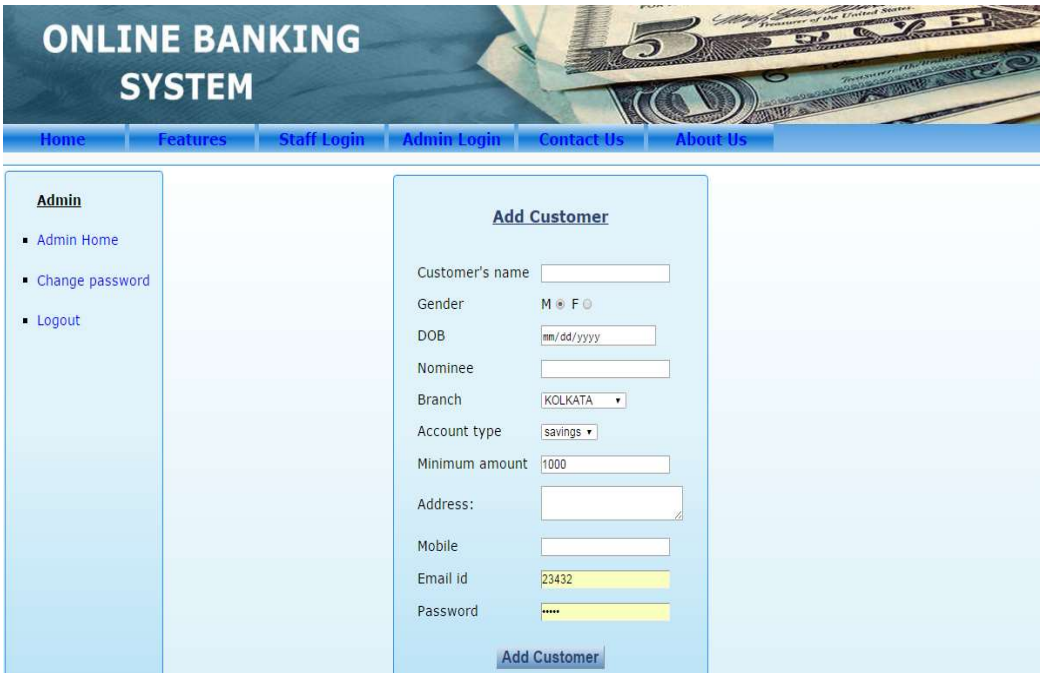

Fig 7.17 Add Customer Page

CHAPTER 8

ADVANTAGES AND LIMITATIONS

Advantages of Online Banking System

Online Banking System provides various features, which complement the information system and increase the productivity of the system. These features make the system easily usable and convenient.

Intelligent user forms design, data access and manipulation through same forms, access to most required information, data Security, restrictive data access as per login assigned only, organized and structured storage of facts, strategic planning made easy, no decay of old records, exact financial position of the business.

Limitations of Online Banking System

Besides the above achievements and the successful completion of the project, we still feel the project has some limitations such as it is not a large scale system, only limited information provided by this system, since it is an online project customers need internet connection to buy products, people who are not familiar with computers can’t use this software.

CHAPTER 9

FUTURE SCOPE AND CONCLUSION

FUTURE SCOPE

This web application involves almost all the features of the online banking. The future implementation will be online help for the customers and chatting with website administrator. The Net Banking System for the recruitment process can be further developed into a separate, automated system with the following enhancements.

A mail server can be implemented to send mails directly from the system to the inbox of the recipient. The code needed for the same is being implemented except the mail server. Help file can be included. The system, as of now, does not support any help facility for the users of the system. A help menu can be provided with a special function key and help command in the main page itself. Help can be either introduced as a separate window, a reference to a printed manual or as one or two line suggestion produced in a fixed screen location.

The system can use typed commands, as they were once the most common mode of communication with the system. The typed command can be provided through control sequence or function keys or typed word. A training module can be included in the system. This module can be used to train the users of the system about the systems usage. The training module can be in the form of a HTML.

CONCLUSION

The project entitled “Online Banking System” is developed using PHP as front end and MYSQL database in back end to computerize the process of online banking. This project covers only the basic features required. The main aim of online banking is to making transactions through online poses and make customer more beneficial.

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