# Acknowledgements

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**[DEPT]**

**[COLLEGE]** Developed by **[NAME]**

# Abstract

The Bank Account Management System is an application for maintaining a person's account in a bank. In this project I tried to show the working of a banking account system and cover the basic functionality of a Bank Account Management System. To develop a project for solving financial applications of a customer in banking environment in order to nurture the needs of an end banking user by providing various ways to perform banking tasks. Also to enable the user’s workspace to have additional functionalities which are not provided under a conventional banking project.

The Bank Account Management System undertaken as a project is based on relevant technologies. The main aim of this project is to develop software for Bank Account Management System. This project has been developed to carry out the processes easily and quickly, which is not possible with the manuals systems, which are overcome by this software. This project is developed using PHP, HTML language and MYSQL use for database connection. Creating and managing requirements is a challenge of IT, systems and product development projects or indeed for any activity where you have to manage a contractual relationship. Organization need to effectively define and manage requirements to ensure they are meeting needs of the customer, while proving compliance and staying on the schedule and within budget. The impact of a poorly expressed requirement can bring a business out of compliance or even cause injury or death. Requirements definition and management is an activity that can deliver a high, fast return on investment.

The project analyzes the system requirements and then comes up with the requirements specifications. It studies other related systems and then come up with system specifications. The system is then designed in accordance with specifications to satisfy the requirements. The system design is then implemented with MYSQL, PHP and HTML. The system is designed as an interactive and content management system. The content management system deals with data entry, validation confirm and updating whiles the interactive system deals with system interaction with the administration and users.

Thus, above features of this project will save transaction time and therefore increase the efficiency of the system.



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## CHAPTER 1

### Introduction & Project Details Information

##### Introduction

The “Bank Account Management System” project is a model Internet Banking Site. This site enables the customers to perform the basic banking transactions by sitting at their office or at homes through PC or laptop. The system provides the access to the customer to create an account, deposit/withdraw the cash from his account, also to view reports of all accounts present. The customers can access the banks website for viewing their Account details and perform the transactions on account as per their requirements. With Internet Banking, the brick and mortar structure of the traditional banking gets converted into a click and portal model, thereby giving a concept of virtual banking a real shape. Thus today's banking is no longer confined to branches. E-banking facilitates banking transactions by customers round the clock globally.

The primary aim of this “Bank Account Management System” is to provide an improved design methodology, which envisages the future expansion, and modification, which is necessary for a core sector like banking. This necessitates the design to be expandable and modifiable and so a modular approach is used in developing the application software. Anybody who is an Account holder in this bank can become a member of Bank Account Management System. He has to fill a form with his personal details and Account Number.

Bank is the place where customers feel the sense of safety for their property. In the bank, customers deposit and withdraw their money. Transaction of money also is a part where customer takes shelter of the bank. Now to keep the belief and trust of customers, there is the positive need for management of the bank, which can handle all this with comfort and ease. Smooth and efficient management affects the satisfaction of the customers and staff members, indirectly. And of course, it encourages management committee in taking some needed decision for future enhancement of the bank.

Now a day’s, managing a bank is tedious job up to certain limit. So software that reduces the work is essential. Also today’s world is a genuine computer world and is getting faster and faster day-by-day. Thus, considering above necessities, the software for bank management has became necessary which would be useful in managing the bank more efficiently.

All transactions are carried out online by transferring from accounts in the same Bank or international bank. The software is meant to overcome the drawbacks of the manual system.

###### Synopsis

Bank Account Management System keeps the day by day tally record as a complete banking system. It can keep the information of Account type, account opening form, Deposit fund, Withdrawal, and Searching the transaction, Transaction reports, Individual account opening form, Group Account. The existing part of this project is; it displays Transaction reports, Statistical Summary of Account type and Interest Information.

###### AIM of this project

The main aim of designing and developing this Internet banking System PHP primarily based Engineering project is to provide secure and efficient net banking facilities to the banking customers over the internet. Apache Server Pages, MYSQL database used to develop this bank application where all banking customers can login through the secured web page by their account login id and password. Users will have all options and features in that application like get money from western union, money transfer to others, and send cash or money to inter banking as well as other banking customers by simply adding them as payees.

###### Getting Started

If you want to try out online banking without committing, select our Online Banking. You don't have to register in any way, so it's a good way to check it out first before register.

Once you register, you'll have the choice of doing just basic banking and viewing your balance or doing more involved transactions like bill payments and transfers. The choice is yours. It really depends on how you like to bank.

You will get a confirmation number after each transaction and you can always check the session summary to see what you've done. If you make a mistake, customer service is always available for your good kindness help.

###### Main Purpose

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 the users 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 up-to-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.

###### Goals and Objectives

1. **Main Goals:**

\* Our motto is to develop a software program for managing the entire bank process related to Administration accounts customer accounts and to keep each every track about their property and their various transaction processes efficiently.

\* Hereby, our main objective is the customer’s satisfaction considering today’s faster in the world.

1. Customer Satisfaction:

* Client can do his operations comfortably without any risk or losing of his privacy.
* Our software will perform and fulfill all the tasks that any customer would desire.

1. Saving Customer Time:

* Client doesn't need to go to the bank to do small operation.

1. Protecting The Customer:

* It helps the customer to be satisfied and comfortable in his choices, this protection contains customer’s account, money and his privacy.

1. Transferring Money:

* Help client transferring money to/or another bank or country.

**CHAPTER 2**

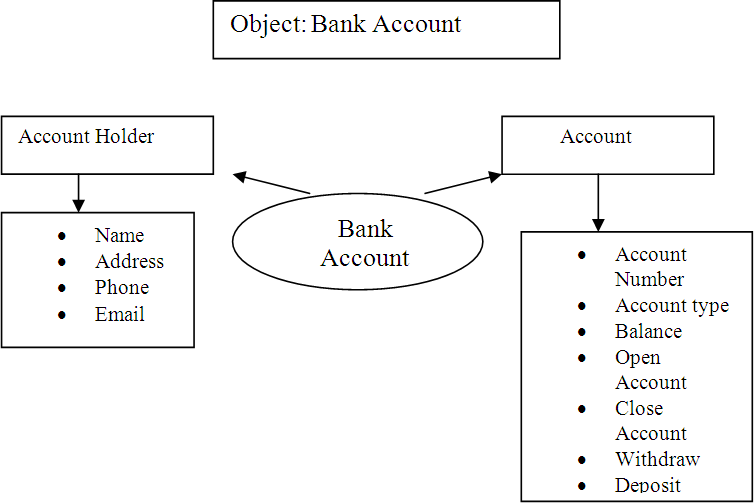
### Modules and Requirements

###### Modules Description

The Modules description of Bank Account Management System project. These modules will be developed in PHP source code and MYSQL database.

1. **Create New Account:** A customer who having the account in the world can create a virtual account through this module. This module receives the customer profile details and the bank account details with the proof of the ownership of the bank account.
2. **Login:** Virtual account holders can login in to the system using this module. Thus this is the secured login page for the customers in the website.
3. **Virtual Account:** After the approval of new virtual account creation, the customer assigned a unique virtual account number to make the online money transactions. This module views the details of the logged customer's virtual account.
4. **Bank Accounts:** A customer may have more than one bank account in various banks, in this case, the customer prompted to decide which bank account should reflect in the account debit or amount credit. For these operations customers can add their owned bank accounts here and it will be approved by the administrations of the system.
5. **Fund Transfer:** This is the module to make fund transfer to the virtual bank account holders or the usual bank account holders from the customer's specified bank account.
6. **Beneficiary:** Beneficiary is a person who receives money. Here the customer can add the beneficiaries to make fund transfer in the future.
7. **Transactions:** This module displays the transactions made by the customer in the particular date with the transaction details.
8. **Administrative Control:** This module contains the administrative functions such as view all virtual account, transactions, approve bank accounts, approve virtual accounts etc.

There are other features and actions that can be performed on a back account but we are not going to look at bank accounts in their entirety only the basics, this way we avoid over complicating the exercise. The purpose of this whole exercise is to show the usefulness of object oriented programming as opposed to really wanting to create a banking system.



**Figure-2.1:** Bank Account System

Just by looking at the above picture, we can work out what methods we need our class to have:

* 1. Methods





r

Money transfer/Loan



The next thing we need to look at is where to store the information about the account. Obviously, the best place to store information relating to bank accounts is in a database. To work with a database (from an OOP point of view) will require the following methods:

cting to the database



* 1. User Module

A simple user can access their account and can deposit/withdraw money from their account. User can also transfer money from their account to any other bank account. User can see their transaction report and balance enquiry too.

* User login, use PIN system
* Creating/open new account registration
* Funds transfer
* View statements transaction
* User account details
* Change Password and PIN
  1. Hardware Requirements Specification Processor

: Intel Pentium III or later

Main Memory(RAM) : 256 MB

Cache Memory : 512 KB

Monitor : 14 inch

Color Monitor

Keyboard : 108 Keys

Mouse : Optical

Mouse

Hard Disk : 160 GB

* 1. **Software Requirements Specification** Front End/Language :

PHP

Back End/Database : MYSQL

Additional Tools : XAMPP

Operating System : Windows 7, 8, 9, 10, XP

# CHAPTER 3

### System & Database Design

###### System Design

Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. The term “design” is defined as “the process of applying various techniques and principles for the purpose of defining a process or a system in sufficient detail to permit its physical realization”. It may be defined as a process of applying various techniques and principles for the purpose of defining a device, a process or a system in sufficient detail to permit its physical realization. Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm that is used. The system design develops the architectural detail required to build a system or product. As in the case of any systematic approach, this software too has undergone the best possible design phase fine tuning all efficiency, performance and accuracy levels. The design phase is a transition from a user oriented document to a document to the programmers or database personnel.

###### System design goes through two phases of development:

* Logical Design and
* Physical Design.

###### Logical Design

The logical flow of a system and define the boundaries of a system. It includes the following steps:

* Reviews the current physical system – its data flows, file content, volumes, frequencies etc.
* Prepares output specifications – that is, determines the format, content and frequency of reports.
* Prepares input specifications – format, content and most of the input functions.
* Prepares edit, security and control specifications.
* Specifies the implementation plan.
* Prepares a logical design walk through of the information flow, output, input, controls and implementation plan.

###### Physical Design

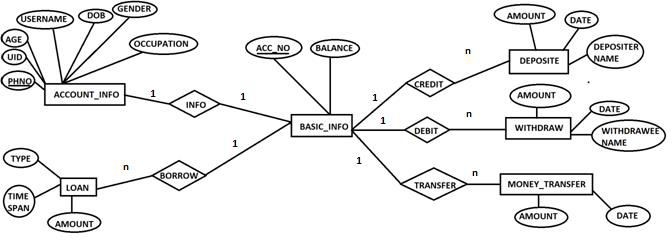
Physical system produces the working systems by define the design specifications that tell the programmers exactly what the candidate system must do. It includes the following steps.

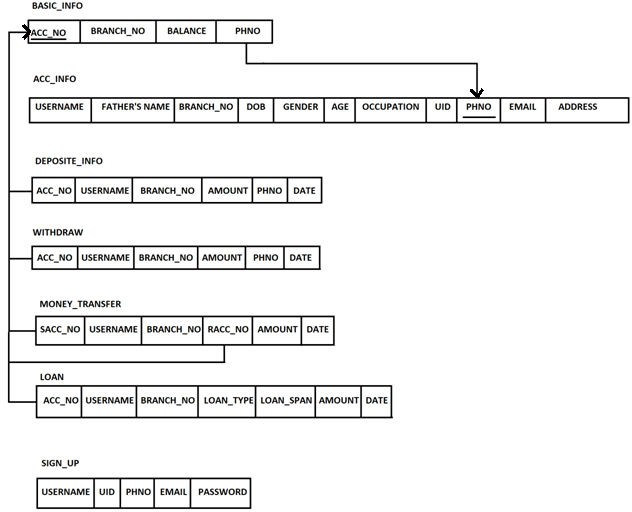
* Design the physical system.
* Specify input and output media.
* Design the database and specify backup procedures.
* Design physical information flow through the system and a physical design Walk through.
* Plan system implementation.
* Prepare a conversion schedule and target date.
* Determine training procedures, courses and timetable.
* Devise a test and implementation plan and specify any new hardware/software.
* Update benefits, costs, and conversion date and system constraints.

###### Database design

The database, called a bank, will have two tables, one called accounts and the other called customer. Each will hold information about either the account or the customer. The two tables will be linked through a foreign key. The customer table has the following fields:

ER-DAIGRAM



SCHEMA DAIGRAM

CHAPTER 4

##### 4.1 PROJECT IMPLEMENTATION

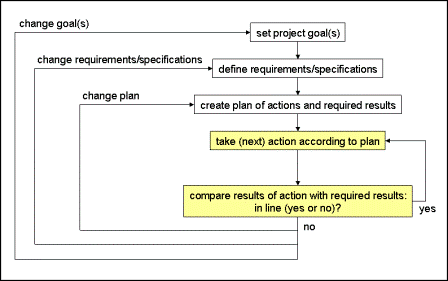
In project planning, we assigned all necessary resources to the project. We continuously reassured that those resources are still available and ready to take off. Now is the right time to have the project kick-off meeting. Its main purpose is to present the project planning status to the stakeholders, especially to all our team members, and to officially start project implementation phase.

Now we apply all the tools we prepared in order to keep ourselves in control of the project. As project managers and sub-project managers we have to make sure that we, together with all our team members,

* Take action, in-line with the plan and / or contract
* record and document all the work, work results, special events, decisions about changes, implementation of changes, etc.
* analyse, communicate, report, and document status and results of action, in-line with the plan and / or contract
* take decision if and what kind of change we need, in case any result (or action) is not as required
* implement agreed changes, in-line with the plan and / or contract.

**Planning Approach**

The most powerful platform for this comparison in order to analyse, communicate, and decide work progress, problems, and necessary changes are project meetings in which we apply the planned project controlling tools.

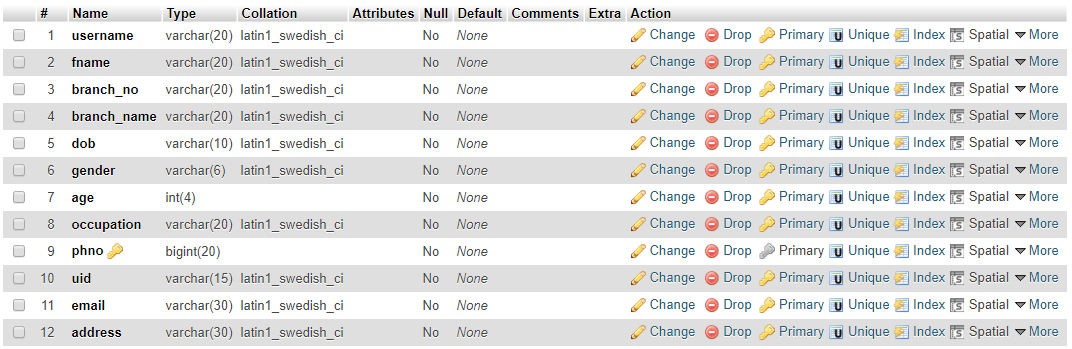


**XAMPP** is a free and open-source [cross-platform](https://en.wikipedia.org/wiki/Cross-platform) [web server](https://en.wikipedia.org/wiki/Web_server) [solution stack](https://en.wikipedia.org/wiki/Solution_stack) package developed by Apache Friends, consisting mainly of the [Apache HTTP Server,](https://en.wikipedia.org/wiki/Apache_HTTP_Server) [MySQL](https://en.wikipedia.org/wiki/MariaDB) [database,](https://en.wikipedia.org/wiki/Database) and [interpreters](https://en.wikipedia.org/wiki/Interpreter_(computing)) for scripts written in the [PHP](https://en.wikipedia.org/wiki/PHP) and [Perl](https://en.wikipedia.org/wiki/Perl) [programming languages.](https://en.wikipedia.org/wiki/Programming_language) Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

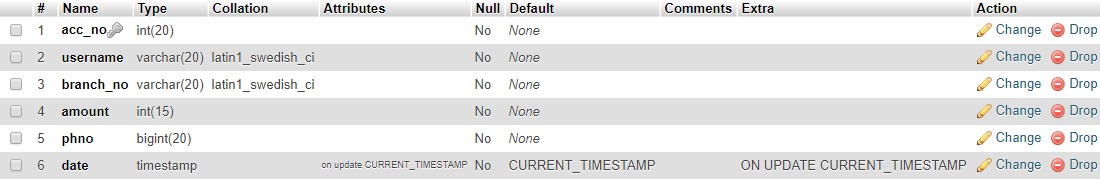
## CHAPTER 5

**Sample Snapshots of Project**

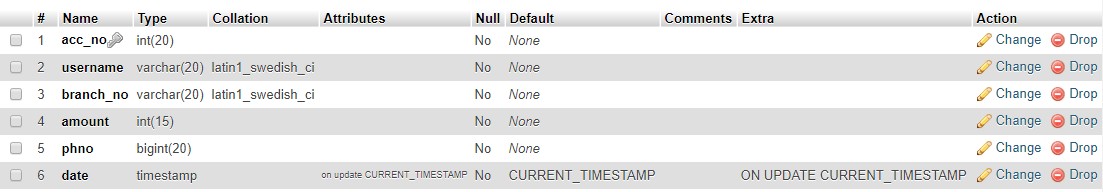
1. Account info Table



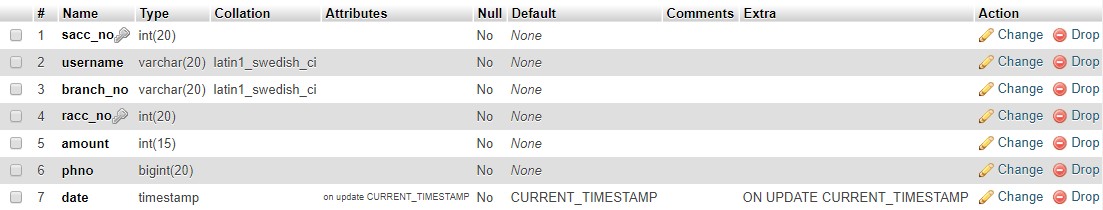
1. Deposit Table



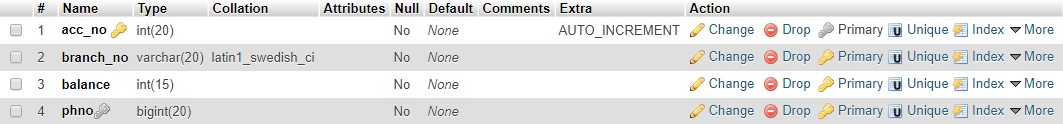
1. Withdrawal Table



1. Money Transfer Table



1. Loan table
2. Basic info Table



##### INSERTING VALUES

* + - insert into account\_info values (‘jhon’,’adam’,’1obi11’,’rr nagar obi’,’12-12- 1998’,’18’,’student’,’banglore’);
    - insert into deposite values(‘1001’,’vicky’,’1obi11’,5000,8938837498);
    - insert into withdraw values(‘1001’,’vicky’,’1obi11’,5000,8938837498);
    - insert into loan values([1000,](http://localhost/phpmyadmin/sql.php?db=obibank&table=basic_info&pos=0&sql_query=SELECT%2B%2A%2BFROM%2B%60obibank%60.%60basic_info%60%2BWHERE%2B%60acc_no%60%2B%3D%2B1000&token=13f97ead40e392f98ae5002aea612627)’nishant’,’1obi12’,’student’,11400,9383738732,’2018-11-30’);
    - insert into moneytransfer values(1004,’jhon’,’1obi12’,1003,5000,8678892748);

##### TRIGGER

CREATE TRIGGER `addmoney` AFTER INSERT ON `withdraw`

FOR EACH ROW UPDATE basic\_info b , withdraw w SET b.balance=b.balance-w.amount where b.acc\_no=w.acc\_no and w.date=CURRENT\_TIMESTAMP

* 1. Stored procedures

DELIMITER $$

CREATE DEFINER=`root`@`localhost` PROCEDURE `getdata`(IN `get` INT) NO SQL

select \* from basic\_info where acc\_no = get$$ DELIMITER ;

#### Queries

. Checking Balance

SELECT A.acc\_no , B.username , B.branch\_name , A.balance , A.phno FROM basic\_info A , account\_info B WHERE A.acc\_no = '$acc\_no' AND A.phno=B.phno;

. Checking Deposite Status

SELECT acc\_no , username , branch\_no , amount , phno , date FROM deposite WHERE acc\_no = '$acc\_no' ;

. Checking Withdrawal Status

SELECT balance FROM basic\_info WHERE acc\_no= '$acc\_no' AND balance>= '$amount' ;

. Checking Money Transfer Status

SELECT sacc\_no , username , branch\_no , racc\_no , amount , phno , date FROM moneytrans WHERE sacc\_no = '$acc\_no';

. Edit Account Detail

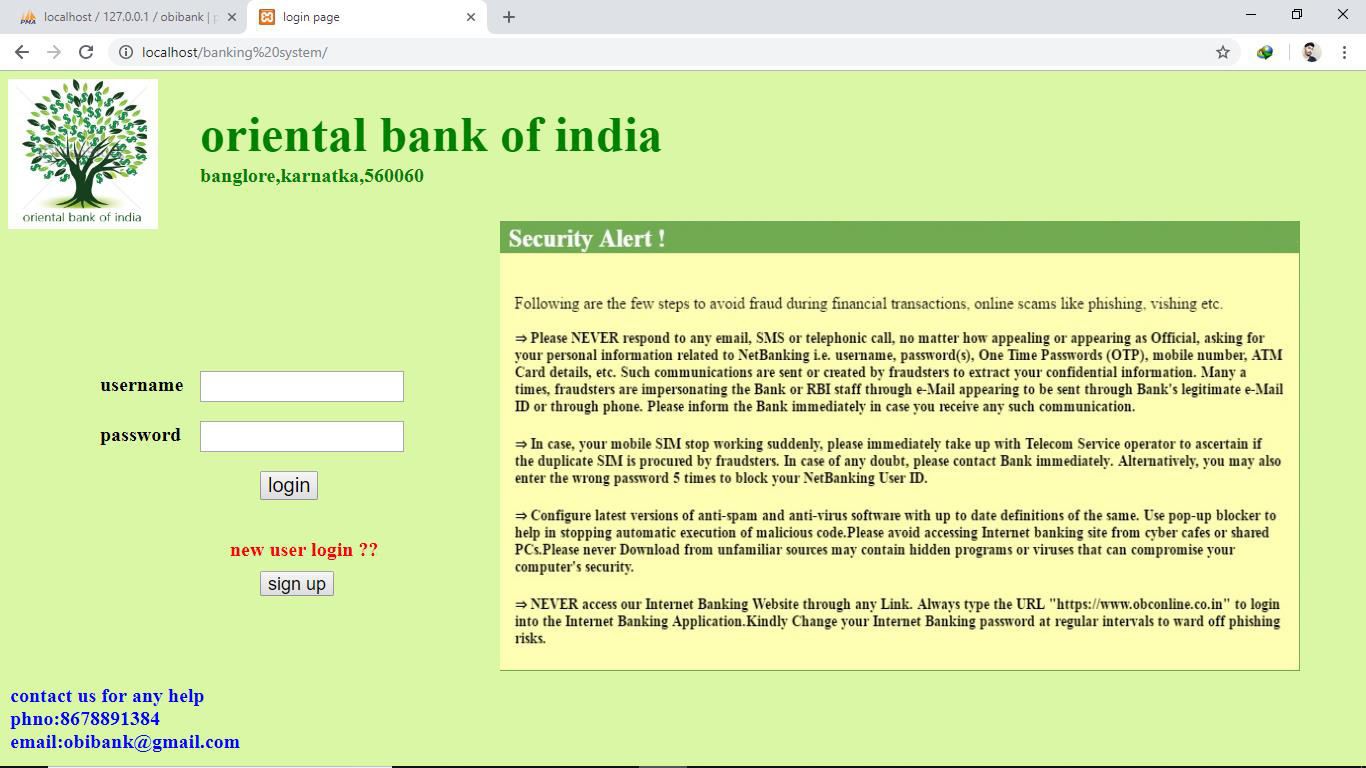
UPDATE account\_info SET username= '$name' , fname= '$fname' , branch\_no= '$brno' , branch\_name= '$brname' , dob= '$dob' , gender= '$gender' , age= '$age' , occupation= '$occupa', uid= '$id' , email= '$email' , address= '$address' WHERE phno= '$mob';

UPDATE basic\_info SET branch\_no= '$brno' WHERE acc\_no= '$acc\_no' ;

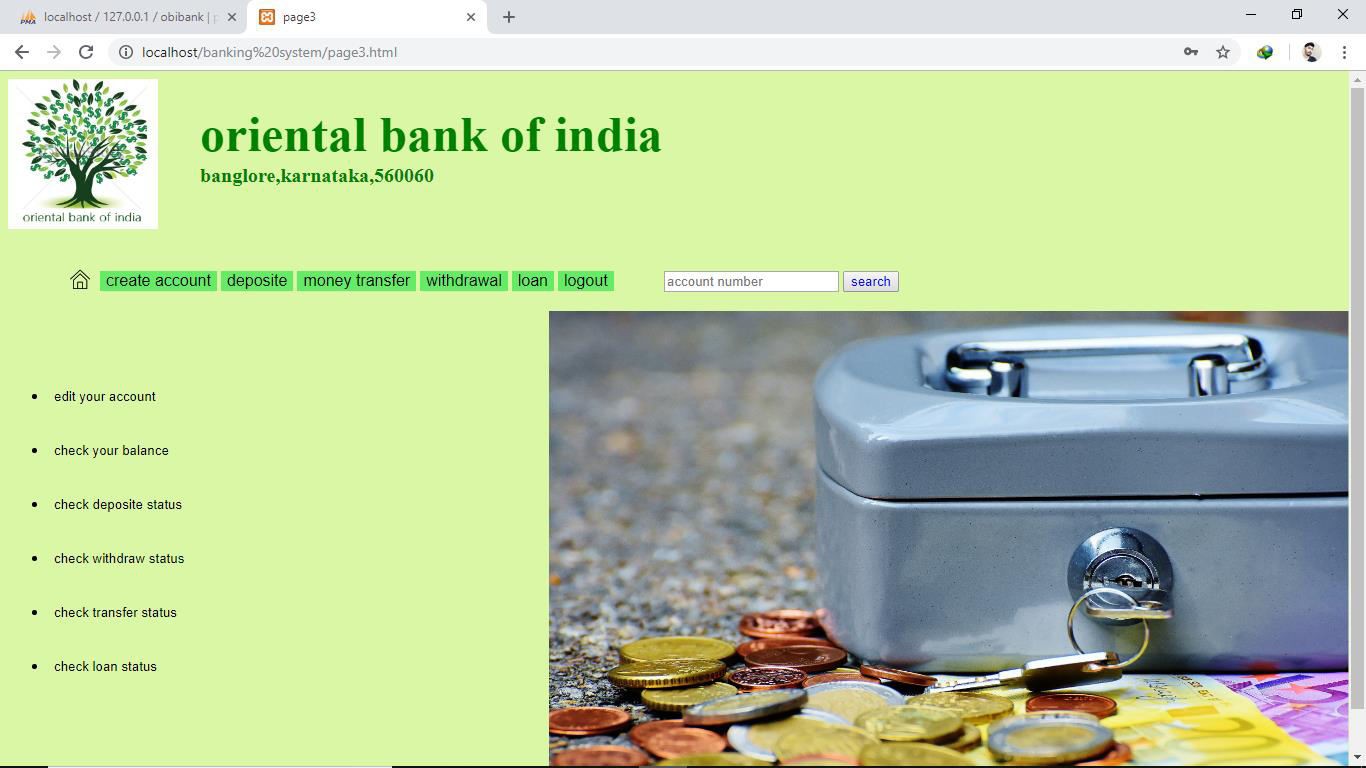
. Checking Loan Status

SELECT acc\_no , username , branch\_no , loan\_type , time\_span , amount , phno , date FROM loan WHERE acc\_no = '$acc\_no' ";

* 1. SNAPSHOTS
     1. Login page



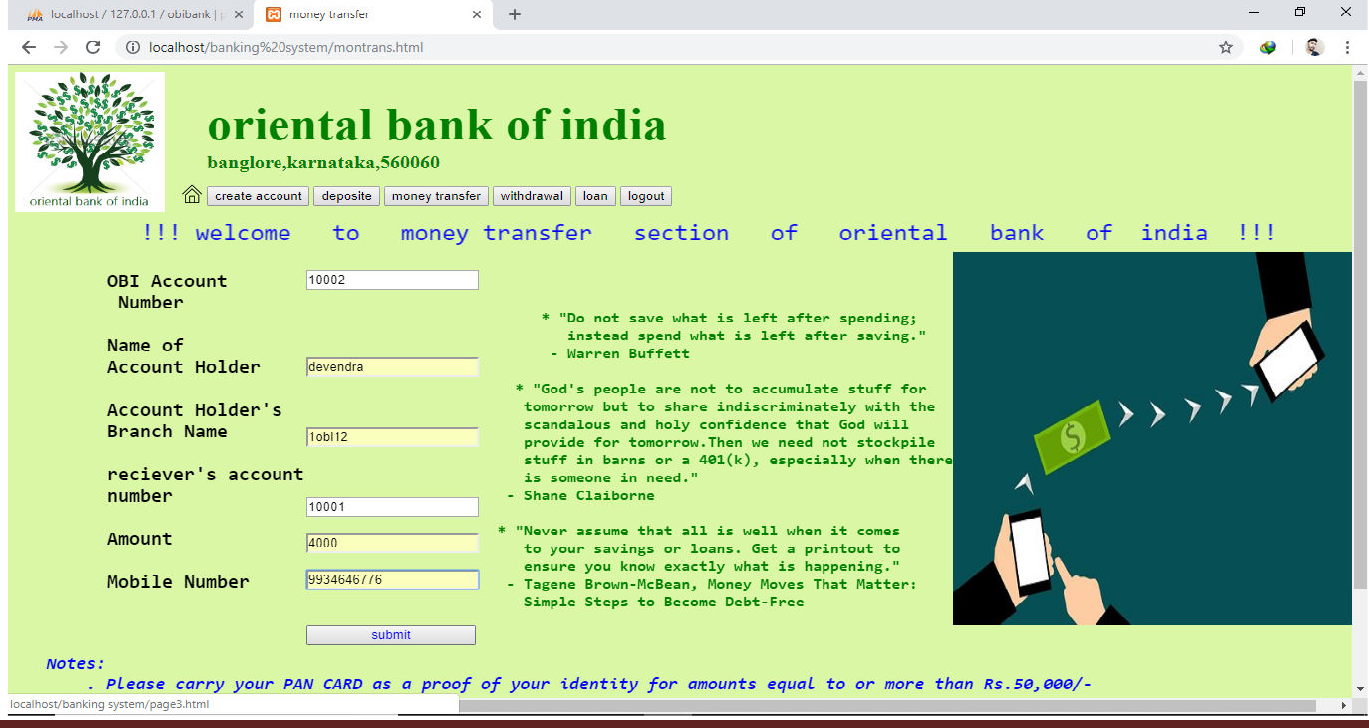
* + 1. Home Page



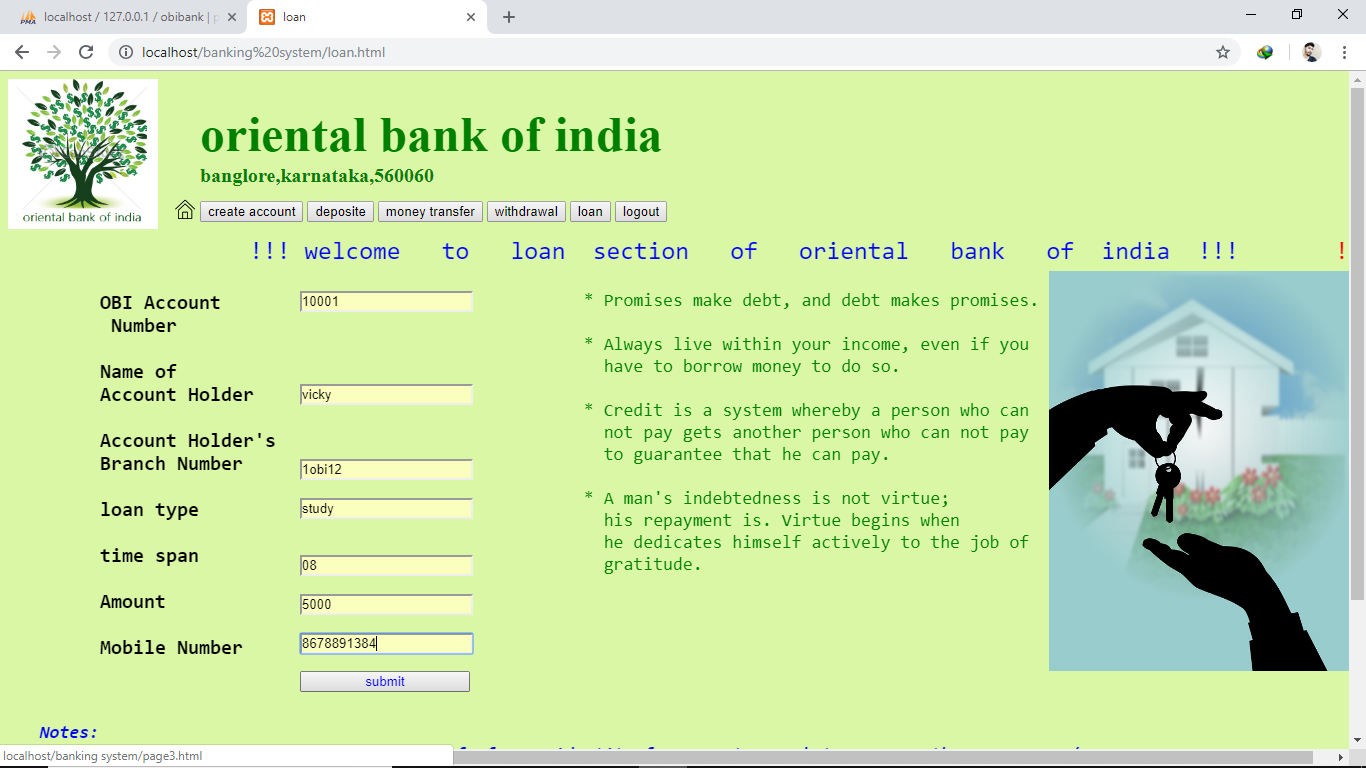
* + 1. Deposite money page



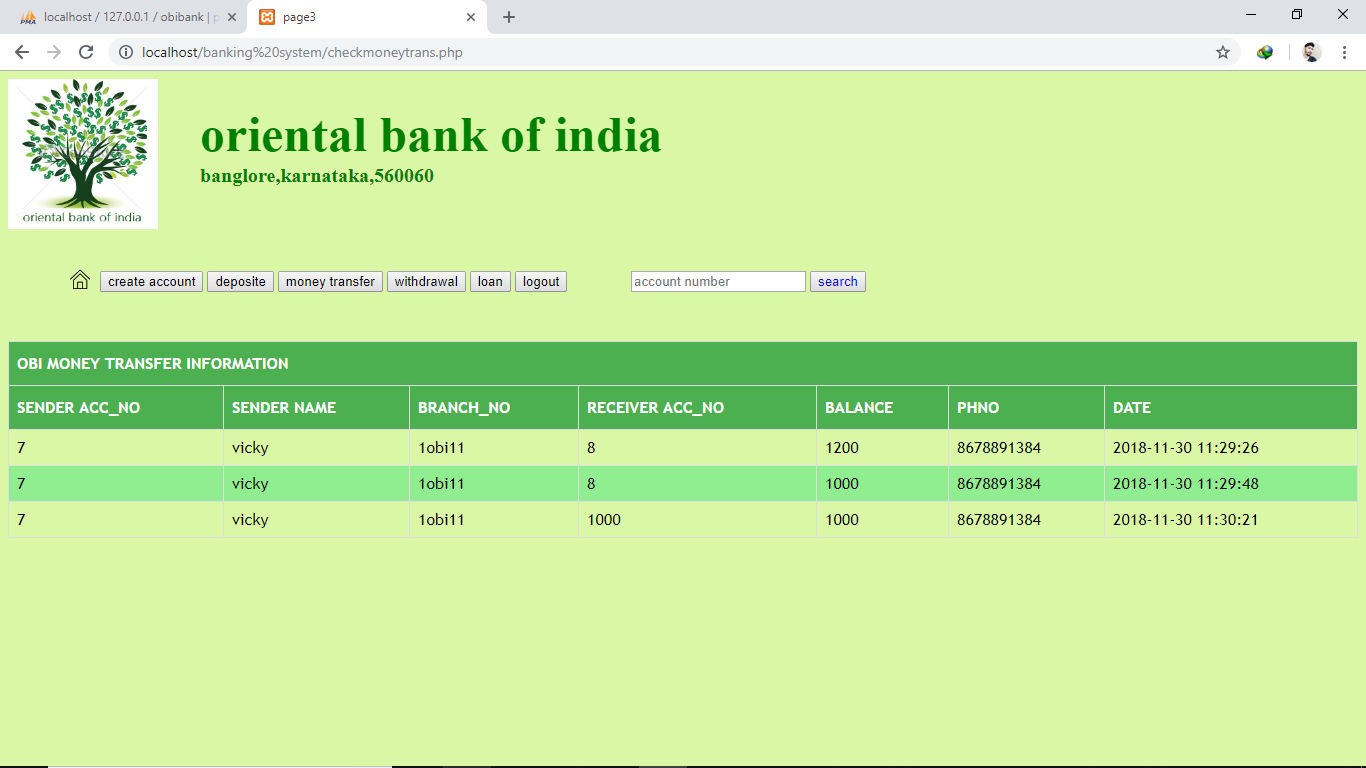
* + 1. Money Transfer Page



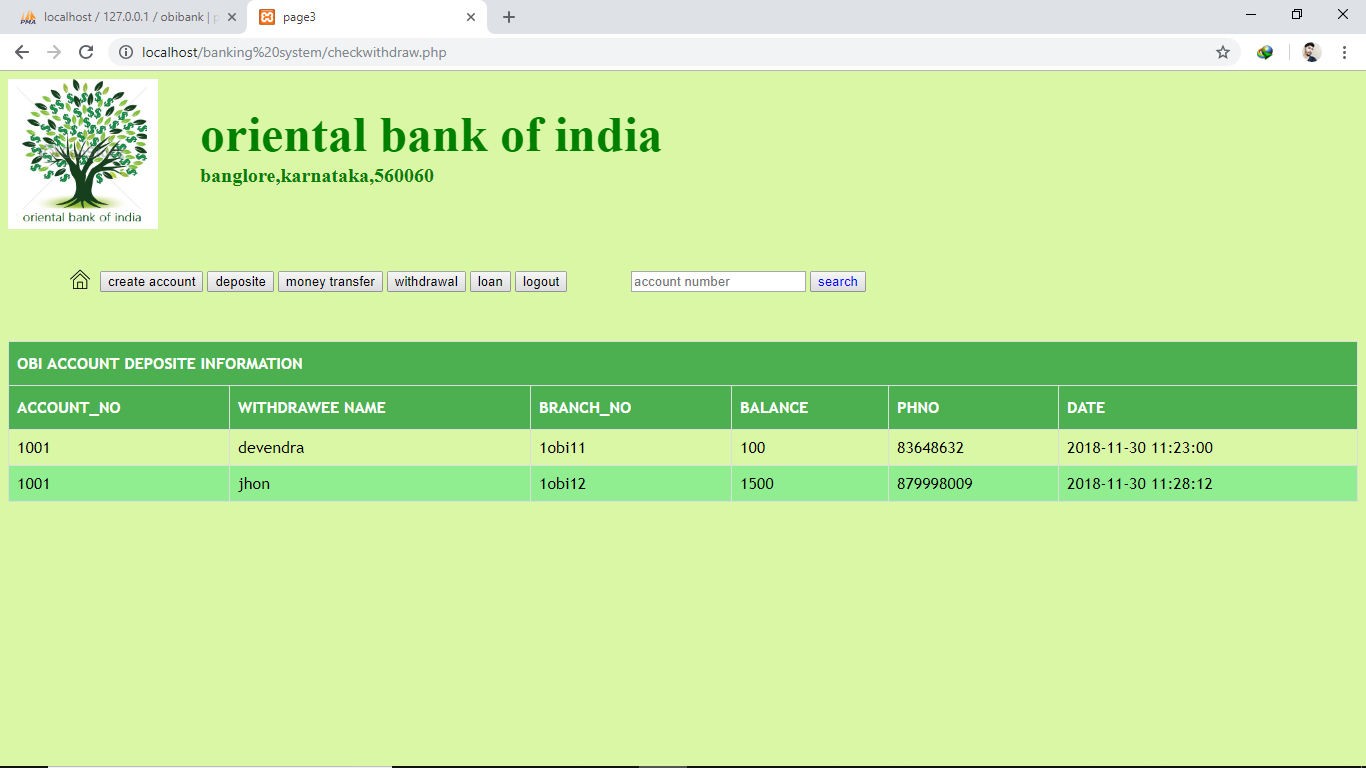
* + 1. Loan Page



* + 1. Check Deposite Status Page



* + 1. Check Money Transfer Status Page



CHAPTER 6

**Conclusion**

* 1. **Benefits of online banking**

Many of us lead busy lives. Some of us are up before the crack of dawn, getting ourselves prepared so we can in turn get our families ready for the day. We rush to work, rush to get the kids to school, and at the end of the day we rush home only to brace ourselves for the next day. After a hectic day, the last thing you want to do is spend time waiting in line at the bank, or even the post office. That's where Online Banking comes in. Many of the benefits of doing our banking online are obvious:

* + You don't have to wait in line.
  + You don't have to plan your day around the bank's hours.
  + You can look at your balance whenever you want, not just when you get a statement.
    1. Most available benefits

1. Online banking with key bank is fast, secure, convenient and free.
2. Quick, simple, authenticated access to accounts via the web application.
3. Simply scalable to grow with changing system requirement.
4. Global enterprise wide access to information.
5. Improved data security, restricting unauthorized access.
6. Minimize Storage Space.

# Conclusion

This project is developed to nurture the needs of a user in a banking sector by embedding all the tasks of transactions taking place in a bank. Future version of this project will still be much enhanced than the current version. Writing and depositing checks are perhaps the most fundamental ways to move money in and out of a checking account, but advancements in technology have added ATM and debit card transactions. All banks have rules about how long it takes to access your deposits, how many debit card transactions you're allowed in a day, and how much cash you can withdraw from an ATM. Access to the balance in your checking account can also be limited by businesses that place holds on your funds. Banks are providing internet banking services also so that the customers can be attracted. By asking the bank employs we came to know that maximum numbers of internet bank account holders are youth and business man. Online banking is an innovative tool that is fast becoming a necessity. It is a successful strategic weapon for banks to remain profitable in a volatile and competitive marketplace of today. If proper training should be given to customer by the bank employs to open an account will be beneficial secondly the website should be made friendlier from where the first time customers can directly make and access their accounts.

Thus the Bank Management System it is developed and executed successfully.

##### REFERENCES

* **BOOK REFERENCES**

1. Database systems Models , Languags, Design and Application Programming, RamezElmasri and Shamkant B .Navathe, 7th Edition , 2017, Pearson.
2. Database management systems,Ramkrsihnan, and Gehrke, 3rd Edition ,2014, McGraw Hill.
3. Database System Concepts, Silberschatz Korth and Sudershan, 6th edition, Mc- GrawHill, 2013.
4. Database Principles Fundamentals of Design, Implementation and Management, Coronel, Morris and Rob, Cengage Learning, 2012.
   * **WEB REFERENCES**

* [***www.wikipedia.org***](http://www.wikipedia.org/)
* [***http://www.w3schools.com/php/***](http://www.w3schools.com/php/)
* [***https://www.tutorialspoint.com***](https://www.tutorialspoint.com/)
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