

Deposit Management System for a Company

by

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ABSTRACT

A company normally keeps its surplus funds in various banks as FDR (Fixed Deposit Receipt). So, each company should have FDR policy in order to establish and set forth a uniform procedure and guideline to regulate and/or control the placement of funds in different scheduled banks subject to the government's directives. The bank for keeping the money as FDR is broadly selected with a policy of maximizing its return. But the risk factors are very important to be considered while keeping the money. The standard and status of a bank has to be considered more over the profit to be generated from fixed deposit. For example the Oriental bank of Bangladesh in 2006 faced bankruptcy due to fall in its reserve and the companies who deposited their money in that bank had to face severe problem in realizing the money. So, the factors to be considered for choosing a bank for FDR are very important for making the FDR policy. Moreover the factors once decided must be reviewed time to time as the scenario of the investment parameters may change. Additionally when an emergency arises from the point of view the bank and/or the company itself, it may be necessary to materialize the invested amount. All the aspects mentioned above should be incorporated in the FDR policy. Once the policy is framed for the sake of accurate determination of a particular investment or a particular realization of previous investments an integrated full fledged software system needs to be deployed.

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APPROVAL

The Project Report titled “DEPOSIT MANAGEMENT SYSTEM” submitted by Partha Sarati Das Roll: 1008311013, Session 2008-2009 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Post Graduate Diploma (ICT) held on 25th February, 2013.

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Declaration

It is hereby declared that this Project or any part of it has not been submitted elsewhere for the award of any degree or diploma.

Signature of the candidate

Partha Sarati Das

INTRODUCTION

1.1 Introduction

In the competitive market of this twenty first century, the technology is dominating the world, if any business wants to flourish, first it has to set up its online system properly. Need based up to date management procedure is its prime necessity. Online oriented deposit management system [1,7] being the crucial part of the profit for the company comes in the first category in such kind of competitive market. Hence, it is very important to run the entire procedure systematically, in a proper manner. In order to make convenient the Deposit activities of the Investor in an efficient way the “Deposit Management System” has been developed.

1.1.1 Motivation

DMS is the best choice for any company. It is difficult to maintain deposited related all procedures of a company in a very conventional way. So, it comes to the consideration to make this system automated. Today, internet is the important technology on the world stage. People want to gather all the necessary information from website rather than making this from any other options. Our “Deposit Management System” will provide all the necessary information to the Investor in an instance. It will design in such a majestic way so that investor can see the ultimate profit at a glance.

1.1.2 Overview

After analyzing many organizations [1,2,7] deposit related systems, we reached a conclusion about what will be the functionality of DMS. In order to make this software perfect where the investor can see the information like in the case of keeping record of bank information, bank camel rating information, deposit rate of different banks and withdrawal of mature of FDR & pre-mature Fixed Deposit Receipt and finally the best rated bank for investment. In the case of admin, an admin can add, edit and delete and retrieve the information according to the accessibility of the system and in the case of user, a user can only view the information according to the accessibility and exactly what we have explained, our system acts

accordingly. In essence, our system plays role of the entire process from the starting of the investment of a investor to the safe and happy return of the profit.

1.1.3 Goal

The project work will focus on the mechanism of selecting the deciding factors for investment, deciding best rated bank for particular investment, changing policy of FDR with the change scenario of the banks & finally to secure the organization if any emergency arises or if any bank falls in bankruptcy then suggestion for organization that how to recover the invested money. Another goal is that we will suggest how to publish the CAMEL rating [9,10] up to date in not only private banks but also private banks. So that investor can up date their profile with authenticate information. Finally when the invested money are matured then whether it will reinvest into same bank or according to the change scenario of banks which bank is best rated.

1.1.4 Objectives

The objectives of this work are as follows: (1) to develop the mechanism of selecting the deciding factors for the investment of a fund. (2) to develop a software system that will help a company for deciding the bank for a particular investment as fixed deposit & also the organized reinvestment facility . (3) to develop the methodology of changing the policy for FDR deposit in conjunction with the changed scenario of the banks where the deposit have already been made. The specific aim of this work is to use the developed software system in a company and the possible outcome of this project to deliver a intelligent solution of the FDR investment guideline for a company.

1.1.5 Summary

The project work conducted for the achievement of the stated goal is presented in the dissertation in several chapters, organized in way so that the steps involved in the study may properly organised the methodology. A brief description of the contents of each chapter follows: Chapter 1 gives the motivation, goal & the project history. A background of the proposed system including a descriptive explanation about the existing system analysis are explained in Chapter 2. Chapter 3 presents in this chapter, System Design & Development

will discuss & Analysis modeling, Designing Tools will be discussed. Chapter 4 presents the Implementation & Testing of the developed software. Finally, a concluding remarks and scope for future work is presented in Chapter 5.

System Design and Development

2.1 Requirement Analysis

Requirement analysis is the primary major activity following the completion of a statement of need ensuring from the predevelopment process in a software development process. Requirement analysis is defined in terms of its major activities: Perceptive problems, Solution resolve.

Specification of a solution that is testable, understandable, maintainable and that satisfies project quality strategy. The principle of a reasonable requirement analysis process is software requirements specification. Requirements analysis process is accomplished through the execution of seven distinct functions: inception, elicitation, elaboration, negotiation, specification, validation and management are given below.

2.1.1 Inception

At project inception, software engineers ask a set of context-free question to the customer. The intent is to establish a basic understanding of the problem, the people who want a solution, the nature of the solution that is desired and the effectiveness of preliminary communication and collaboration between the customer and the developer.

2.1.2 Elicitation

It certainly seems simple enough-ask the customer, the users, and others what objectives for the system or product are, what is to be accomplished, how the system or product fits into the needs of the business, and finally how the system or product is to be used on a day-to-day basis.

2.1.3 Elaboration

The information obtained from the customer during inception and elicitation is expanded and refined during elaboration. The end result of elaboration is an analysis model that defines the informational, functional and behavioral domain of the problem.

2.1.4 Negotiation

The requirement engineer must reconcile these conflicts through a process of negotiation. Customers, users and other stakeholders are asked to rank requirements and then discuss conflicts in priority.

2.1.5 Specification

The specification is the final work product produced by the requirements engineer. It serves as the foundation for subsequent software engineering activities and describes the function and performance of a computer-based system and the constraints that will govern its development.

2.1.6 Validation

Requirement validation examines the specification to ensure that all software requirements have been stated unambiguously that inconsistencies, omissions and errors have been detected and corrected and that work products conform to the standards established for the process, the project and the product.

2.1.7 Requirement Management

The requirement management is a set of activities that help the project team to identify, control and track requirements and changes to requirements at any time as the project proceeds. Requirement management begins with identification and each requirement is assigned a unique identifier.

2.2 Risk Analysis

Risk is the chance that outcomes will not turn out as planned and risk analysis are a series of steps that help a software team to understand and manage uncertainty.

2.2.1 Software Risk

Risk always involves two characteristics

- Uncertainty – the risk may or may not be happen that is, there are no 100% probable risks.
- Loss – if the risk becomes a reality, unwanted consequence or losses will occur.

When risks are analyzed, it is important to quantify the level of uncertainty and the degree of loss associated with each risk. To accomplish this, different categories of risks are considered.

- Projects risk threatens the project plan. That is, if projects risk become real it is likely that project schedule will slip and that cost will increase. Projects risk identifies potential budgetary, schedule, personnel (staffing and organization), resource, stakeholder, and requirements problem and their impact on a software project.
- Technical risks threaten the quality and timeliness of the software to be produced. If a technical risk becomes a reality, implementation may become difficult or impossible.
- Business risks threaten the viability of the software to be built.

2.2.2 Risk Identification

Risk identification is a systematic attempt to specify threats to the project plan (Estimates, schedule, resource loading etc). One method for identifying risk is to create a risk item checklist that can be used for risk identification and focuses on some subset of known and predictable risks in following generic subcategories.

- Product size – risk associated with the overall size of the software to be built.
- Business impact – risks associated with constraints imposed by management or the marketplace.
- Customer’s characteristics – risk associated with the sophistication of the customer and the developer’s ability to communicate with the customer in a timely manner.
- Process definition – risk associated with the degree to which the software process has been defined and is followed by the development organization.
- Development environment – risk associated with the availability and quality of the tools to be used to build the product.
- Staff size and experienced – risks associated with the overall technical and project experienced of the software engineers who will do this work.

2.2.3 Risk Mitigation, Monitoring and Management

All the risk analysis [26] activities presented to this point have a single goal – to assist the project team in developing a strategy for dealing with risk. An effective strategy must consider three issues: Risk avoidance, Risk monitoring and Risk management contingency planning.

To mitigate the risk, project management must develop a strategy for reducing turnover. Among the possible steps to be taken are-

- Meet with current staff to determine causes for turnover.
- Mitigate those causes that are under our control before the project start.
- Once the project commences, assume turnover will occur and develop technique to ensure continuity when people leave.
- Organize project team so that information about each development activity is widely dispersed.
- Define documentation standard and establish mechanisms to ensure that documentations are developed in a timely manner.
- Conduct peer reviews of all work.
- Assign a backup staff member for every critical technology.

The project manager monitors factors that may provide an indicator of whether the risk is becoming more or less likely. The following factors can be monitored:

- General attributes of team members based on the project pressures.
- The degree to which the team has jelled.
- Interpersonal relationships among team members.
- Potential problems with compensation and benefits.

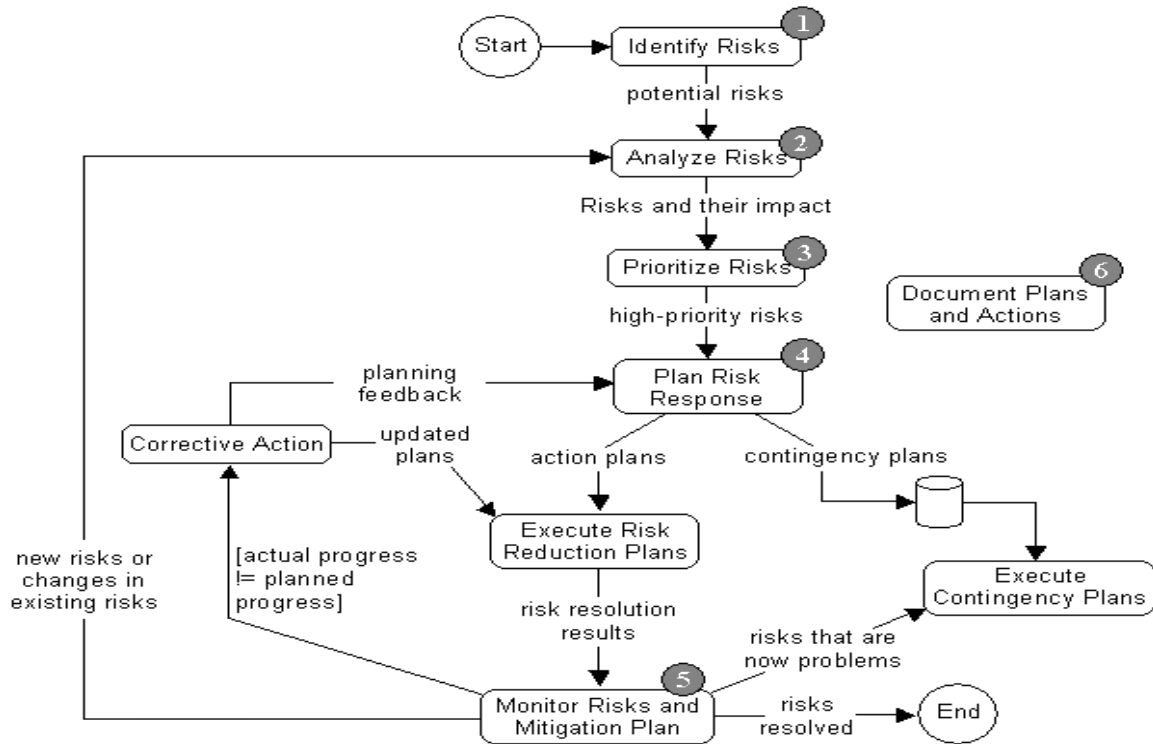


Fig 2.1: Flowchart of Risk Analysis

Here, Fig 2.1 shows the step by step functions of risk analysis. In step-1 risks are identified, step-2 analyzes those risks, step-3 prioritizes those risks according to some criteria, step-4 designs plan for those risks, and step-5 monitors risk and mitigation the plan. If any new risk occurs then again step-2 is executed and same procedures (discussed above) are followed. If there is no risk occurs then all risks are solved.

2.3 Software Process Models

A structured set of activities are required to develop a software system. A software process model is an abstract representation of a software process. Each process model represents a process from a particular perspective that only provides partial information about the process.

There are several popular process models [26] such as

1. Waterfall Model
2. Incremental Model
3. Rapid Application Development
4. Prototyping Model
5. Spiral Model
6. Extreme Programming (XP)

2.3.1 Waterfall Model

The Waterfall Model[26] is a sequential software development model (a process for the creation of software) in which development is seen as flowing steadily downwards (like a waterfall) through the phases of Requirements Analysis and Definition, System and Software Design, Implementation and Unit Testing, Integration and System Testing and Operation and Maintenance.

The phases are described below:

- a) **Requirements Analysis and Definition:** the system's services, constraints and goals are established by consultation with system users. They are then defined in detail and serve as a system specification.
- b) **System and Software Design:** the system's design process partitions the requirements to either hardware or software systems. It establishes overall system architecture. Software design involves identifying and describing the fundamental software system abstractions and their relationships.
- c) **Implementation and Unit Testing:** during this stage, the software design is realized as a set of programs or program units. Unit testing involves verifying that each unit meets its specification.
- d) **Integration and System Testing:** the individual program units or programs are integrated and tested as a complete system to ensure that the software requirements have been met. After testing, the software system is delivered to the customer.
- e) **Operation and Maintenance:** Normally (although not necessarily) this is the longest life-cycle phase. The system is installed and put into practical use. Maintenance involves correcting errors which were not discovered in earlier stages of the life cycle and improving the implementation of system units and enhancing the system's services as new requirements are discovered.

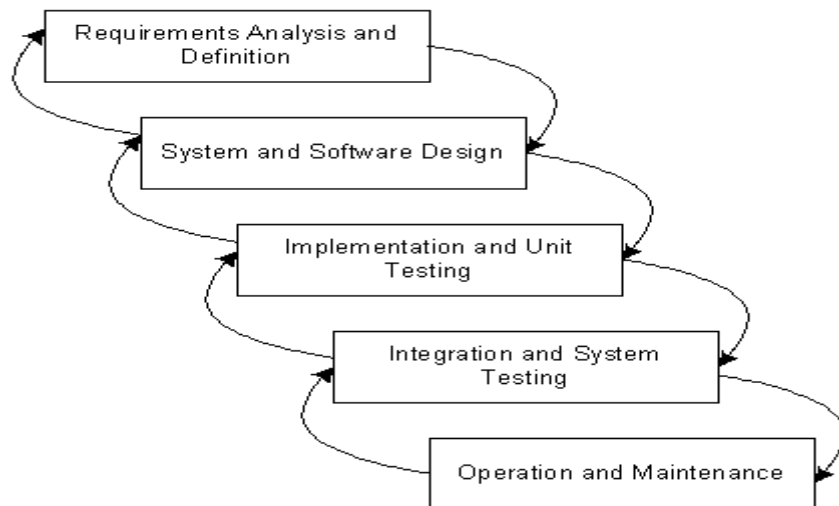


Fig: 2.2 Flowchart of Waterfall Model

Some major advantages and disadvantages of Waterfall Model are given below.

Advantages:

1. Having fewer errors.
2. System requirements are identified before programming starts.
3. Changes are minimized to the requirements as the project proceeds.

Disadvantages:

1. Most time consuming process model.
2. Huge amount of paperwork is necessary.
3. Does not allow going next stage before finishing the previous stage.

2.3.2 Incremental Model

The Incremental Model [26] combines elements of the linear sequential model (applied repetitively) with the iterative philosophy of prototyping. When an incremental model is used, the first increment is often the “core product”. The subsequent iterations are the supporting functionalities or the add-on features that a customer would like to see. More specifically, the model is designed, implemented and tested as a series of incremental builds until the product is finished.

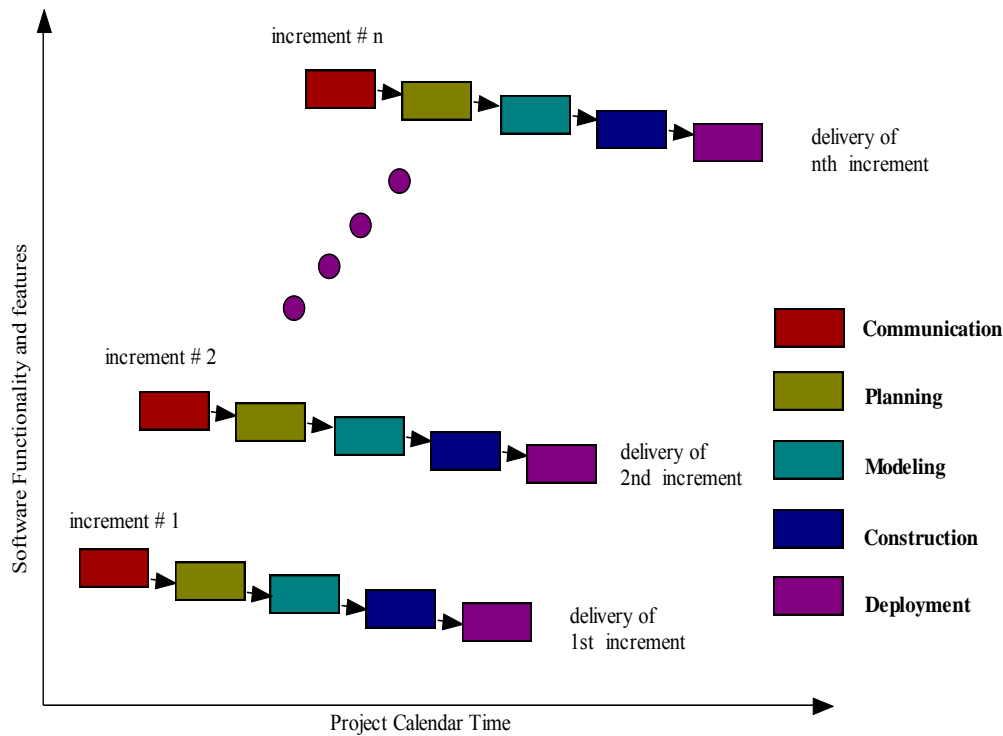


Fig 2.3: Incremental Model

Fig 2.3 shows the incremental way of processing. Increment # 1 is the core product and the basic requirements are addressed here. Other increments are additional increments. If the core product is well delivered, the additional functions can be added to implement the next increment.

Some major advantages and disadvantages of Incremental Model are given below.

Advantages:

1. Early increments act as a prototype to help elicit requirements for later increments.
2. Lower risk of overall project failure.

Disadvantages:

1. Difficult to map user requirements into increments which can deliver functionality.
2. Difficult to identify small increments (<20,000 LINE OF CODE).
3. Difficulty of identifying the common facilities needed by all sub-systems.

2.3.3 Rapid Application Development

Rapid Application Development (RAD)[26] is a software development methodology that focuses on building applications in a very short amount of time traditionally with compromises in usability, features and/or execution speed. The term has recently become a marketing buzzword that generically describes applications that can be designed and developed within 60-90 days, but it was originally intended to describe a process of development that involves application prototyping and iterative development.

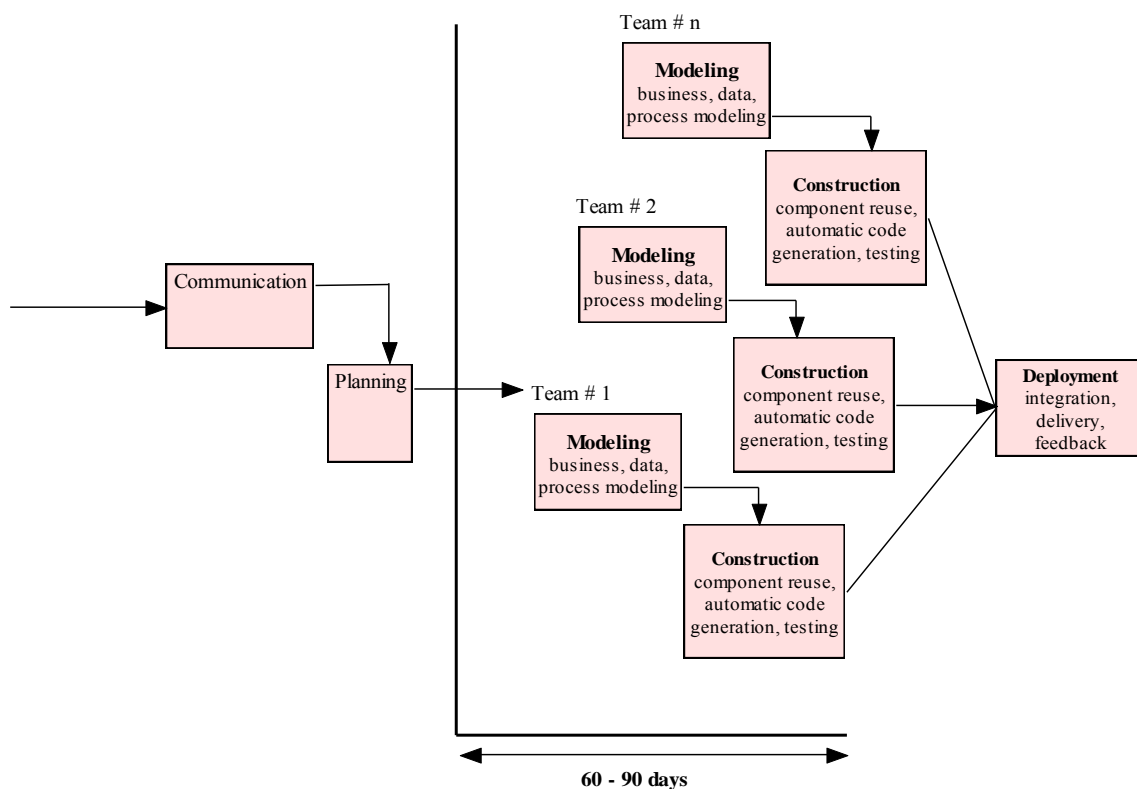


Fig 2.4: RAD Model

Some major advantages and disadvantages of RAD model are given below.

Advantages:

1. Improve the speed and quality of systems development.
2. Adjust the SDLC (Software Development Lifecycle) phases so that some parts of the system are developed quickly and presented to the users.

3. Breaks the system into a series of versions that are developed sequentially and a useful (but incomplete) system is generated quickly.

Disadvantages:

1. There is a long delay before the customer gets to see any results.
2. Development can take so long that the customer's business has fundamentally changed by the time the system is ready for use.
3. Delivery process is delayed until 100% process is completed.

2.3.4 Prototyping Model

Prototyping Model, a possible activity during software development, is the creation of prototypes, i.e., incomplete versions of the software program being developed. A prototype typically implements only a small subset of the features of the eventual program, and the implementation may be completely different from that of the eventual product.

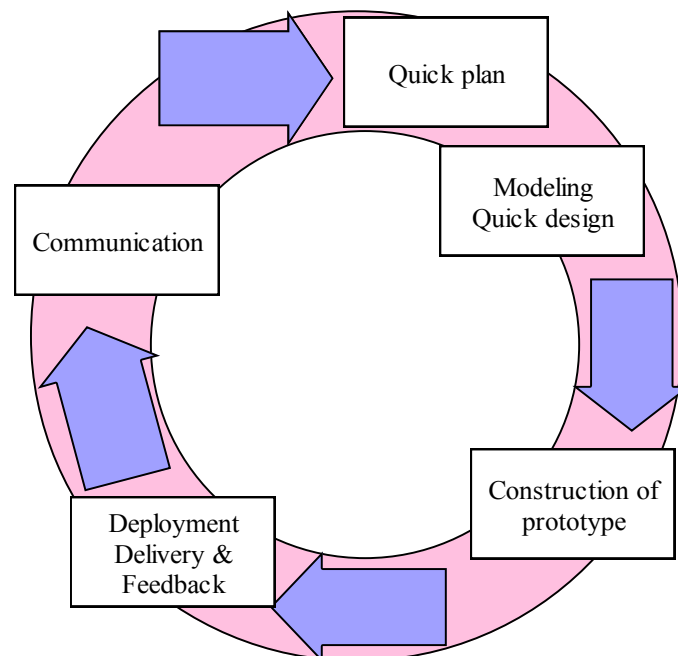


Fig 2.5: Prototyping Model

Fig 2.5 shows that the prototyping process begins with communication. Here the software engineer and customer meet and discuss the overall objective of the project. Then a quick plan is designed and modeling occurs. This modeling focuses on those aspects that are visible to the customer. The quick design leads to the construction of a prototype. The prototype is

deployed and evaluated by the customers. Then feedback is used to refine the requirement of the project.

Some major advantages and disadvantages of Prototyping Model are given below.

Advantages:

1. Focuses on what is visible to customer
2. Quick design leads to a prototype
3. Prototype evaluated by the customer who can refine requirements

Disadvantages:

Customer sees something that appears to work and wants it.

2.3.5 Spiral Model

The Spiral Model [26] is an evolutionary software process model that couples the iterative nature of prototyping with the controlled and systematic aspects of the Linear Sequential Model. Using the Spiral Model the software is developed in a series of incremental releases. In Spiral Model the early iterations could result in a paper model or a prototype. However, during later iterations more complex functionalities could be added.

A Spiral Model combines the iterative nature of prototyping with the controlled and systematic aspects of the Waterfall Model, there in providing the potential for **rapid development of incremental versions of the software**. A Spiral Model is divided into a number of framework activities, also called task regions. These task regions can vary from 3-6 in number and those are:

Liaison - tasks required to establish effective communication between the developer and customer.

Planning - tasks required to define resources, timelines and other project related information /items.

Risk Analysis - tasks required to assess the technical and management risks.

Engineering - tasks required to build one or more representation of the application.

Construction & Release - tasks required to construct, test and support (eg. Documentation and training)

System evaluation - tasks required to obtain periodic customer feedback so that there are no last minute surprises.

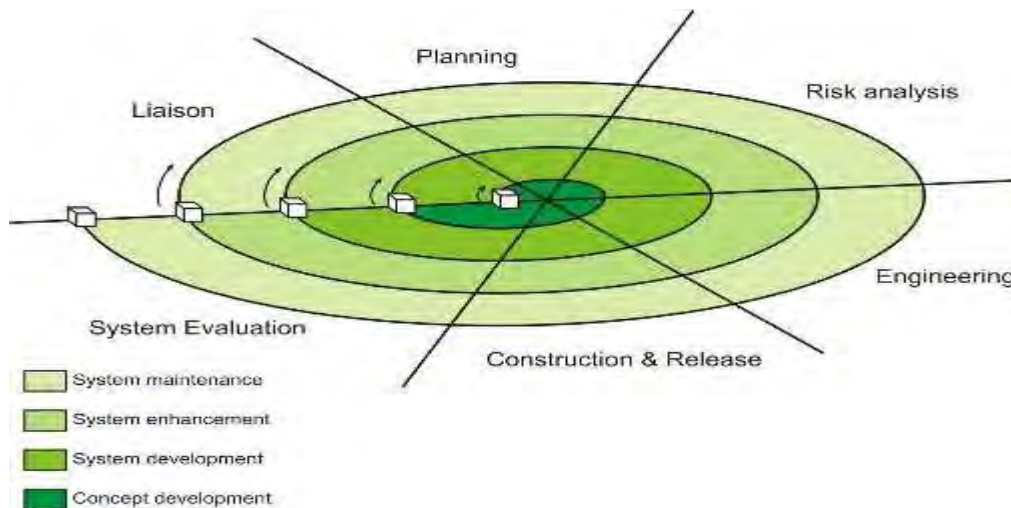


Fig 2.6: Spiral Model

Some major advantages and disadvantages of Spiral Model are given below

Advantages:

1. Realistic approach to the development because the software evolves as the process progresses.
2. The model uses prototyping as a risk reduction mechanism and allows for the development of prototypes at any stage of the evolutionary development.
3. It maintains a systematic stepwise approach, like the classic waterfall model, and also incorporates it into an iterative framework that more reflect the real world.

Disadvantages:

1. should possess considerable risk-assessment expertise
2. It has not been employed as much proven models (e.g. the Waterfall Model) and hence may prove difficult to sdl to the client.

2.3.6 Extreme Programming

Extreme Programming (or XP)[25,26] is a software engineering methodology, one of several agile software development methodologies, prescribing a set of daily stakeholder practices that embody and encourage particular XP values (below). Proponents believe that exercising these practices—traditional software engineering practices taken to so-called "extreme" levels—leads to a development process that is more responsive to customer needs ("agile") than traditional methods, while creating software of better quality. XP

encompasses a set of rules and practices that occur within the context of four framework activities: *planning, design, coding and testing*.

The Extreme Programming (XP) Model is given in Fig 2.7.

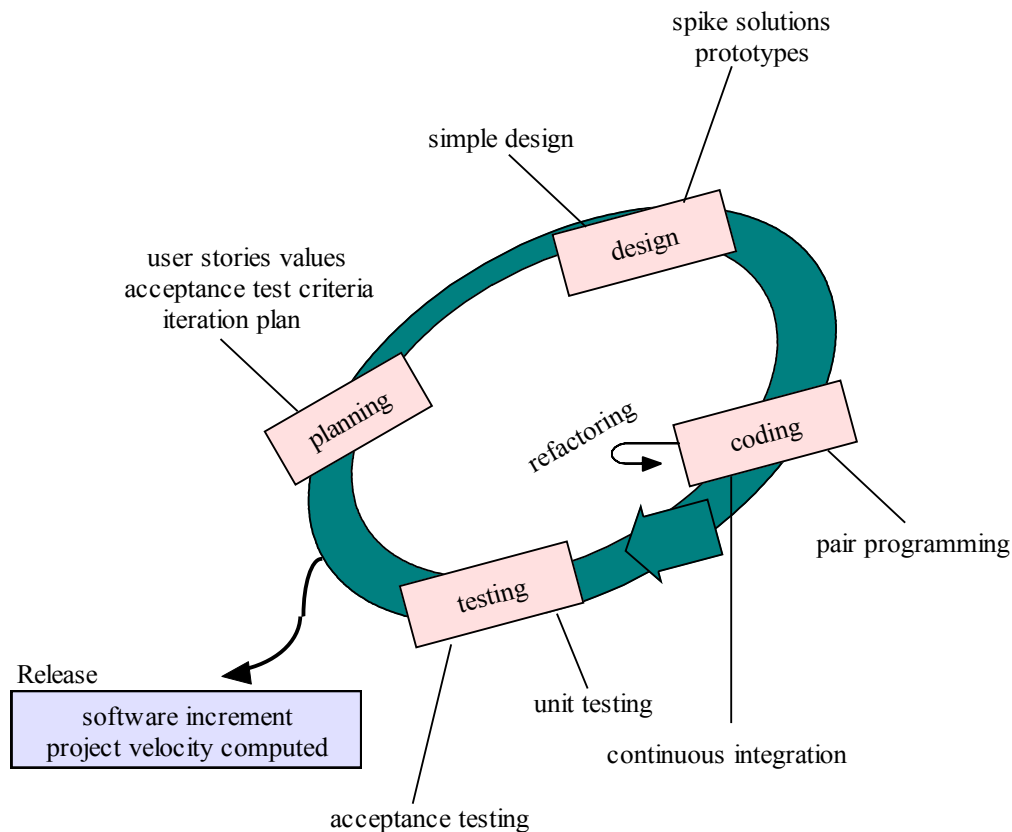


Fig 2.7: Extreme Programming (XP)

Some major advantage and disadvantage of XP has given below-

Advantages:

1. New approach to development based on the development and delivery of very small increments of functionality.
2. Relies on constant code improvement, user involvement in the development team and pair wise programming.
3. Good for small teams.

Disadvantages:

1. The process for this model can be very long and all prototypes for the test have to follow the whole life cycle of the model.

2.4 Summary

This chapter has discussed about the Requirement Engineering & Software Process Model. Next chapter will discuss about the Existing System Analysis and Proposed System.

CHAPTER THREE

EXISTING SYSTEM ANALYSIS & PROPOSED SYSTEM

3.1 Requirement Analysis

Requirement analysis is a software engineering task that bridges the gap between system engineering and software design. It allows the software engineer to refine the software allocation and builds the models of the data, functional and behavioral domains that will be treated by software. Among the entire software process models that have been discussed in the chapter 2, the waterfall process model has been chosen for this particular project because of its relatively simple structure. Another feature of this model is that it is easy to follow. For this particular project, the requirement analysis was done through continuous developer-client meetings. The solution or modification needed is designed and the modules that have been designed are the outcome of the requirement analysis and engineering.

3.2 Existing System Analysis

As we told in chapter-1 that we have chosen a web base management named DMS as our study case. In that software has three modes: User mode, Admin mode and mid user mode. In user mode visitors are allowed to see the entire website only, they are not permitted to add, delete or modify something. In admin mode user allow for all kind of permission, they are authorized for everything's. In mid user mode, users are permitted for some specific things. They are limited user. The existing system analysis is the first step for requirement analysis. We have studied Govt. organization and also private organization simultaneously. But we found that no one organization except DESCO in Bangladesh follow any proper deposit policy guide in order to draw the maximum benefit. TITAS GAS TRANSMISSION & DISTRIBUTION CO. LTD and WASA[1,7] Dhaka investment policy guideline. As described DESCO policy guideline we have found that the following investment objectives will be applied-

1. Safety
2. Liquidity
3. Management of Risk
4. Return on Investment

But the Investments Banks policy are different from TITAS & WASA. In DESCO policy [1,2,7] guideline of the Investment Banks should include the followings:

- a) Investemtns of funds in FDR shall only be made in scheduled Banks of Bangladesh. Investents in FDR may also be made in scheduled foreign banks provided that not less than 51% of the shares of the foreign banks are held by Bangaldeshi Company/Individual.
- b) No funds shall be placed with any Non Financial Istitutions (NBFIs), e.g Leasing/Housing Companies
- c) Investments already made in NBFIs shall be encashed on maturity and may be considered for investment in scheduled Banks as per this policy.

Investments Consideration- the following shall be considered:

- a) Latest CAMEL/CREDIT Rating[9,10] of Banks prevailing at the time of investment/renewal.
- b) Highest Interest rate offered by the Banks at the time of investment/renewal
- c) Bill collection performance of Banks

Rating Consideration-

- a) While considering investments, the latest prevailing CAMEL and CREDIT Rating of a bank shall be considered.
- b) No Investment shall be made in any bank with CAMEL rating below B or Long term CREDIT rating below Triple B, i.e. BBB. However, investment may be made in Govt. Bank with lower CAMEL/CREDIT rating to the extent of 10% of the funds available for investments, as special consideration.
- c) In between CAMEL Rating and CREDIT Rating, preference shall be given to CAMEL Rating.

Investments Ceilings

- a) Total Investment in any one bank, including its branches, shall be limited to following amount:

Class	Limit (Tk.)
A-Class Bank	100 Crore
B-Class Bank	
1-5	90 Crore
5-10	80 Crore
11-15	70 Crore
16-20	60 Crore
20 and above	50 Crore

- b) The Board may review this limit as and when necessary.
- c) If the rating of a Bank is changed from A to B, then the excess funds above the ceiling, if any, will be encashed on maturity.

7.0 Interest Rate Consideration

Subject to the ceiling mentioned in para 6 above, investment will be made as under:

- a) Among the banks in A and B Class, investment shall be made in the bank(s) offering the highest interest rate. However investment in any one bank shall not exceed 20% of the fund available for investment.
- b) If the interest rate offered by B class bank (s) is equal to that offered by a A class bank (s), investment shall first be made in A class bank (s), subject to limit stipulated in (a) above, and balance, if any will be placed in B class bank (s).
- c) Within the same group, if the offered interest rates are equal, then fund shall be placed equally among the banks of that Group.

8.0 Renewal/ Encashment on Maturity

- a) Renewal/ encashment will be made considering the requirement of fund by the company from time to time.
- b) FDRs may be renewed on maturity dates if the interest rate offered by the bank on the date of renewal is equal or more than the current highest rate on that date.
- c) FDRs in a bank shall be encashed on maturity dates if the rate offered by bank is lower than the prevailing highest rate on that date, or if the bank fails to satisfy the CREDIT/ CAMEL Rating stipulated in para 5 (c).

d) If a bank fails to encash any FDR, then it will not be considered for further investment.

e) All existing investments, if any, in banks with CAMEL/ CREDIT Rating below ‘B’ class shall be encashed on maturity, and reinvested according to policy above.

9.0 General

a) This FDR Policy, on approval of the Board, will supersede the existing FDR Policy earlier approved by the Board.

b) The Board may review/ modify this policy as and when deemed necessary.

c) Any deviation made from the above policy will be reported to the Board with reasons in the following Board Meeting.

As described **TITAS GAS TRANSMISSION & DISTRIBUTION CO. LTD & WASA Dhaka**, we have found that the following investment objectives will be applied-

- 1. Under Annual Development Programme the placement of fund will be 20%, if the commercial bank age is greater or equal ten years.**
- 2. The placement of fund will be 25%, if the commercial bank age is greater or equal five years.**

3.3 The Proposed System

The proposed system means a new system that should have the ability to overcome the problems of existing one. After analyzing the problem of existing system, the following modules for the proposed system have been established. The Proposed system means a new system that should have the ability to overcome the problems of existing manual procedure. After analyzing the problem of existing system, the following rules & regulation for the proposed system have been established-

1. To develop the mechanism of selecting the deciding factors for the investment of a fund.
2. To develop a software system that will help a company for deciding the bank for a particular investment as fixed deposit.
3. To develop the methodology of changing the policy for FDR deposit in conjunction with the changed scenario of the banks where the deposit have already been made and finally.
4. To develop a system for FDR maturity policy when any emergency arises.

3.3.1 Modules of the Proposed System

Modularity of software helps better management during development stages and later in maintenance. In order to do so, “*Deposit Management System*” project has been broken down into several modules. Each module has subdivided into functions.

3.3.2 User Groups of the Proposed System

Two types of user groups have been proposed for this project. These are Administrative user & Normal user.

- Administrative user
 - Add new user and give authority to normal users.
 - Add, modify, delete and all of their relevant information.
 - Generate all status of FDR.
 - Check all kinds of information.
- Normal User
 - View, search and find fixed deposits.
 - Add fixed deposit

The following are the major operations in this application.

- Registration of Uesr
- Forgot Password
- Login
- Change password
- Add fixed deposit
- Update fixed deposit
- Delete fixed deposit
- Search fixed deposits
- List all fixed deposits
- Listing deposits to be matured in the near future

3.4 Summary

This chapter has discussed about the Existing System Analysis and Proposed System. Next chapter will discuss about the Project Estimation.

SYSTEM DESIGN & TOOLS

System Design

System design is the most creative and challenging phase in software development. System design describes the final system and the process by which it is developed. It refers to the technical specifications that can be applied to implement the new system.

4.1 Analysis Modeling

To accomplish analysis model objectives we had to consider some basic schema such as – data flow diagram (DFD), entity relationship diagram (ERD) and normalized nchema (NS).

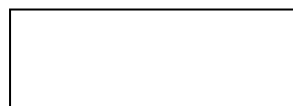
4.1.1 Data Flow Diagram (DFD)

Data flow diagram [2,6] is a picture of the movement of data between external entities and the process and data stores within a system [2]. DFD helps the analyst to understand the entire system and helps in preparing the coding phase. There are two standards for drawing DFD:

- The DeMarco & Yourdan Symbol set
- Gane & Sarson DFD Symbol set

The Gane & Sarson Symbol set have been used to draw the DFD for our project. These are:

Source / Sink: The origin and / or destination of data, sometimes refers to as external entities.



Process: The work of the actions performed on so that they are transformed, stored, or distributed.



Data store: Data at rest, which may take the form of many different physical representation.



Data Flow: Indicate from where to where data is flowing.



Fig 4.1: DFD Symbols

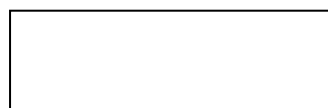
The preparation of DFDs can go upto several levels deep. In each level the breakdown of a process of the previous level is shown in details. The DFDs for this project goes upto Level 1, starting from the context level.

Entity Relationship Diagram (ERD)

A detailed, logical representation of the entities, associations, and elements for an organization or a business area is known as E-R model and the graphical representation of E-R model known as entity relationship diagram. It will be use for designing the database. It will make a clear understanding of the database for the system.

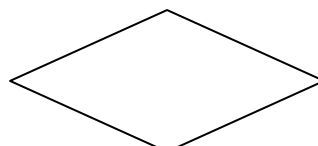
Some of the basic component we have used in ERD are given below:

Entity: An entity is designated by a rectangle.



Relationship:

A relationship is designated by a diamond.



Attribute:

Attributes are the piece of information describing a particular entity.

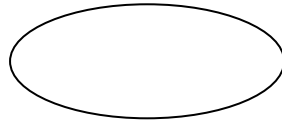


Fig 4.2: ERD Symbol

Cardinality:

The number of instances of one entity that can be associated with each instances of other entity.

The cardinality ratios are:

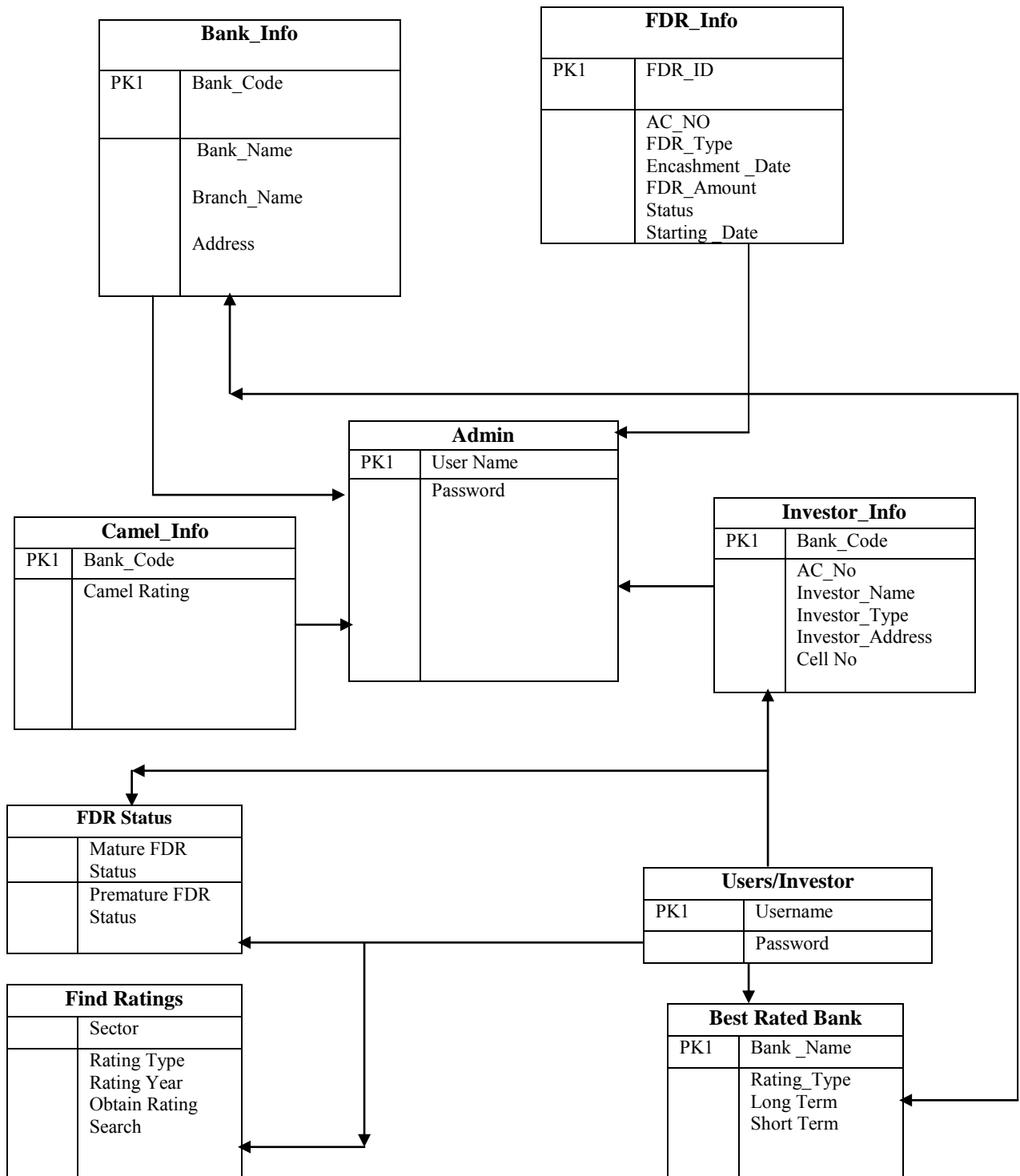
- 1 One to One: (| |)
- 2 One to Many: (| <)
- 3 Many to Many: (> <)

Primary Key (PK)

A primary key is an attribute or a collection of attributes that allow us to identify an entity uniquely.

Foreign Key (FK)

A foreign key is an attribute of a relation which refers to an existing attribute of another relation.



By taking all the entities from ERD following tables have been designed for the database.

Fig 4.3: E-R Diagram of Deposit Management System

Table 4.1: Admin Information

ADMIN

SL No	Name	Data Type	Width	Constrain
01.	USERNAME	VARCHAR	15	PRIMARY KEY
02.	PASSWORD	VARCHAR	15	

Table 4.2: Admin Create Bank Info

ADMIN CREATE BANK INFO

SL No	Name	Data Type	Width	Constrain
01.	BANK_CODE	VARCHAR	15	PRIMARY KEY
02.	BANK_NAME	VARCHAR	50	
03.	BRANCH_NAME	VARCHAR	50	
04.	ADDRESS	VARCHAR	50	

Table 4.3: Admin Create CAMEL Info

ADMIN CREATE CAMEL INFO

SL No	Name	Data Type	Width	Constrain
01.	BANK_CODE	VARCHAR	15	PRIMARY KEY
02.	CAMEL_RATING	VARCHAR	15	

Table 4.4: Admin Create FDR Info

ADMIN CREATE FDR INFO

SL No	Name	Data Type	Width	Constrain
01.	AC_NO	VARCHAR	15	PRIMARY KEY
02.	FDR_ID	VARCHAR	15	
03.	FDR_TYPE	VARCHAR	50	
04.	ENCASHMENT_DATE	VARCHAR	50	
05.	FDR_AMOUNT	VARCHAR	50	
06.	STATUS	VARCHAR	50	
07.	STARTING_DATE	VARCHAR	50	

Table 4.5: Admin Create Investor Info

ADMIN CREATE INVESTOR INFO

SL No	Name	Data Type	Width	Constrain
01.	AC_NO	VARCHAR	15	PRIMARY KEY
02.	INVESTOR_NAME	VARCHAR	15	
03.	INVESTOR_TYPE	VARCHAR	50	
04.	INVESTOR_ADDRESS	VARCHAR	50	
05.	CELL NO	VARCHAR	50	
06.	BANK CODE	VARCHAR	50	

Table 4.6: Admin Mature FDR Status Info

MATURE FDR STATUS INFO

SL No	Name	Data Type	Width	Constrain
01.	BANK_CODE	VARCHAR	15	PRIMARY KEY
02.	BANK_NAME	VARCHAR	50	
03.	INVESTED AMOUNT	VARCHAR	50	
04.	PAYABLE PROFIT	VARCHAR	50	
05.	TOTAL AMOUNT	VARCHAR	50	

Table 4.7: Premature FDR Status Info

PREMATURE FDR STATUS INFO

SL No	Name	Data Type	Width	Constrain
01.	BANK_CODE	VARCHAR	15	PRIMARY KEY
02.	BANK_NAME	VARCHAR	50	
03.	INVESTED AMOUNT	VARCHAR	50	
04.	PREMATURE PROFIT	VARCHAR	50	
05.	TOTAL AMOUNT	VARCHAR	50	

Table 4.8: Find Ratings Info

FIND RATINGS INFO

SL No	Name	Data Type	Width	Constrain
01.	SECTOR	VARCHAR	15	PRIMARY KEY
02.	RATING TYPE	VARCHAR	50	
03.	RATING YEAR	VARCHAR	50	
04.	OBTAIN RATING	VARCHAR	50	
05.	SEARCH	VARCHAR	50	

Table 4.9: Best Rated Bank Info

BEST RATED BANK INFO

SL No	Name	Data Type	Width	Constrain
01.	BANK_NAME	INT	15	PRIMARY KEY
02.	RATING_TYPE	VARCHAR	15	
03.	LONG TERM	VARCHAR	20	
04.	SHORT TERM	VARCHAR	20	

Table 4.10: Ratings Info

RATINGS INFO

SL No	Name	Data Type	Width	Constrain
01.	RATING HISTORY & METRICS	VARCHAR	15	PRIMARY KEY
02.	CREDIT RATING PROCESS	VARCHAR	15	
03.	CREDIT RATING METHODOLOGY	VARCHAR	20	
04.	CREDIT RATING SCALES	VARCHAR	20	

Process Model

The Process Model shows the overall functionality of the system. **Data Flow Diagrams** is the tools for process modeling. The Data Flow Diagram shows the sequence of events of a business operation.

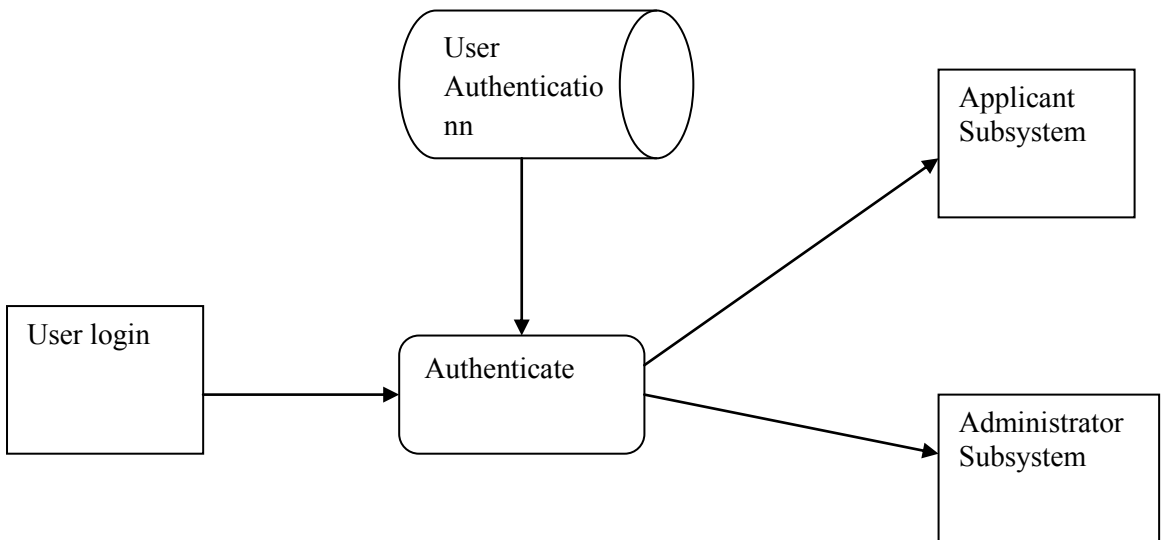


Fig 4.4: User Authentication

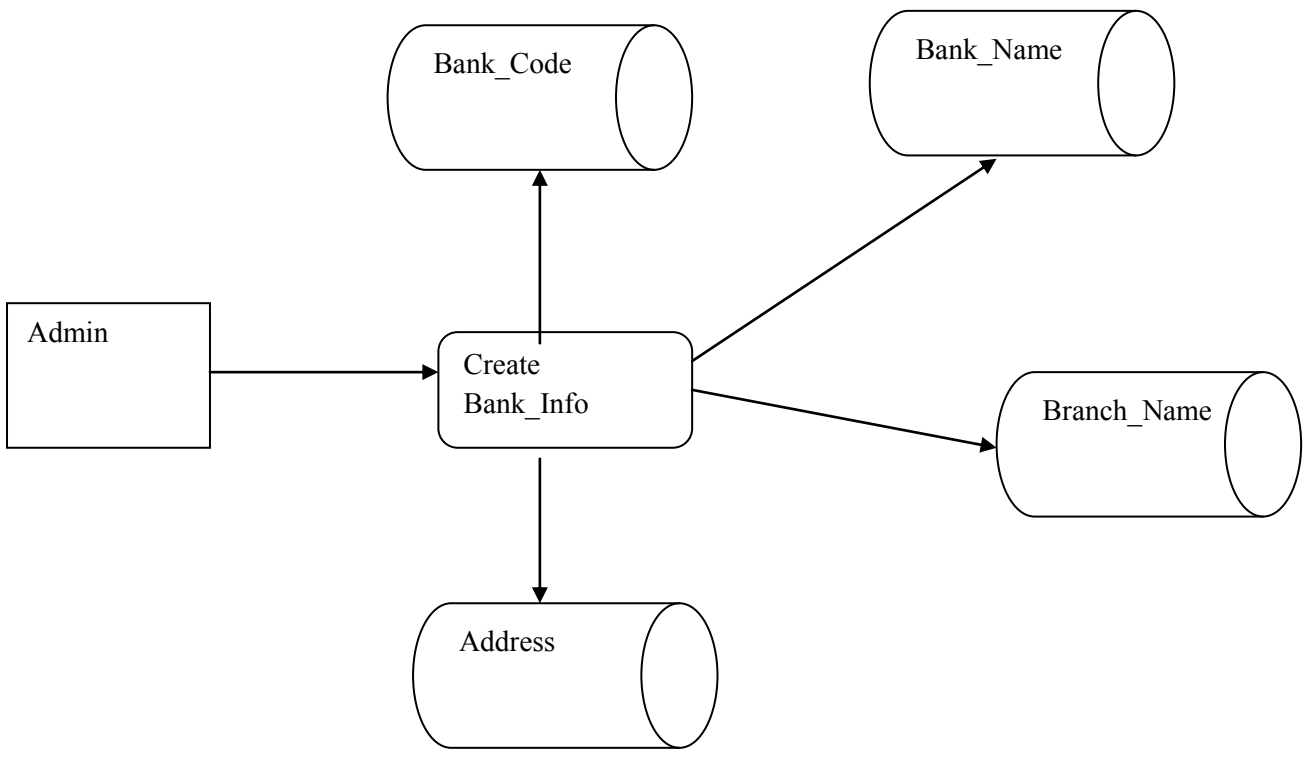


Fig 4.5: Admin Create Bank_Info DFD

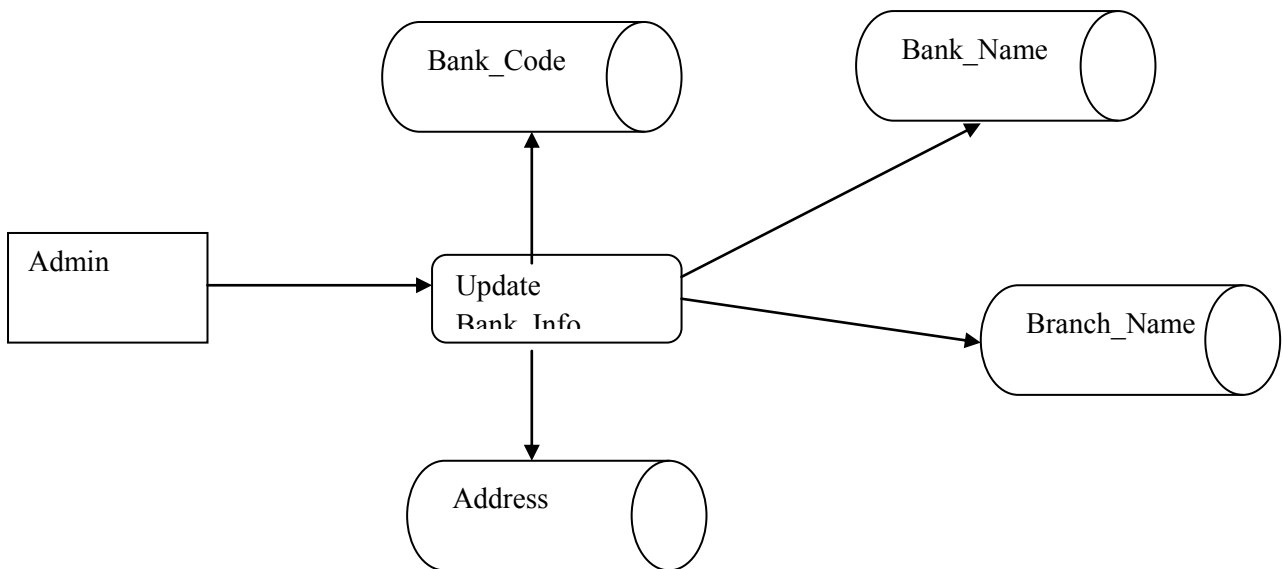


Fig 4.6: Admin Update Bank_Info DFD

UML Diagram

Object oriented analysis and design are implemented during the software design. Different software tools are used for designing different part of the software. UML is used for high level design of the proposed system. Different diagrams are drawing using MS vision. These diagrams help in visualizing the whole development process.

The Unified Modeling Language (UML)[25,26] is a standard language for specifying, visualizing, constructing, and documenting the artefact of software systems, as well as for business modeling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems.

a) Use Case Diagram

A use case[25] is a set of scenarios that describing an interaction between a user and a system. A use case diagram displays the relationship among actors and use cases. The two main components of a use case diagram are use cases and actors.

An actor is represents a user or another system that will interact with the system you are modeling. A use case is an external view of the system that represents some action the user might perform in order to complete a task.

In the bellow figures show the use cases for the user, the paid user and admin.

I. Use case diagram of Admin User

Fig: shows the use case diagram of Admin. Admin user can login their account for Create new information. Admin can Update and Delete the Information.

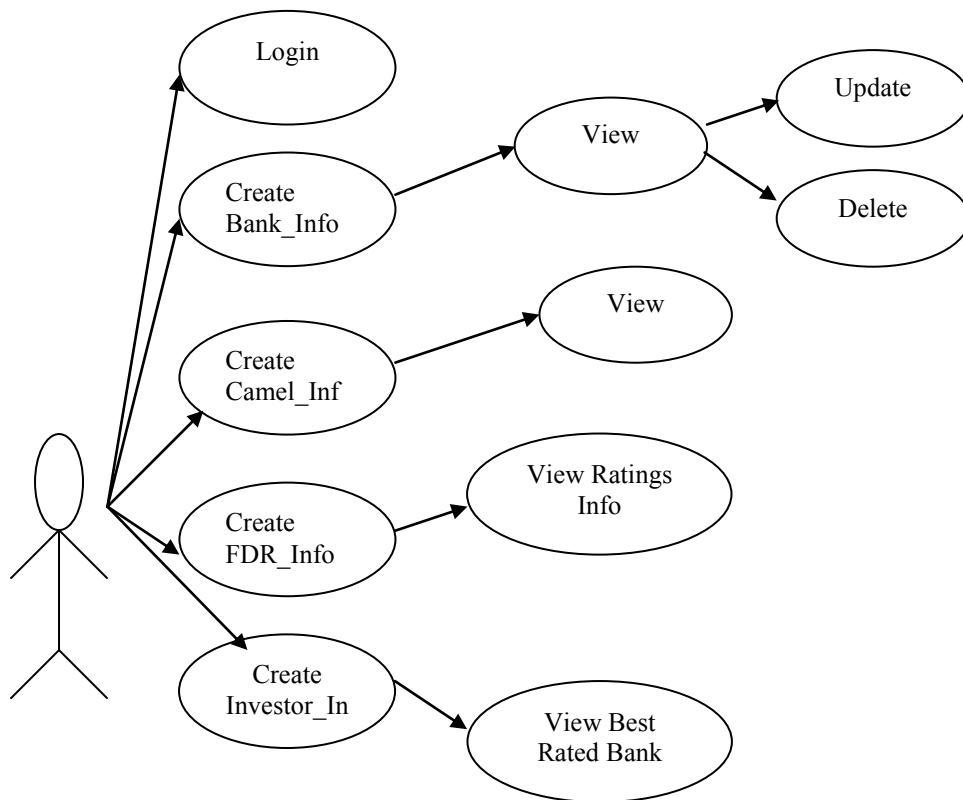


Fig 4.7: Use case diagram of Admin

II. Use case diagram of Investor

Figure shows the use case diagram of Investor. Investor can login to his account and view Mature FDR Status, Premature FDR Status, Find Ratings, Best Rated Bank, Ratings.

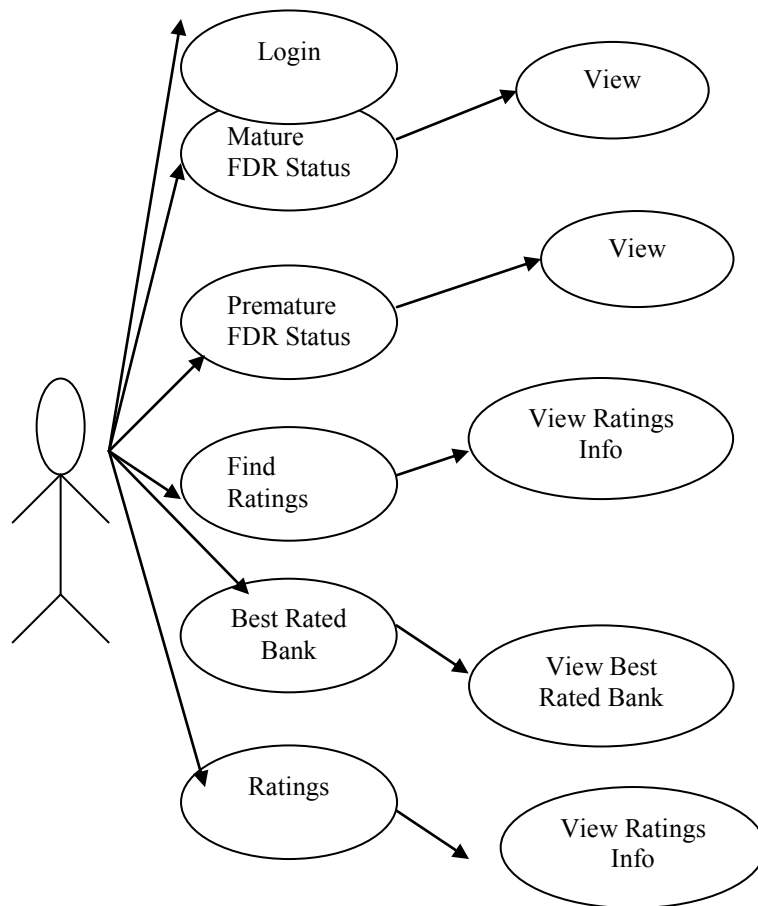


Fig 4.8: Use case diagram of Investor

5.1.3 Normalized Schema (NS)

Normalization[25,26] is a step-by-step decomposition of complex record into simple record. Normalization reduces redundancy using the principles of non-loss decomposition. Non-loss decomposition is the reduction of a table to smaller tables without loss of information.

Redundancy is the unnecessary repetition of data. It causes problems with storage and retrieval of data. Redundancy can lead to, Inconsistencies, because errors are more likely to occur when data are repeated.

Update anomalies because of inserting, modifying and deleting data may cause inconsistencies. A fully normalized record consists of a primary key that identifies an entity a set of attributes that describe the entity.

There are few rules for database normalization. Each rule is called normalization. If the first rule is observed, the database is said to be first normal form (1NF). Similarly, if the second rule is observed, the database is said to be second normal form (2NF) and if the third rule is observed, the database is said to be third normal form (3NF).

First Normal Form (1NF)

The purpose of the first normal (1NF) form is to eliminate repeating group of attributes of an entity. Remedy is to create a new relation for each repeating group and create primary key for new relation.

Second Normal Form (2NF)

The purpose of the second normal form (2NF) is to eliminate partial key dependencies for relations where primary key composed of more than one attributes, no non-key attributes should be functionally dependent on a part of the primary key. Remedy is to create a new relation for attributes which are not dependent on the whole key, copy the part of the primary key into the new relation that has link with the new attributes and create primary key for new relation.

Third Normal Form (3NF)

The purpose of the third normal form (3NF) is to eliminate interdependencies between non-key attributes. Relations should not have a non-key attribute functionally determined by another non key attribute.

4.2 Design Tools

The system is expected to serve all the purpose that it has been developed for. The design tools are used for designing the front end and back end interface and also generating the relevant report. We use the following tools for developing our project.

- HTML,JAVASCRIPT, CSS (Front-end and Design)
- PHP and MYSQL (for back end database design)
- Dream Waver , XAMPP server (Application Software)

4.2.1 HTML, JAVASCRIPT & CSS

HTML, which stands for Hyper Text Markup Language[13,16], is the predominant markup language for web pages. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists etc as well as for links, quotes, and other items. It allows images and objects to be embedded and can be used to create interactive forms. It is written in the form of HTML elements consisting of "tags" surrounded by angle brackets within the web page content. It can include or can load scripts in languages such as JavaScript which affect the behavior of HTML processors like Web browsers; and Cascading Style Sheets (CSS) to define the appearance and layout of text and other material.

CSS: Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation semantics (that is, the look and formatting) of a document written in a markup language. Its most common application is to style web pages written in HTML and XHTML, but the language can be applied to any kind of XML[16,20] document, including SVG and XUL. CSS is designed primarily to enable the separation of document content (written in HTML or a similar markup language) from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design). CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. While the author of a document typically links that document to a CSS style sheet, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called *cascade*, priorities or *weights* are calculated and assigned to rules, so that the results are predictable.

JAVASCRIPT: JavaScript is an object-oriented scripting language used to enable programmatic access to objects within both the client application and other applications. It is primarily used in the form of client-side JavaScript, implemented as an integrated component of the web browser, allowing the development of enhanced user interfaces and dynamic websites. JavaScript is a dialect of the ECMAScript standard and is characterized as a

dynamic, weakly typed, prototype-based language with first-class functions. JavaScript was influenced by many languages and was designed to look like Java, but to be easier for non-programmers to work with.

4.2.2 MYSQL & PHP

Hypertext Preprocessor, is a widely used, general-purpose scripting language that was originally designed for web development, to produce dynamic web pages. It can be embedded into HTML and generally runs on a web server, which needs to be configured to process PHP code[13] and create web page content from it. It can be deployed on most web servers and on almost every operating system and platform free of charge. PHP is installed on over 20 million websites and 1 million web servers. PHP was originally created by Rasmus Lerdorf in 1995 and has been in continuous development ever since. The main implementation of PHP is now produced by The PHP Group and serves as the *de facto* standard for PHP as there is no formal specification. PHP is free software released under the PHP License, which is incompatible with the GNU General Public License (GPL) because of restrictions on the use of the term *PHP*. PHP has evolved to include a command line interface capability and can also be used in standalone graphical applications.

MySQL: MySQL[19,22] is a relational database management system (RDBMS) which has more than 6 million installations. MySQL[21] stands for "My Structured Query Language". The program runs as a server providing multi-user access to a number of databases. The project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL is owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now a subsidiary of Sun Microsystems, As of 2009 Oracle Corporation began the process of acquiring Sun Microsystems; Oracle holds the copyright to most of the MySQL codebase

MySQL is often used in free software projects which require a full-featured database management system, such as WordPress, phpBB and other software built on the LAMP software stack. It is also used in very high-scale World Wide Web products including Wikipedia, Google and Facebook.

Advantage of SQL Server:

- Easy to use
- Familiar to the user

4.2.3 Dream Waver & Xampp Server

Adobe Dreamweaver (formerly Macromedia Dreamweaver)[13,14,15] is a web development application originally created by Macromedia, and is now developed by Adobe Systems, which acquired Macromedia in 2005. Dreamweaver is available for both Mac and Windows operating systems. Recent versions have incorporated support for web technologies such as CSS, JavaScript, and various server-side scripting languages and frameworks including ASP, ColdFusion, and PHP.

XAMPP server: XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl. XAMPP is really very easy to install and to use – just download, extract and start.

4.3 Summary

This chapter has discussed about the System Design & tools. Next chapter will discuss the Implementation & Testing.

IMPLEMENTATION & TESTING

5.1 Welcome Page

The welcome page is very simple. It contains sign up page link and the menu. The user can find Premature FDR Status, Find Ratings, Best Rated Bank, Ratings. User or Admin can also sign in by clicking in the corresponding link of the menu. The following figure 5.1 shows the welcome page.



Fig 5.1: Welcome Page

5.2 Sign Up Page

New user can fill up the Register information form. Username must be unique. After clicking the save button user can find his/her given information. The following figure 5.2 shows the sign up page.



The screenshot displays a web interface for user registration. On the left, a form titled "REGISTER" contains the following fields: "Full Name:", "User Name:", "Password:", "Retype password:", "Address:" (with a larger text area), "Phone(Office):", "Phone(Home):", "Phone(Mobile):", and "Email:". A "save" button is located at the bottom of the form. On the right, a "MAIN MENU" sidebar lists several options: "View or Edit general User", "Manage Bank info", "Manage Rating articlaes", "Edit admin info", and "Add admin".

Fig 5.2: Sign Up Page

5.3 Change User Profile Form

This page is made for security purpose. Any user can change his/her password from this page. The following figure 5.3 shows the change password page.

Fig 5.3: Change User Profile Form

5.4 Change Admin Profile

This page is made for security purpose. Any admin can change his/her password from this page. The following figure 5.4 shows the change password page.

Fig 5.4: Change Admin Profile

5.5 User Homepage

The User Homepage is very user friendly. It contains change profile link and the menu. The user can find mature FDR status, Premature FDR Status, Find Ratings, Best Rated Bank, Ratings. The following figure 5.1 shows the user home page.

The screenshot displays the 'My FDRs' section of a user's homepage. On the left is a navigation menu with options: Mature FDR Status (with sub-links: Show all, Show matured, Add FDR info, Print Statment), Premature FDR Status, Find ratings, Best Rated Bank, Ratings (with sub-link: Camel Rating System Analysing), and Change Profile. The main content area lists three FDRs:

- Bank Name: Rupali bank Ltd(Y)**
Account Name: Pronaya Das Account No.: 2147483647
Amount(tk): 453,534.00 Rate of interest: 13
Interest Earned (tk): 752,573.51
FDR date: 23-09-2010 Mature Date: 28-08-2014
Status: Not matured [reinvest](#) [edit](#) [delete](#)
- Bank Name: UCBL**
Account Name: Rajib khan Account No.: 869869
Amount(tk): 667,154,296.00 Rate of interest: 13
Interest Earned (tk): 667,154,296.00
FDR date: 24-01-2013 Mature Date: 24-01-2013
Status: Matured [reinvest](#) [edit](#) [delete](#)
- Bank Name: EBL bank ltd**
Account Name: Suman Das Account No.: 3243422
Amount(tk): 32,445,555.00 Rate of interest: 13
Interest Earned (tk): 32,445,555.00
FDR date: 19-01-2013 Mature Date: 19-01-2013
Status: Matured [reinvest](#) [edit](#) [delete](#)

Fig 5.5: User Homepage

5.6 Matured FDR

This page contains mature FDR status. The following figure 5.6 shows the user home page.

The screenshot displays the DM System user interface. At the top, there is a navigation bar with a logo and the text "DM System". Below this is a banner area with a user profile picture on the left and a message: "You have 1 FDR to be matured within 15 days." The main content area is divided into two columns. The left column contains a sidebar with menu items: "Mature FDR Status" (with sub-items: Show all, Show matured, Add FDR info, Print Statement), "Premature FDR Status", "Find ratings", "Best Rated Bank", "Ratings" (with sub-items: Camel Rating System, Analysing), and "Change Profile". The right column is titled "My FDRs" and lists two FDRs. The first FDR is from UCBL, with account name Rajib Khan, amount 667,154,296.00, and a matured status. The second FDR is also from UCBL, with account name Suman Das, amount 32,445,555.00, and a matured status. Each FDR entry includes fields for Bank Name, Account Name, Account No., Amount, Rate of Interest, Interest Earned, FDR date, and Mature Date, along with action buttons: reinvest, edit, and delete.

Fig 5.6: Mature FDR

5.7 Reinvestment Suggestion

This page contains Reinvestment Suggestion with loss profit calculation. The following figure 5.7 shows the Reinvestment Suggestion.

The screenshot shows the DM System user interface, similar to Figure 5.6. The navigation bar includes "Home", "Contact", and "Logout" buttons. The banner area and sidebar are identical to Figure 5.6. The "My FDRs" section shows two FDRs. The first FDR is from Rupali bank Ltd(Y) with account name Pronaya Das, amount 453,534.00, and a status of "Not matured". A popup window is overlaid on this FDR, displaying a reinvestment suggestion: "% cut 1 on amount: 599250.38 tk", "NCC will give u tk: 771,927.11 @ 17%", and "Eastern Bank Ltd will give". The second FDR is from UCBL, with account name Rajib Khan, amount 667,154,296.00, and a matured status. The popup window also includes action buttons: reinvest, edit, and delete.

Fig 5.7: Reinvestment Suggestion

5.8 Reinvestment Form

This page contains Reinvestment Form with loss profit calculation. After click button click here to reinvest user can modified the FDR status. The following figure 5.8 shows the Reinvestment Form.

Mature FDR Status

- Show all
- Show matured
- Add FDR info
- Print Statment

Premature FDR Status

Find ratings

Best Rated Bank

Ratings

- Camel Rating System
- Analysing

Change Profile

Reinvest

Pre Maturity date:
28-01-2013

Interest cut for pre maturity:
1

Effective rate:
12

Amount in pre maturity (Taka):
599250.38

Loss of interest in pre maturity (Taka):
153323.13

[Click Here To Reinvest](#)

Bank Name:
Rupali bank Ltd(Y)

Account Name:
Pronaya Das

Account Number:
2147483647

Amount (Taka):
599250.38

Interest Rate:
13

Fig 5.8: Reinvestment Form

5.9 Profit Calculator

This page contains Profit Calculator (Fixed Deposit). Any user calculate the profit through variable time period. The following figure 5.9 shows the Profit Calculator.

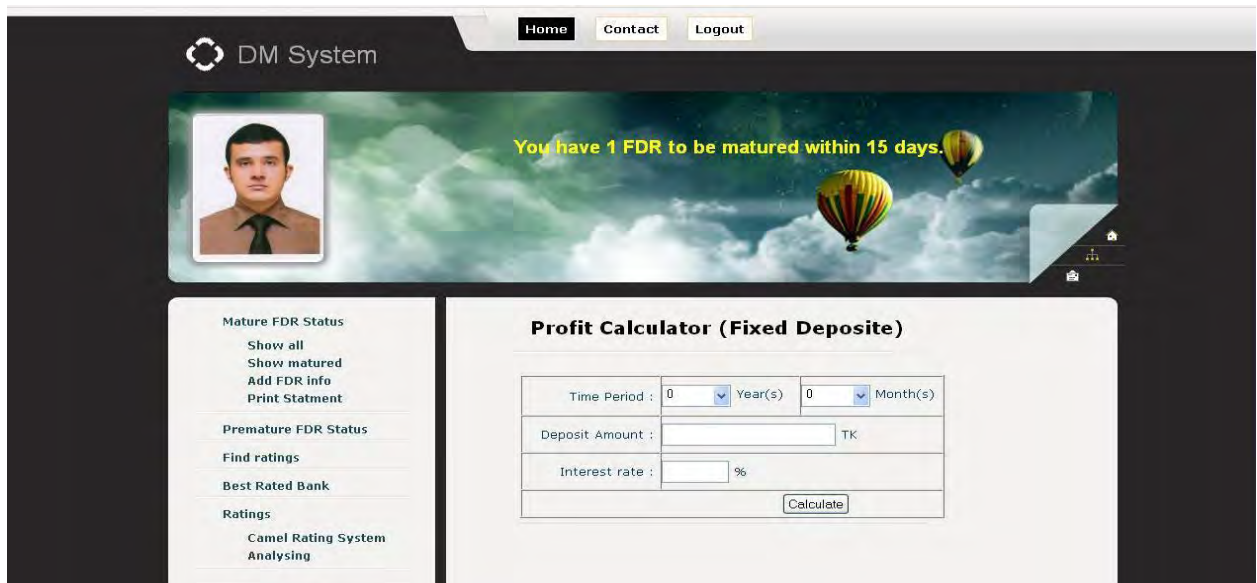


Fig 5.9: Profit Calculator

5.10 Find Rating

This page contains Find Ratings Page. Any user can find the desired bank rating parameter. The following figure 5.10 shows the Find Rating.

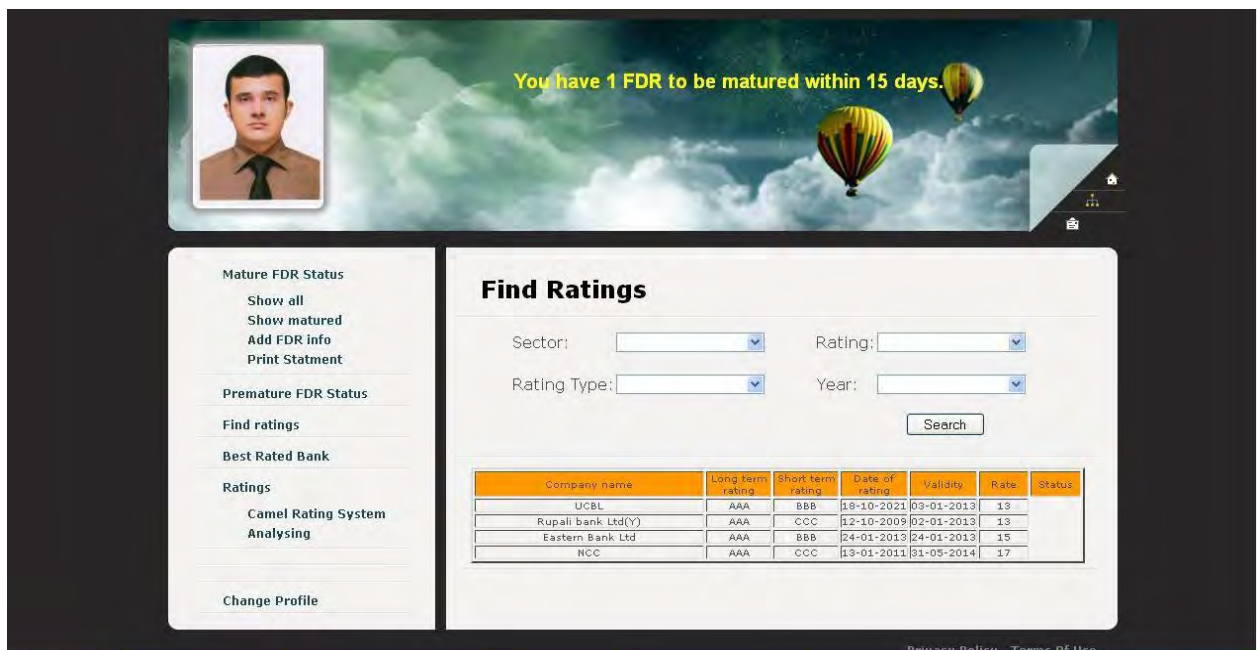
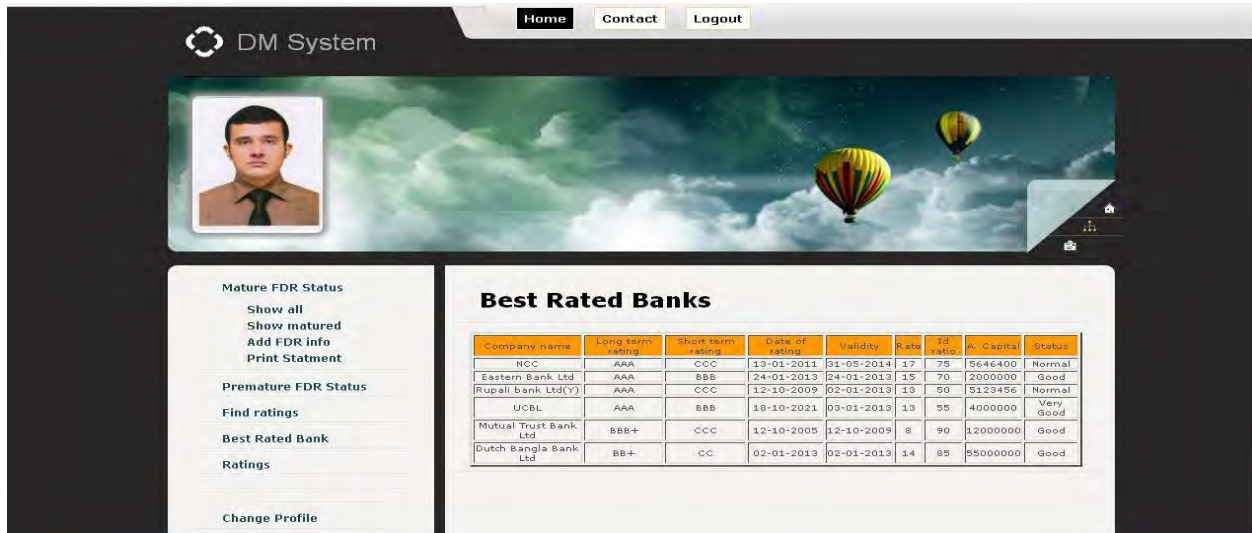


Fig 5.10: Find Rating

5.11 Best Rated Bank

This page contains Best Rated Bank Page. Any user can find the Best Rated Bank. The following figure 5.12 shows the Best Rated Bank.

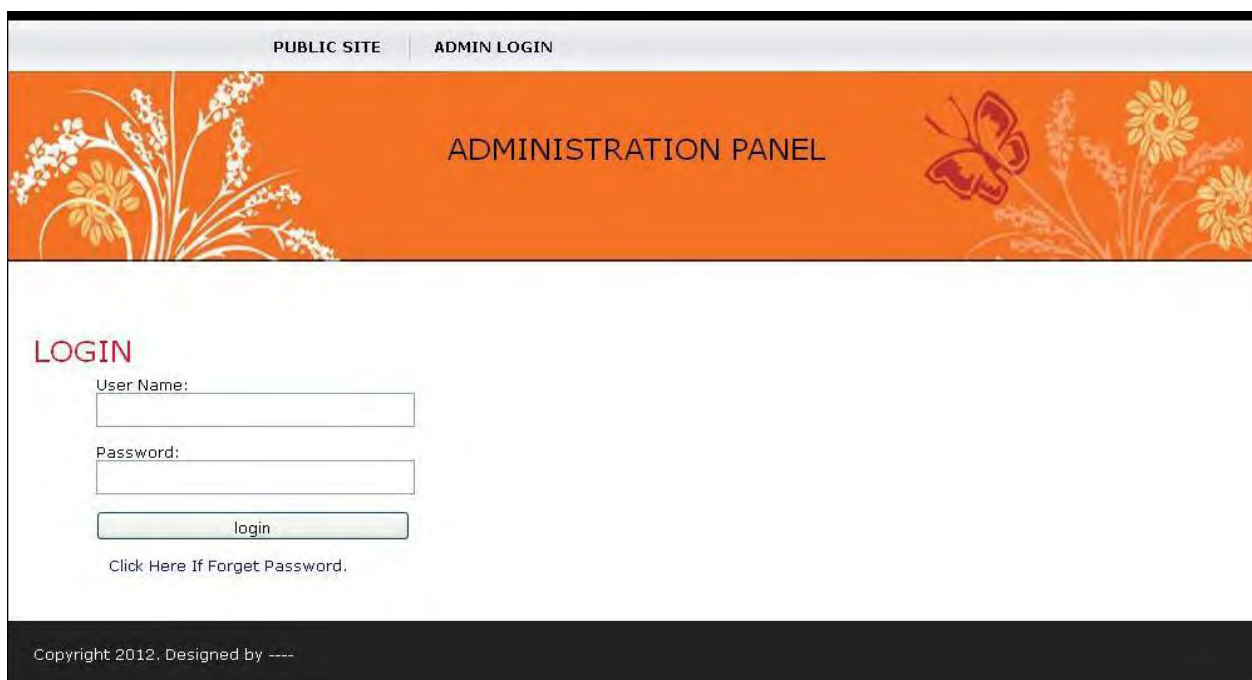


Company name	Long term rating	Short term rating	Date of rating	Validity	Rate	ID ratio	A. Capital	Status
NCC	AAA	CCC	13-01-2011	31-05-2014	17	75	5646400	Normal
Eastern Bank Ltd	AAA	BBB	24-01-2013	24-01-2013	15	70	2000000	Good
Rupali bank Ltd(Y)	AAA	CCC	12-10-2009	02-01-2013	13	50	9123456	Normal
UCBL	AAA	BBB	19-10-2021	03-01-2013	13	55	4000000	Very Good
Mutual Trust Bank Ltd	BBB+	CCC	12-10-2005	12-10-2009	8	90	12000000	Good
Dutch Bangla Bank Ltd	BB+	CC	02-01-2013	02-01-2013	14	85	55000000	Good

Fig 5.11: Best Rated Bank

5.12 Admin Login

This page is made for security purpose. Any admin can change his/her password from this page. The following figure 5.12 shows the Admin Login page.



PUBLIC SITE | ADMIN LOGIN

ADMINISTRATION PANEL

LOGIN

User Name:

Password:

[Click Here If Forget Password.](#)

Copyright 2012. Designed by ----

Fig 5.12: Admin Login

5.13 Admin Panel

This page is Admin Panel. Any admin can edit/delete required information. The following figure 5.13 shows the Administration Panel.

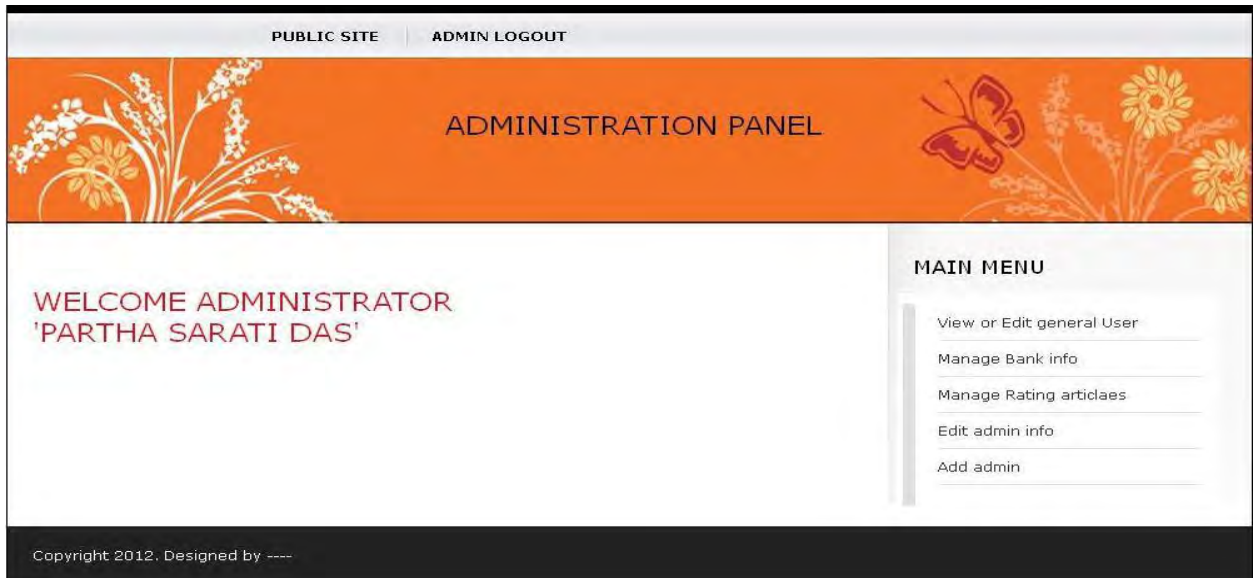


Fig 5.13: Admin Panel

5.14 Admin User Control

This page is Admin General User Control. Any admin can search the user from this page through name or email. The following figure 5.14 shows the Administration Panel.

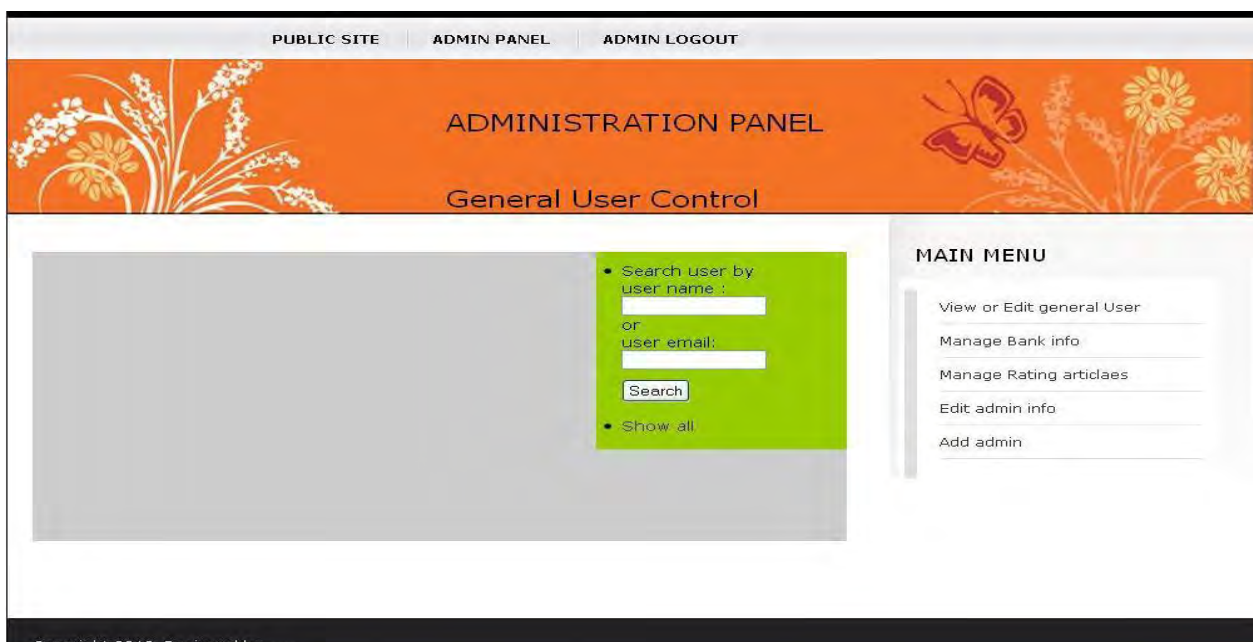


Fig 5.14: Admin User Control

5.15 FDR Statements

This page is made for user. Any user can download the FDR Statements from this page. The following figure 5.3 shows the FDR statement page.

[back](#) [Download as PDF](#)

FDR Statements
Thursday 24th of January 2013 06:03:16 PM

Bank and A/C Name	A/C No.	FDR date	Mature Date	Amount(tk)	Rate	Status
Rupali bank Ltd(Y)						
Pronaya Das	2147483647	23-09-2010	28-08-2014	453,534.00	13	Not matured
UCBL						
Rajb khan	869869	24-01-2013	24-01-2013	667,154,296.00	13	Matured
Suman Das	3243422	19-01-2013	19-01-2013	32,445,555.00	13	Matured
EBL bank Ltd						
Sarati Das	324342343	19-01-2013	1-02-2013	4,335,000.00	15	Not matured

Fig 5.15: FDR Statements

5.16 Add Article

This page is made for admin. Any admin can upload the CAMEL rating and Bank Rating Analysis Type Article from this page. Any user can read this from Home Page. The following figure 5.3 shows the FDR statement page.

PUBLIC SITE | ADMIN PANEL | ADMIN LOGOUT

ADMINISTRATION PANEL

ADD ARTICLES

Title:

Image:

0 Files Uploaded.

Article:

Fig 5.16: Add Article

5.17 Manage Rating Article

This page contains Manage Rating Article with write, edit, delete options. Any admin can modified this panel. The following figure 5.12 shows the Manage Rating Articles.



Fig 5.17: Manage Rating Article

5.18 Add Bank Info

Administrator will fill the form of Add Bank Information. The following figure 5.18 shows the Add Bank Information form.



Fig 5.18: Add Bank Info

5.19 Add FDR Info

Administrator will fill the form of Add FDR Information. The following figure 5.19 shows the Add FDR Information form.

Mature FDR Status
Show all
Show matured
Add FDR info
Print Statment

Premature FDR Status

Find ratings

Best Rated Bank

Ratings
Camel Rating System
Analysing

Change Profile

Add FDR info

Bank Name:

Account Name:

Account Number:

Amount (Taka):

Interest Rate:

FDR Date:

Mature Date:

Fig 5.19: Add FDR Info

CONCLUSION

6.1 Conclusion:

Finally a full featured Web Based Deposit Management System is developed. Most of the basic as well as advanced features are developed in this software. In this project Software Development Life Cycle followed as a methodology.

The developed software is implemented for commercial purpose. Different types of advanced features like Add New FDR Information, Update, Delete, Search Fixed Deposit, List All Fixed Deposit, Listing deposits to be matured in near future, Keep Records of Banks Information, Findings Best Rated Bank, Search Bank CAMEL Rating, Findings Premature FDR status, Print & Download Statement of FDR Status, Registration of User, Keep Information About User Detail are developed in this software. Administrator of the software can control the user information etc. The developed software is user friendly. The features of the software are self descriptive so that any new user can easily use this software. The developed software can easily be implemented for commercial purpose.

6.2 Future Works

Future works related to the present development can be carried out. A few area of the future research is outlined below:

Firstly, the message alarm can be sent to the user mobile phone through built-in in the software, which will be used to give alert to the users about FDRs.

The system may also be modified to provide appropriate E-mail to the user when FDRs are going to be matured. As for example, the system will give the users time to time basis as parameter change.

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Appendix A

Some PHP and HTML code segments

A.1 PHP and HTML code for Home page of the proposed system

```
<?php
error_reporting(0);
session_start();
require_once "functions/functions.php";
$login = (isset($_SESSION['login'])&&$_SESSION['usertype']==2)?1:0;
$adminlogin = (isset($_SESSION['login'])&&$_SESSION['usertype']==1)?1:0;
$userid=isset($_SESSION['userid'])?$_SESSION['userid']:0;

?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<link rel="stylesheet" media="screen" href="style.css" />
<link href="favicon.ico" rel="shortcut icon" type="image/x-icon" /><!-- custom favicon -->
<link rel="stylesheet" href="css/datepicker.css" type="text/css" />

<title>Deposit Management System</title>

<meta name="Keywords" content="Deposit Management System" />

<script type="text/javascript" src="js/jquery.js"></script>
    <script type="text/javascript" src="js/datepicker.js"></script>
    <script type="text/javascript" src="js/eye.js"></script>
    <script type="text/javascript" src="js/utills.js"></script>
    <script type="text/javascript" src="js/layout.js?ver=1.0.2"></script><!-- jQuery -->
```

```
<meta name="Author" content="PPD" />
<meta name="Robots" content="index,follow" />
<meta http-equiv="imagetoolbar" content="no" /><!-- disable IE's image toolbar -->
```

```
</head>
```

```
<body>
```

```
<div id="daddy">
```

```
  <div id="header">
```

```
    <div id="logo"><a href="/"></a><span id="logo-text"><a href="/">DM
System</a></span></div><!-- logo -->
```

```
    <div id="menu">
```

```
      <ul>
```

```
        <li><a href="index.php" id="active">Home</a></li>
```

```
        <li><a href="contact.php">Contact</a></li>
```

```
    <?php
```

```
      if($login)
```

```
      echo '<li><a href="logout.php">Logout</a></li>';
```

```
      else
```

```
      echo '    <li><a href="login.php">Login</a></li><li><a
href="register.php">Register</a></li>';
```

```
    ?>
```

```
  </ul>
```

```
</div><!-- menu -->
```

```
<div id="ticker">
```

```
</div><!-- ticker -->
```

```
<div id="headerimage">
```

```
  <div id="icons">
```

```
    <a href="/" ></a>
```

```

        <a href="."></a>
        <a href="."></a>
    </div><!-- icons -->

```

```

<?php
    if($login)
    {
        echo '<div id="popup"><p>.count_fdr_within($userid).</p></div>';
        if(isset($_SESSION['userpic'])&& $_SESSION['userpic']!=NULL)
        {
            echo '<div class="propiccontainer">

</div>';
        }
        else
        {
            echo '<div class="propiccontainer">

</div>';
        }
    }
?>
</div>
<!-- header -->
<div id="content">
    <div id="cA">
        <div class="Ctopleft"></div>
        <h3></h3>
    </div>
</div>
<h3>

```

```

<ul>
<?php
    if($login)
    {
echo '<div class="news">
    <li class="manu_style"><a href="mfd_r.php">Mature FDR Status</a>
<ul>
<li><a href="mfd_r.php">Show all</a></li>
<li><a href="mfd_r.php?status=Matured">Show matured</a></li>
<li><a href="add_bank_info.php">Add FDR info</a></li>
    <li><a href="print_stat.php">Print Statment</a></li>
</ul>
</li>

</div>';
    }

?>
<div class="news">
    <li><a href="pmfd_r.php">Premature FDR Status</a></li>
</div>
<div class="news">
<li><a href="find_rating.php">Find ratings</a></li>
</div>
<div class="news">
<li><a href="best_rated_bank.php">Best Rated Bank</a></li>
</div>
<div class="news">
<li class="manu_style"><a href="#">Ratings</a>
<?php
    read_blog_title(0, 'rating_info.php', 'echo');
?>
</li>
</div>

```



```
<div class="news"></div>
```

```
<div class="news"></div>
```

```
<?php
```

```
    if($login)
```

```
    {
```

```
        echo '<div class="news">
```

```
<li><a href="edit_profile.php">Change Profile</a></li>
```

```
</div>';
```

```
    }
```

```
?>
```

```
</ul>
```

```
</h3>
```

```
</p>
```

```
</div><!-- cA -->
```

```
<div id="cB">
```

```
    <div class="Ctopright"></div>
```

```
    <div id="cB1">
```

```
        <div class="news">
```

```
    <br/>
```

```
        <h1
```

```
            style="font-size:24px;
```

```
color:#000;">WELCOME</h1>
```

```
        </div>
```

```
    </div><!-- cB1 -->
```

```
</div><!-- cB -->
```

```
<div class="Cpad">
```

```

                <br class="clear" /><div class="Cbottomleft"></div><div
class="Cbottom"></div><div class="Cbottomright"></div>
        </div><!-- Cpad -->
        </div><!-- content -->
        <div id="properspace"></div><!-- properspace -->
</div><!-- daddy -->
<div id="footer">
        <div id="foot">
                <div id="foot1"><a href=".">Privacy Policy</a> - <a href=".">Terms Of
Use</a></div><!-- foot1 -->
                <div id="foot2">
                        <span class="valid"></span>Copyright 2012, Your Company.
Designed by _____<span class="star">*</span><a style="padding-left:40px;"
href="adminpanel.php">Admin Panel</a>
                </div><!-- foot1 -->
        </div><!-- foot -->
</div><!-- footer -->

</body>

</html>

```

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