



# Bank Management System

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## Abstract:

Bank management system can be consider as a most important thing in economic world in the present scenario the banking sector is the common need in everyday life in day to day life we face the problems and then we realize something is not done in this sector like we want to change the location (branch) of our account then we need to fill the application and then some day waiting to complete bank process. In this process amount of time is more as well as here occur manual work which is increases man power. Also in current scenario aadhar card linking is must with bank account and it is possible through the ATM but if in urgent we want to link aadhar it may be not possible there is no ATM are available in that case we provide this facility through the our project i.e. Bank management system.

**Key words:** Virtual transaction, Transaction, Security system, computerization.

## 1. INTRODUCTION

The project entitled “Bank management system” is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank taller (manpower). [1] In paper “Online Banking: A field study of drivers, development challenges, and expectations “by author (Adel M. Aladwani2001). This paper reports the results of a quantitative study of the perceptions of banks executive and IT managers and potential customers with regards to the drivers, development challenges, and expectations of online banking. Thousands of banks perform millions of transactions every day and thousands of users used banking system in day to day life. As we know that if number of users increases us need more banks and more staff it means increasing manual work also we put more amount of money in bank it is more risky and not much secure. If we developed advanced computerized based banking system so there is no need to open more branches as well the manpower is reduce and maximum information are stored automatically in banking server. [2]In paper “The Determinants of Banking Crises In Developing and Developed Countries”by author (Asli demircuc-kunt, 2014). The author says about the banking system the banks are financial intermediaries whose liabilities are mainly short term deposits and whose assets are usually short –and long-term loans to businesses and consumers. When the value of their assets falls short of the value of their liabilities, banks are insolvent. Banking system requires authenticity and validity if a system provides these basic logics that mean we can developed a new system that authenticate and validate the user and user can do any type of virtual transaction any time anywhere in minimum amount of time. One of the most authentic codes i.e. the customer account number for recognition of any person. It always appears on and credit, withdraw, money transferring, linking aadhar with account and changing the account location in one branch to another branch in same bank. Day to day life banking system is most useful and important thing in economical world and which is very useful to develop country as well as economic power. Transaction: in banking transaction is the execution of a program that performs an administrative or real time

function, often by accessing shared data sources, usually on behalf of a banking user who have an account in the respective bank. This transaction executed by the program and it automatic do the transactions with balance and it check all conditions are satisfied or not in respective process. This is the more secure and automatic process which do all the transaction with accuracy of calculation. [3]In paper “SOA Migration- Approaches and experience” By author (Rainer Gimmich,2009) is says in this paper SOA is a business-centric IT architectural approach that supports integrating business as linked, repeatable business tasks ,services.web services provides a standardized, cost effective implementation of such services. [4]In paper “Relationships between Design Patterns” By author (Walter Zimmer, 2012)is says in this paper , we organize these relationships into different categories and revise the design patterns and relationship .we are arrange the design patterns in different layers. [5]In paper ”Bank Customer Management system” By author (Ebubeogu Amarachukwu Felix, Aug 2015)is says in this paper, bank customers management system provides a more secured approach in managing bank customers information which strengthens the relationship between banks and their customer by providing the right solutions.

## 2. LITERATURE SURVEY/ RELATED WORK

In [1], Information and communication technology (ICT) has helped to drive increasingly intense global Competition. In the world history the most of the countries are most developed because of they are financially very clear for how to use the high amount of money in the developing process in own country. We also use the SOA architecture for providing the scalable and reliable service there for we studied related to the SOA architecture to know how we use to implementation process in our project using Service Oriented Architectures (SOA).we also refer the paper who give the case study information about Scandinavian bank and a Swiss bank This two banks are working on the basis of service oriented architecture for providing the service for the customer. SOA provides potential for greater organizational agility (and thereby competitiveness). In [2], in the second paper we learn which type of problems is created in banking system during the

different types of transactions. Here discuss about if any region the transaction may be fail then how to avoid it and fixed it. We also studied about Firms in Italy defaulted more against banks with high levels of past losses. This `selective' default increases where legal enforcement is weak. Poor enforcement thus can create a systematic transaction risk by encouraging banking users to defaulted masse once the continuation value of their bank relationships come into doubt. In banking sector the security also must and when we talk about money or property this case is more sensational then we found the security is the major thing to do in banking system.

In [3], in this third paper” service quality and operating efficiency synergies management control in the provision of financial services: evidence from Greek bank branches” (AntreasD. Athanassopoulos, 2015)In this paper we concentrate on the assessment of the productive efficiency of bank branches. The efforts effectiveness is estimated by embodying three quality dimensions on the operating efficiency of bank branches. In [4], in this paper “Customer Acceptance Of Internet Banking IN Estonia”(Kent Eriksson 2000)The purpose of this paper is to study technology Acceptance of Internet Banking in Estonia, an emerging East European economy .The present paper modifies the technology acceptance model and applies is to bank customers in Estonia, Because Estonia , country with a developing economy, has focused on Internet banking as an important distribution channel. In[5], ”Bank customer Management System” (Ebubeogu Amarachukwu Felix August 2015)In this paper analyses and exposes the banking channel and service preferences of most bank management system in Nigeria and examine the factors influencing the intention to adopt or to continue the use of existing banking among both users and non users of Internet banking. In[6],”Corporate governance in European banking ”(F.Arnaboldi 18 Jan2011) This paper present a survey of the corporate governance is influenced by cultural values, represented an analysis clustering EU countries on the basis of their legal system ,language family and proximity as indicators of cultural differences .Our result highlight that cultural and legal differences are still strongly embedded in national cultural identities and these seem to drive the majority of differences in corporate governance arrangements. In our project we provide the security questions when customer login with account to prevent the fraud and provide the best security in the bank management system.

**3. IMPLEMENTATION SYSTEM:**

We use n-tier architecture for the bank management system for making its scalable multitalented secured and reliable this architecture is are as follows:

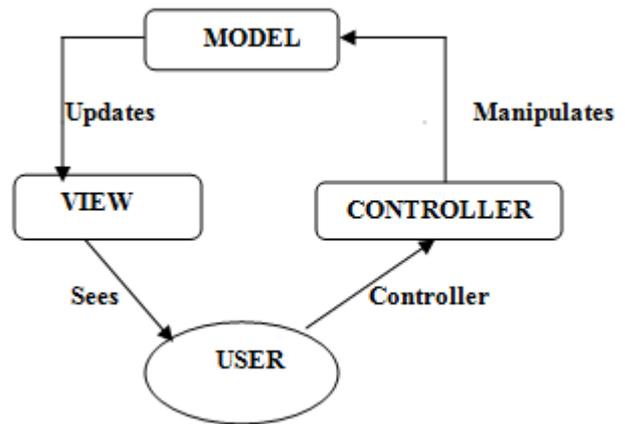
1. MVC architecture for presentation layer
2. SOA architecture for service layer
3. Design pattern for business logic layer
4. Entity framework for data access layer
5. SQL server for database

**1. MVC architecture (model view controller):**

[1] In paper “J2EE and MVC architecture” (Manish Bhatt, July 14). In this paper give the following implementation of MVC architecture;

- **Model** –The lowest level of the pattern is responsible for maintaining data
- **View** – This is responsible for displaying all or a portion of the data to the user
- **Controller**-Software code that controls the interactions between the model and view

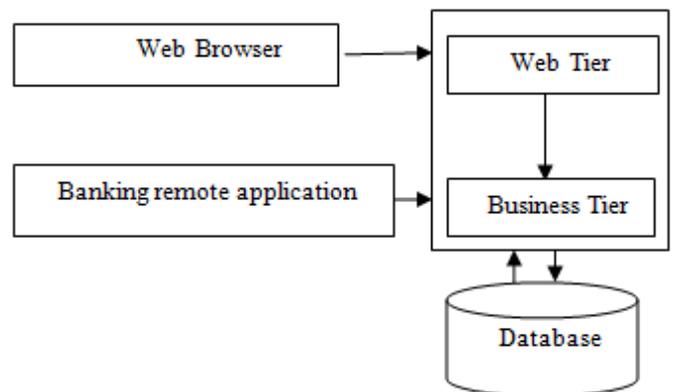
ASP.NET supports three major development models: web pages, web forms and MVC .AspNet MVC framework is a lightweight, highly testable presentation framework that is integrated with the ASP.NET features such as master pages authentication etc.



**Figure.1. Mvc architecture**

**2. SOA (Service Oriented Architecture):**

[2]In paper” SOA Migration–Approaches and Experiences” (Rainer Gimnich2009).In this paper give the following implementation of SOA architecture; SOA is an evolution of distributed computing based on the request reply design paradigm for synchronous and asynchronous application. Application business logic or individual functions are modularized and present as a services for customers / client application. Applications developer or system integrator can build applications by composing by one or more services without knowing the services underlying implementations.



**Figure.2.Architecture of SOA in banking system**

**3. Design pattern (Business logic layer):**

[3]In paper” Relationships between Design Patterns” (Walter Zimmer 2012).In this paper give the following implementation of business logic layer; This paper gives new insights into the relationships between existing designs patterns. Our major accomplishments are as follows:

- A classification of the relationships between design patterns.
- A new design pattern resulting from a generalization of several other design patterns.
- And a structuring of design patterns into a several layers.

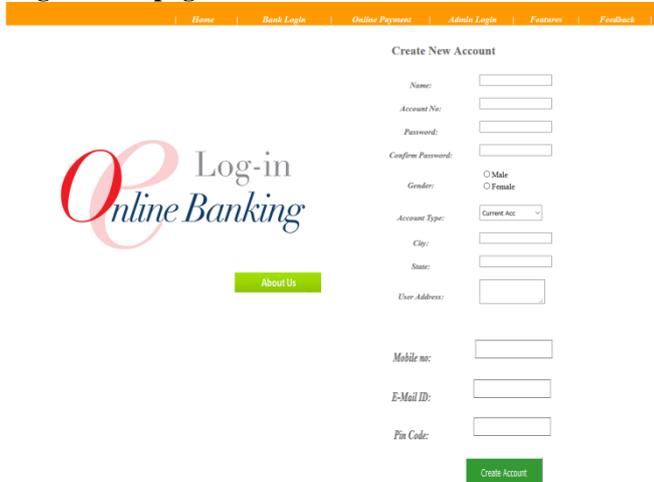
**4. Entity framework (Data access layer):**

[4]In paper “A Preliminary Framework for Entity Relationship Model”(PETER PIN –SHAN CHEN 2015).In this paper give the following implementation of data access layer ;In this paper preliminary framework for entity relationship model is proposed. The framework is based on the capabilities and

limitations of “Relationships” and “Attribute” in each model. In term of “relationship”, models are differentiated by whether they allow n-ary relationships or allow only binary relationships. In terms of “attribute”, some models allow “attribute of relationships”, while some other allow no attributes at all. By differentiating on the treatment of “relationships” and “attributes”, we can present framework for classifying the entity relationship models.

**4. RESULT AND DISCUSSION:**

**Registration page:**



**Figure.3. Snapshot of registration page**

In the bank management system when user already have an account in bank but not register in the site then they can register in this page.

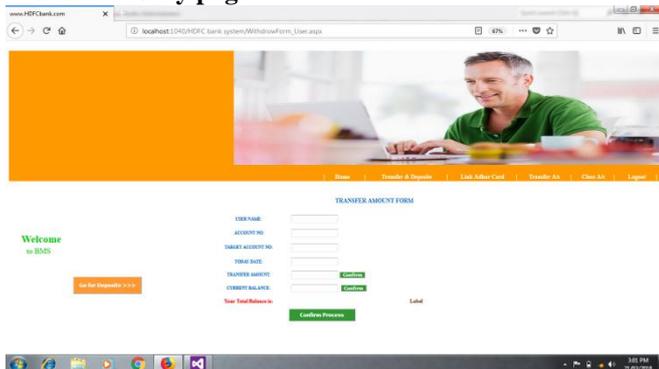
**Login Page:**



**Figure.4. Snapshot of Login page**

When user already register in the site then they can directly access the own account using the login page with account number and password.

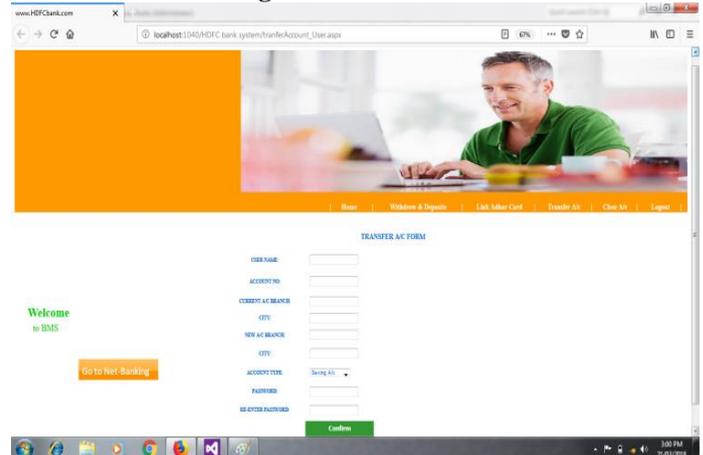
**Transfer money page:**



**Figure.5. Snapshot of Money transfer page**

In this page the user access own account and they transfer the money in one account to another using this page in bank management system.

**Transfer Account Page:**



**Figure.6. Snapshot of account transfer**

In this page if account holder change his location and he/she want to change bank location they have directly apply from this page and change the account branch location in another bank branch in nearest city.

**5. CONCLUSIONS AND FUTURE SCOPE:**

Bank management system is a virtualization of transactions in banking system. The banking system are used manual working but when we used online banking system it is totally virtualization process which avoid manual process and converts it in automatic process. If user can make a transaction in bank management system it is available in any were also user can link aadhar with account, change branch location easily. Bank management system is saving the time with accuracy than bank manual system.

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