

## ONLINE BANKING PROJECT REPORT

### 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.

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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 used 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. The main object of this system is to provide a secure system. Our system is password protected and it only allows authorized user to access various functions available in the system.

Our system will help the user to Locate any A/C wanted by the user. It will Reduced manual work as most of the work done by computer. As all the manual work will be done automatically so it will increase work speed and reduce time consumption to complete any bank related work. It will also increase the work efficiency as few employees can handle more customers. This will reduced the manual workload and give information instantly.

The Project Banking system has been made to automate the Banking system. Through this bank management system user can manage all bank account activity like deposit money, withdraw money, transfer money from one account to another account, online payment etc. Using this bank management system user can check his account detail online like balance in account, bank statement etc. The Administrator can check bank account with a login can work out with A/C holders of the bank can withdraw/ deposit cash / cheque /DD to/from their accounts. This system is also help bank user to create New account easily. The project makes a sincere effort to provide all the below-mentioned features to meet the requirements of the bank.

In this project we have automate the bank process like Account Opening, Daily Transactions, Loan Sanctions, Account Maintenance. In this bank management system use can also search record of a particular Account Holder.

Using this system user can manage following account type

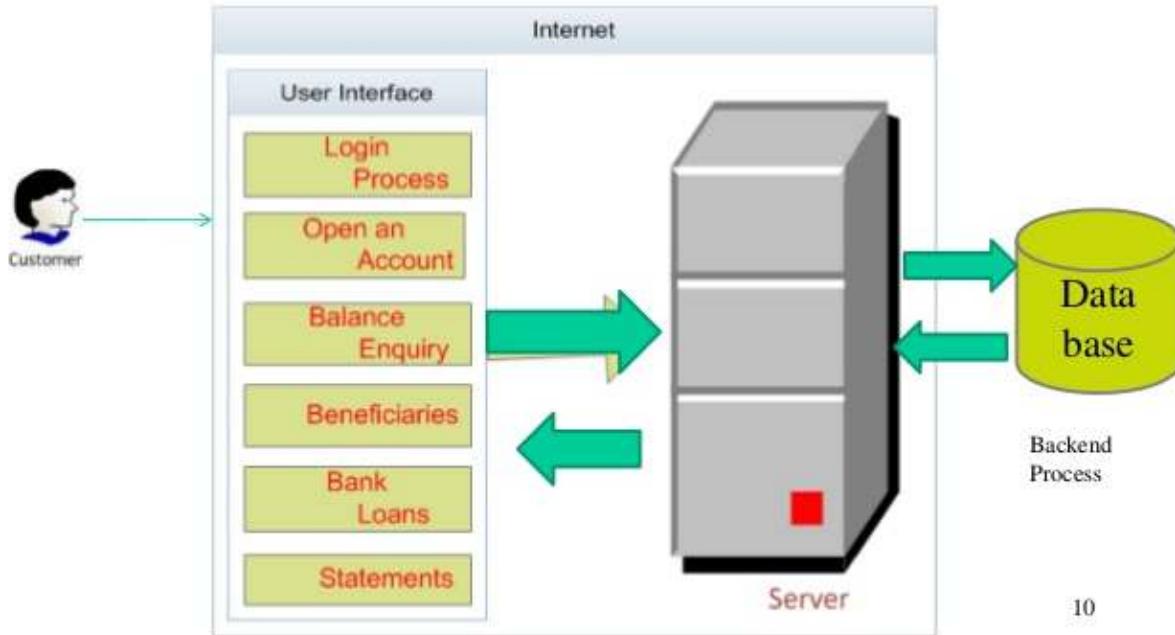
Savings Account

Current Account

Fixed Deposit Account

Recurring Deposit Account

## Loan Account



## SYSYTEM REQUIREMENTS

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
2. Application Software:- Application software uses front end visual basic and database access etc.

## INTRODUCTION TO FRONT END TOOL

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

HTML markup consists of several key components, including those called tags (and their attributes), character-based data types, character references and entity references. HTML tags most commonly come in pairs like `<h1>` and `</h1>`, although some represent empty elements and so are unpaired, for example `<img>`. The first tag in such a pair is the start tag, and the second is the end tag (they are also called opening tags and closing tags).

Another important component is the HTML document type declaration, which triggers standards mode rendering.

The following is an example of the classic "Hello, World!" program:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>This is a title</title>
```

```
</head>
```

```
<body>
```

```
<p>Hello world!</p>
```

```
</body>
```

```
</html>
```

The text between `<html>` and `</html>` describes the web page, and the text between `<body>` and `</body>` is the visible page content. The markup text `<title>This is a title</title>` defines the browser page title.

The Document Type Declaration `<!DOCTYPE html>` is for HTML5. If a declaration is not included, various browsers will revert to "quirks mode" for rendering.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) `text/css` is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

## 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 DATABASE TABLES: -

A database most often contains one or more tables. Each table is identified by a name (e.g. "Customers" or "Orders"). Tables contain records (rows) with data.

Below is an example of a table called "Persons": -

Last Name	First Name	Address	City
Hansen	Ola	Timoteivn 10	Sandnes
Svendson	Tove	Borgvn 23	Sandnes
Pettersen	Kari	Storgt 20	Stavanger

The table above contains three records (one for each person) and four columns (Last Name, First Name, Address, and City).

#### SQL QUERIES: -

With SQL, we can query a database and have a result set returned.

A query like this: -

```
SELECT Last Name FROM Persons
```

Gives a result set like this: -

Last Name
Hansen
Svendson
Petersen

#### 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 Data Manipulation Language (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

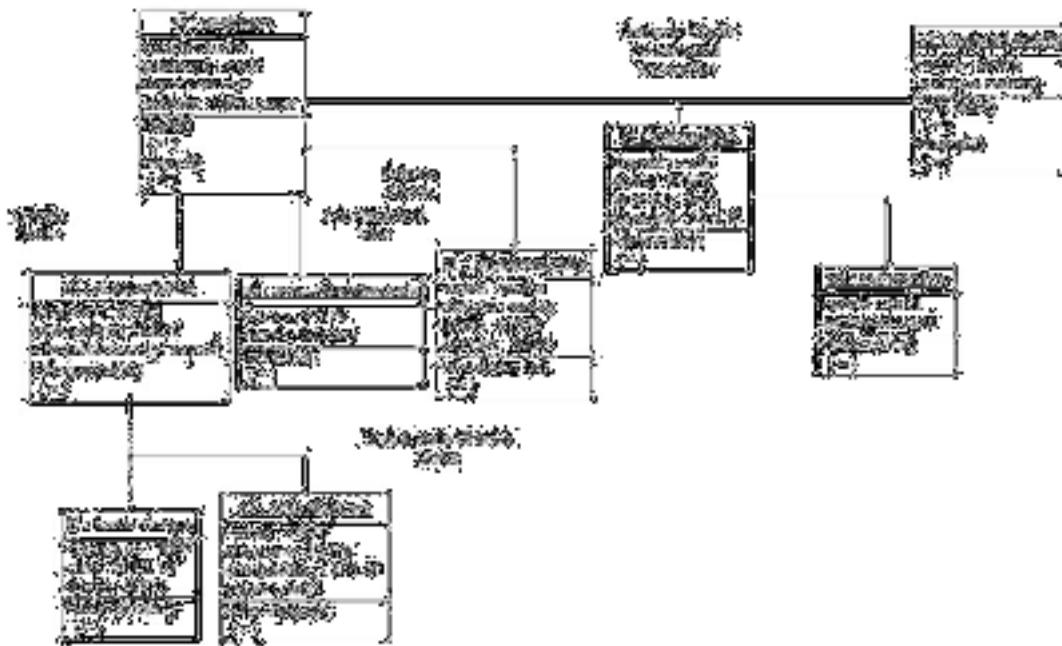
## OBJECT DIAGRAM

Object is an instance of a particular moment in runtime, including objects and data values. A static UML object diagram is an instance of a class diagram; it shows a snapshot of the detailed state of a system at a point in time, thus an object diagram encompasses objects and their relationships at a point in time. It may be considered a special case of a class diagram or a communication diagram.

The use of object diagrams is fairly limited, mainly to show examples of data structures.

- During the analysis phase of a project, you might create a class diagram to describe the structure of a system and then create a set of object diagrams as test cases to verify the accuracy and completeness of the class diagram.
- Before you create a class diagram, you might create an object diagram to discover facts about specific model elements and their links, or to illustrate specific examples of the classifiers that are required.

Below is the object diagram of online banking system:



## CLASS DIAGRAM

In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

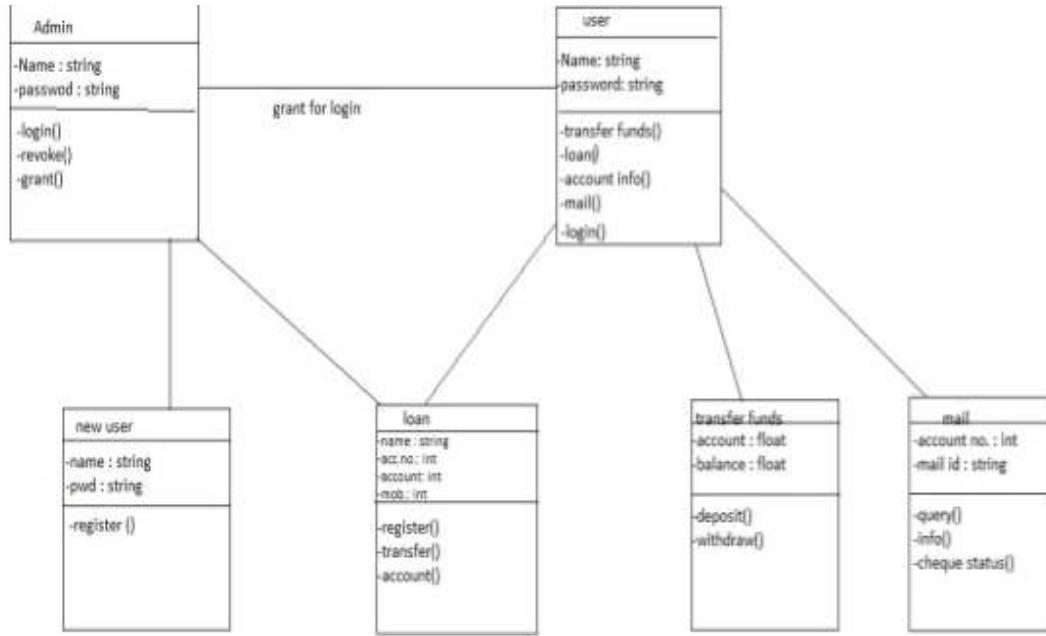
Shows static structure of classifiers in a system

Diagram provides a basic notation for other structure diagrams prescribed by UML

Helpful for developers and other team members too

Business Analysts can use class diagrams to model systems from a business perspective

Below is the class diagram :



## COLLABORATION DIAGRAM

Collaboration diagrams are used to show how objects interact to perform the behavior of a particular use case, or a part of a use case. Along with sequence diagrams, collaboration are used by designers to define and clarify the roles of the objects that perform a particular flow of events of a use case. They are the primary source of information used to determining class responsibilities and interfaces.

A Collaboration is a collection of named objects and actors with links connecting them. They collaborate in performing some task.

A Collaboration defines a set of participants and relationships that are meaningful for a given set of purposes

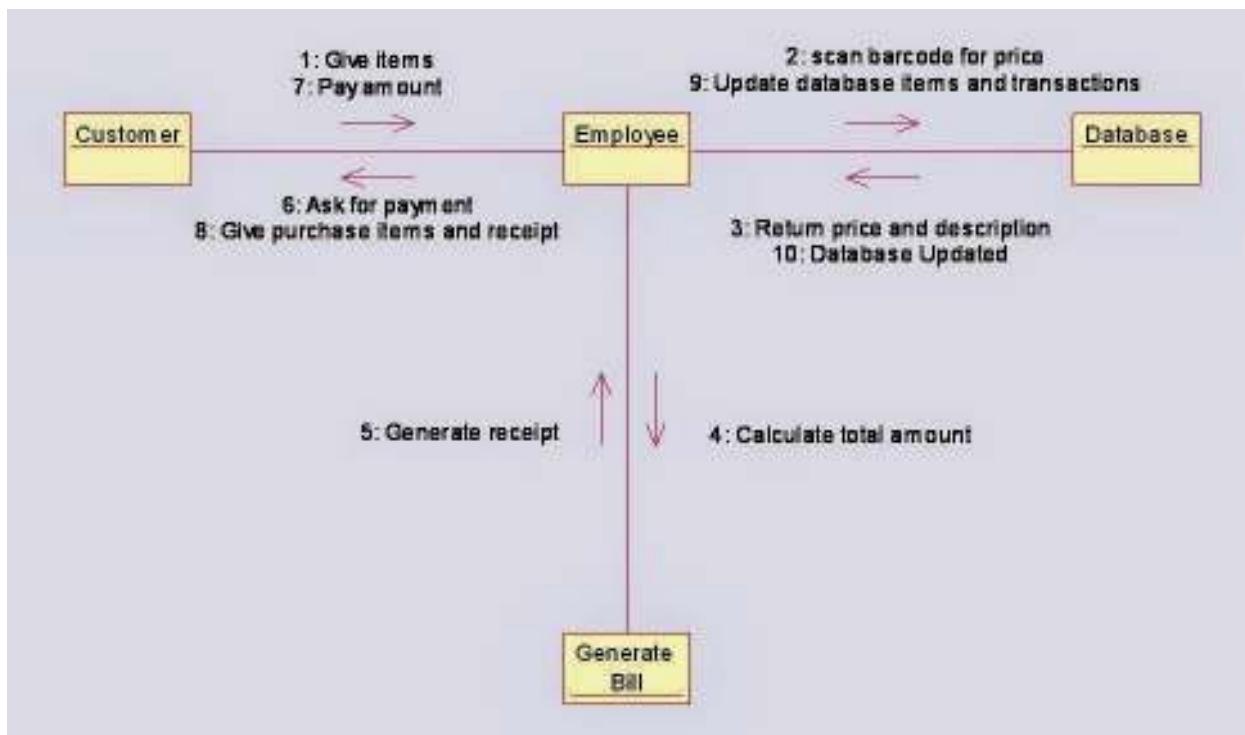
A Collaboration between objects working together provides emergent desirable functionalities in Object-Oriented systems

Each object (responsibility) partially supports emergent functionalities

Objects are able to produce (usable) high-level functionalities by working together

Objects collaborate by communicating (passing messages) with one another in order to work together

Below is the diagram:



## SEQUENCE DIAGRAM

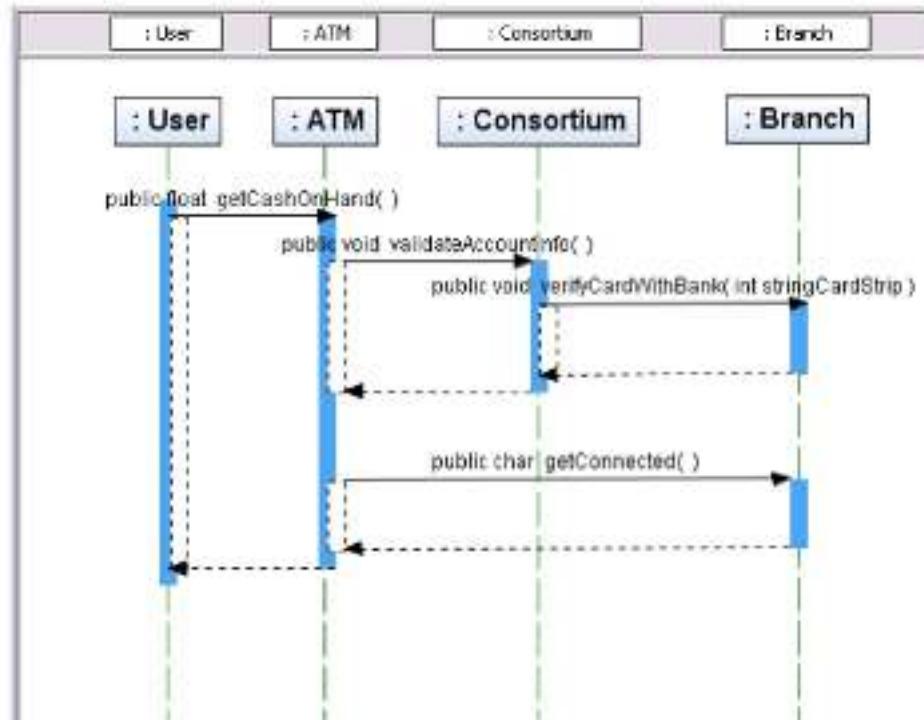
Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagrams are time focus and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent and when.

Sequence Diagrams captures:

the interaction that takes place in a collaboration that either realizes a use case or an operation (instance diagrams or generic diagrams)

high-level interactions between user of the system and the system, between the system and other systems, or between subsystems

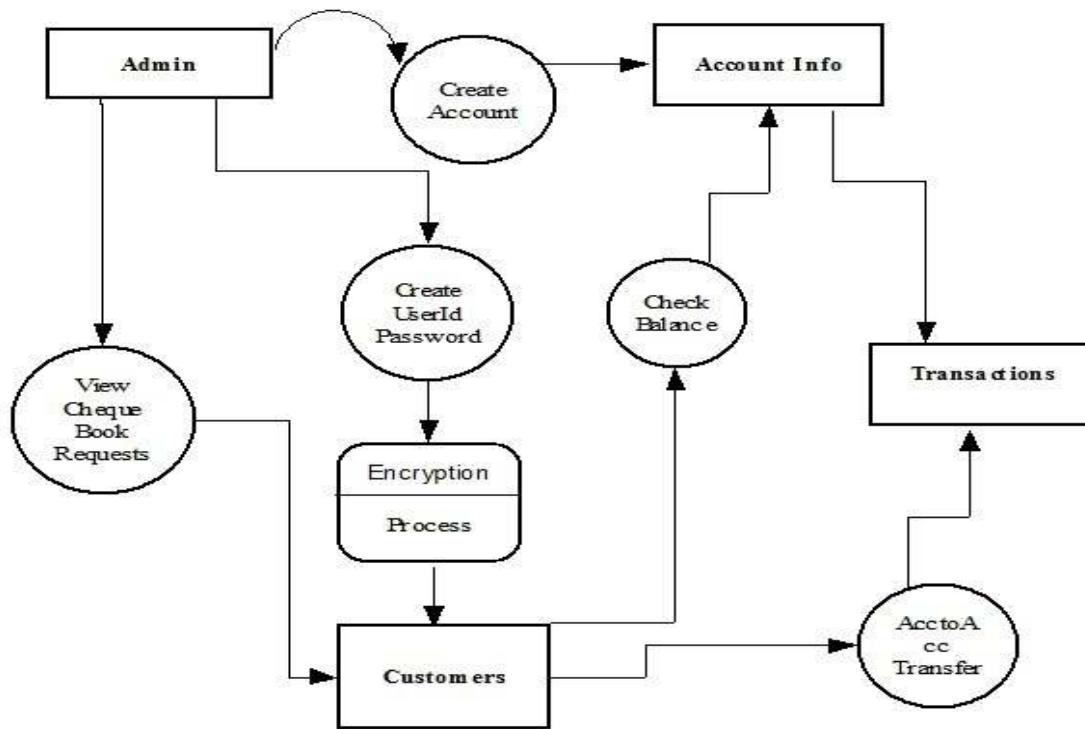
Below is the sequence diagram:



## DATAFLOW DIAGRAM

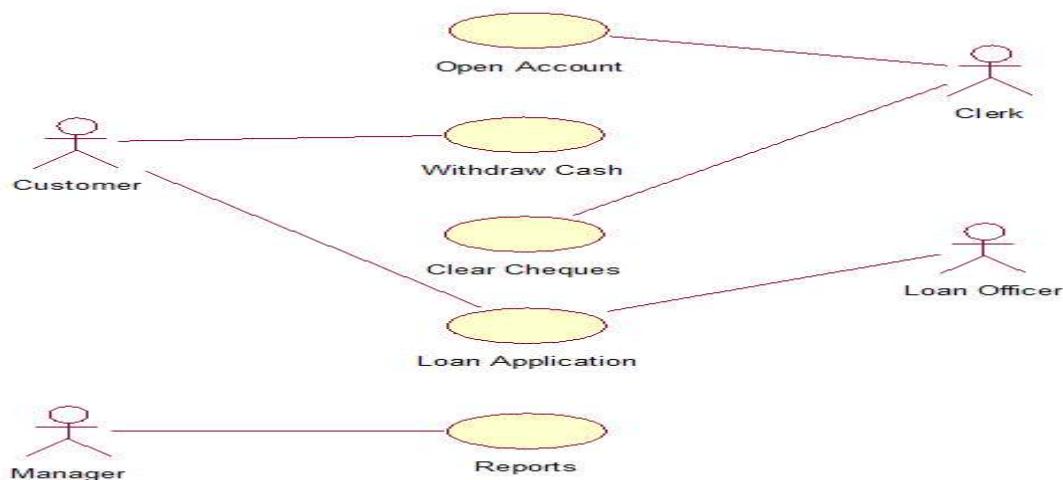
Also known as DFD, Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation. Data flow diagrams can be divided into logical and physical. The logical data flow diagram describes flow of data through a system to perform certain functionality of a business. The physical data flow diagram describes the implementation of the logical data flow.

Below is the dataflow diagram:

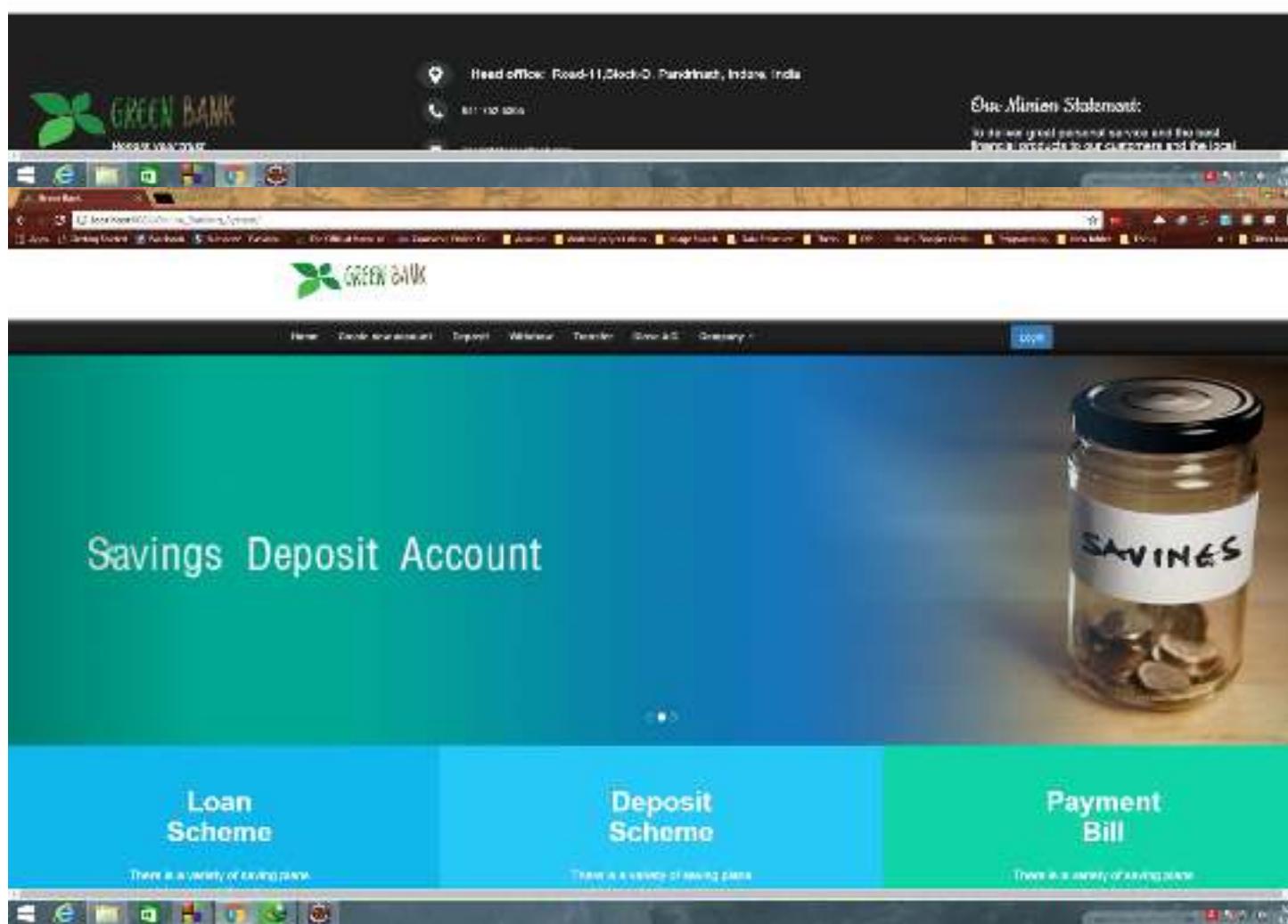


## UML DIAGRAM

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.



## SCREENSHOTS



The screenshot shows the 'Deposit Schemes' section of the Green Bank website. At the top, there's a navigation bar with links for Home, Deposit, Withdrawal, Transfer, Deposit A/C, and About Depository. The main heading is 'Deposit Schemes'. Below it, a sub-section titled 'Deposit Products' lists three categories: 'Bronze', 'Silver', and 'Gold'. Each category has a green button labeled 'View more'.

Scheme	Interest rate	Description
Bronze	8%	- Fixed - 1,00,000/- to 5,00,000/- Interest rates: 8% p.a. Tenure: 1 year, 2 years, 3 years, 5 years Min. deposit amount: ₹ 1,00,000/- Max. deposit amount: ₹ 5,00,000/- Tenure: 1 year, 2 years, 3 years, 5 years
Silver	10%	- Fixed - 5,00,000/- to 10,00,000/- Interest rates: 10% p.a. Tenure: 1 year, 2 years, 3 years, 5 years Min. deposit amount: ₹ 5,00,000/- Max. deposit amount: ₹ 10,00,000/- Tenure: 1 year, 2 years, 3 years, 5 years
Gold	12%	- Fixed - 10,00,000/- to 20,00,000/- Interest rates: 12% p.a. Tenure: 1 year, 2 years, 3 years, 5 years Min. deposit amount: ₹ 10,00,000/- Max. deposit amount: ₹ 20,00,000/- Tenure: 1 year, 2 years, 3 years, 5 years

The screenshot shows the 'Silver Deposit Scheme' page. It features a large image of a smiling woman holding a bank branch, with the text 'Your Money, Our Care' overlaid. Below the image, there's a heading 'Silver Deposit Scheme' and a brief description: 'An exciting new scheme for you! Fixed deposit scheme with high interest rates. The interest rates for your fixed deposit will be provided based on the maturity period.' There are sections for 'Eligibility' (with points like 'A/c holder', 'A/c holder, PWD') and 'Deposit Amount' (with a dropdown menu set to 'Choose deposit amount'). A green 'Deposits' button is at the bottom.

The screenshot shows the footer of the Green Bank website. It includes the bank's logo, address ('Head office: Road No. 10, Block D, Panchkula, Haryana, India'), phone number ('+91 172 25555555'), and email ('info@greenbank.com'). On the right, there's a 'Our Mission Statement' section with the text: 'To offer great personal service and the best products and services available to our clients'. The footer also features social media icons for Facebook, Twitter, and YouTube.

The screenshot shows a web browser window with the URL [www.greenbank.com/transfers](http://www.greenbank.com/transfers). The page title is "Transfer Form". The form fields include:

- Account No.: 1234567890
- Beneficiary Acc. No.: Enter Beneficiary...
- Amount: 1000.00
- From Account: Enter account no.

Below the form are two buttons: a green "Submit" button and a red "Cancel" button.

The screenshot shows a web browser window with the URL [www.greenbank.com/loanrequest](http://www.greenbank.com/loanrequest). The page title is "Loan Request". The form fields include:

- Last Name: Enter last name

Below the form is a blue "Submit" button.



Green Bank

GREEN BANK

# Current Deposit Account

There is a variety of saving plans.

Loan Scheme

There is a variety of saving plans.

Deposit Scheme

There is a variety of saving plans.

Payment Bill

There is a variety of saving plans.

Green Bank

## Withdraw Form

Account No.	1234567890
Main Name	ABCDE
Password	1234567890
Security	1234567890

Submit Cancel

GREEN BANK

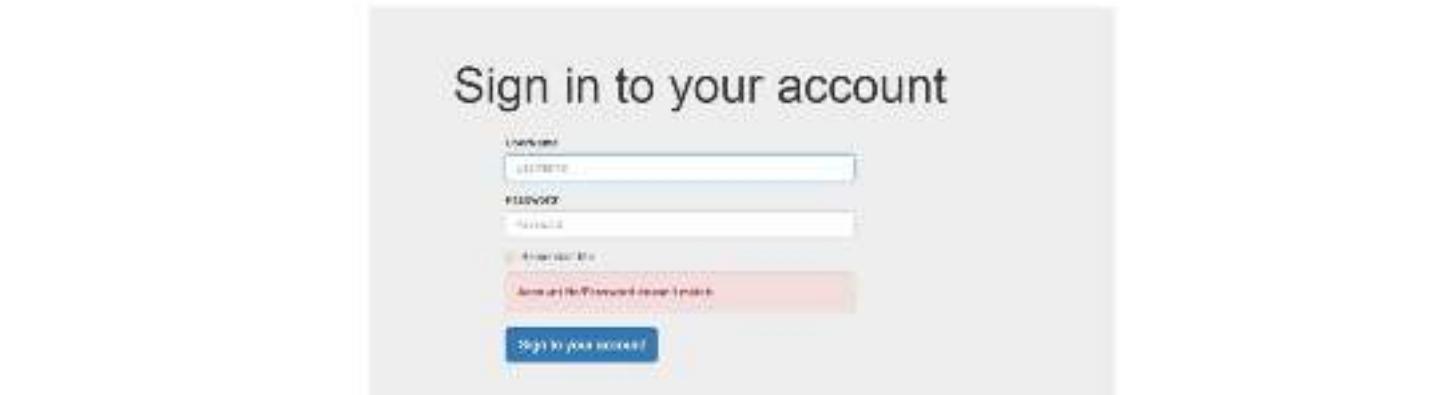
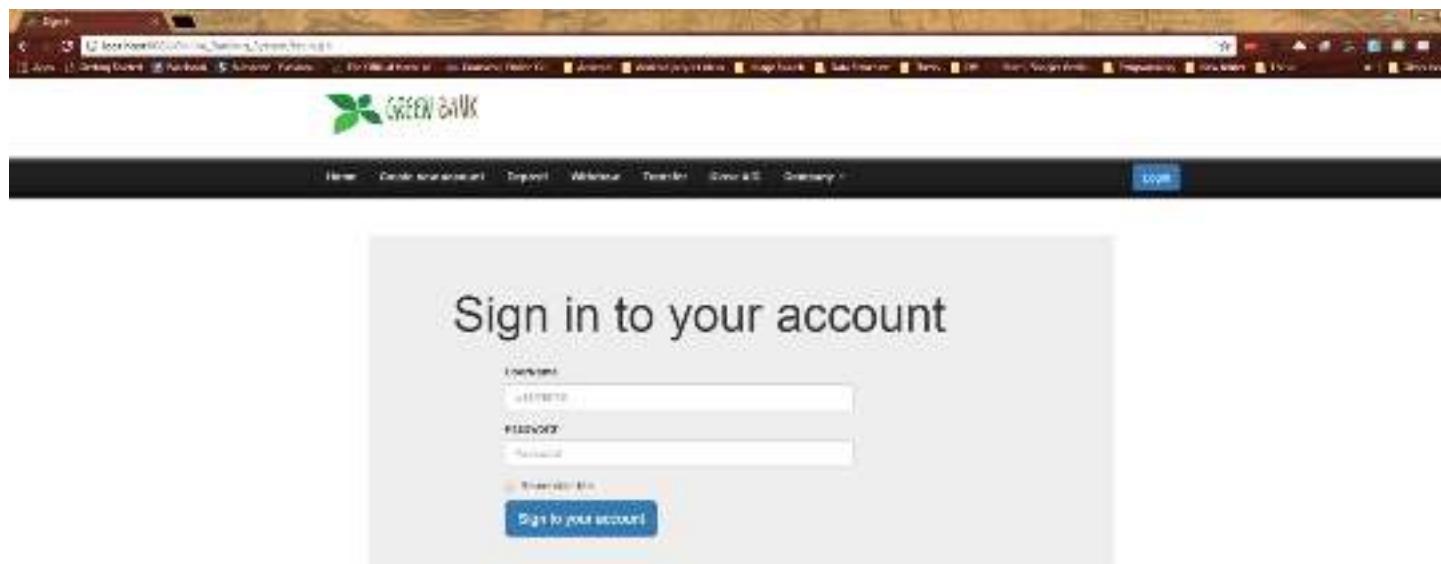
Head office: Road 11, Block D, Panditnath, India

9871-123456

info@greenbank.com

**Our Mission Statement:**

To deliver great personal service and the best financial products to our customers and the local community at competitive rates.



The screenshot shows a web browser window with a 'Create New Account' form. The browser's address bar displays the URL: <http://www.loanapp.com/CreateCustomer.aspx?CustomerID=0>. The page title is 'Create New Account'. The form fields include:

- POSITION:** India IT Hub - Mumbai
- ZIP CODE:** 400001
- Address:** Plot no. 100, Sector 10, Noida
- CITY:** India IT Hub - Mumbai
- STATE:** Maharashtra
- Zip:** 400001
- User Name:** Enter user name here...
- PASSWORD:** Enter password here...
- CONFIRM PASSWORD:** Enter password again...
- PHONE NUMBER:** Enter phone number here...
- EMAIL ADDRESS:** Enter email address here...
- Choose Account type:** Savings Account
- ACCOUNT NUMBER:** 123456789012345678
- CREATE ACCOUNT** button