



Bank Management System

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ABSTRACT

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

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

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

INTRODUCTION

1.1. Objectives

The objective of a bank management system is to efficiently and effectively manage various banking operations, processes, and resources to ensure smooth functioning of the bank while providing excellent services to customers. Some key objectives include:

Customer Service: Ensuring customer satisfaction by providing convenient and reliable banking services, including account management, transactions, loans, and customer support.

Risk Management: Identifying, assessing, and mitigating various risks such as credit risk, operational risk, market risk, and compliance risk to safeguard the bank's assets and reputation.

Operational Efficiency: Streamlining processes and utilizing resources effectively to optimize operational efficiency, reduce costs, and improve profitability.

Information Security: Implementing robust security measures to protect sensitive customer information, prevent fraud, and ensure data integrity and confidentiality.

Strategic Planning: Developing and implementing strategic plans to achieve long-term goals, such as expanding market presence, increasing profitability, and enhancing competitiveness.



Technology Integration: Leveraging technology and innovative solutions to automate processes, enhance customer experience, and stay competitive in the digital banking landscape.

Financial Performance: Maximizing financial performance by managing assets and liabilities effectively, optimizing revenue streams, and controlling expenses.

1.2.Problem specification

The problem specification for a bank management system encompasses the multifaceted challenges and requirements inherent in efficiently managing a bank's operations, resources, and customer interactions. At its core, this system must seamlessly handle various aspects of banking, from customer management to transaction processing, while ensuring security, compliance, and strategic planning. Key components include the need to manage customer information comprehensively, facilitate diverse account operations, process transactions securely, mitigate risks effectively, and comply with stringent regulatory standards. Additionally, the system should offer robust reporting and analytics capabilities to provide insights into financial performance and customer behavior. Integration with external systems and scalability to accommodate growth are also essential considerations. Ultimately, the goal is to develop a user-friendly, technologically advanced platform that optimizes operational efficiency, enhances customer satisfaction, and fosters sustainable growth for the bank.

1.3.Methodologies

When developing a bank management system, regardless of the technology stack used, it's crucial to follow a structured approach to ensure the success of the project. Here's a general outline of methodologies commonly used in the development of bank management systems:

Requirement Gathering and Analysis:

Engage with stakeholders, including bank management, staff, and end-users, to understand their needs and expectations. Document functional and non-functional requirements, such as features, performance criteria, security requirements, and compliance standards.

System Design:

Design the architecture of the bank management system, including the overall structure, modules, and components. Define the database schema, considering factors like data integrity, scalability, and performance. Create wireframes or prototypes to visualize the user interface and interactions.

Agile Methodology:

Adopt Agile methodologies like Scrum or Kanban to manage the development process iteratively and incrementally. Break down the project into smaller tasks or user stories and prioritize them based on business value and urgency. Conduct regular sprint planning, review, and retrospective meetings to track progress, gather feedback, and make necessary adjustments.

Testing:

Perform various types of testing, including unit testing, integration testing, system testing, and user acceptance testing. Validate the functionality, performance, security, and usability of the bank management system. Address any issues or defects identified during testing and ensure they are resolved before deployment.

Maintenance and Support:

Provide ongoing maintenance and support for the bank management system to address bugs, performance issues, and user feedback. Maintain documentation, including user manuals, technical guides, and system documentation, to facilitate system usage and troubleshooting. Offer training and support to bank staff to ensure they can effectively utilize the system in their daily operations.



Aim of The Project:

The principle objective of planning and developing this monetary framework is to give steady and productive net monetary workplaces to monetary customers through the web. This bank application permits all monetary customers to sign in. Customers would approach all alternatives and highlights around there, including the capacity to get cash from a western affiliation., send money or cash to bury banking just like other financial clients by basically adding them as payees, and send money or cash to bury banking just like other financial clients by essentially adding them as payees.

1.1 Main Purpose- The Customary technique for keeping up nuances of a customer in a financial institution to come the nuances and make a note of them. Each time the customer must be play out specific trades he needs to go to bank and play out the fundamental exercises, which may not be so conceivable continually. It very well might be a difficult task for the customers moreover it is agents also the endeavour provides veritable comprehension of Internet bank Framework moreover activities carried out by various positions in the store organization. We use the Internet to computerise the banking system. Online Financial Framework adventure gets practices performed by different parts, in fact, banking which gives overhauled techniques to keeping up the vital information best in class, which achieves capability. The endeavour gives certifiable appreciation of Web based Financial Framework and activities performed by various positions in the store organization.

2. What to Expect:

2.1 To see your equilibriums: sign in with your record number and covered up key. Testing the harmony by then isn't excessively troublesome. You basically pick Record changes and take a gander at your equilibrium and past exchanges.

2.2 Transfer funds: When you choose Exchange Assets, you'll be asked where you want the money to go, where you want it to go, and how much you want it to go for.

2.3 Make monthly payments or transfers to your bank account: If you regularly make a regular payment, it might be helpful to set up a scheduled withdrawal from your account..

2.4 Cheques: Because of internet banking and charge purchases, we don't need to worry about checks as much as we used to, but if you do, you can order them directly from the BAMS.

3. Project Required Tools

3.1 Hardware Requirements

Specification

- Processor :- intel i3
- Hard disk :- 500 GB
- RAM :- 2 GB

3.2 Software Requirements

Specification

- Front End :- HTML
- Bank End :- MYSQL

ANALYSIS

There are various significant components something on the web Inside the PC being utilized inside the financial area, the financial framework will even now be as long and as manual as it was numerous years prior and you would not have the option to move cash and remain in front of proclamations effectively.

Electronic banking is currently more well known than any time in recent memory and this is because of the presentation of PCs inside the financial area. Having the option to speak with various banks from everywhere the world is likewise conceivable because of the new infusion of innovation and there are substantially less issues with information imports and fares since everything should be possible by a couple of snaps of a catch.



1. Existing System of the Project:

The current framework work physically. The current framework has got part of complexities inside itself and need parcel of including a PC inside the financial area. It makes life much snappier and simpler and there will presently try not to should be manual commitments of data on paper and inside records, it would all have the option to be managed by the PC and be taken care of and sent on suitably.

Past trades of explicit customers can be found in seconds instead of keeping it together for a huge time frame, and in this way issues continually can be overseen a lot quicker as the information can be discovered immediately.

You can moreover notice the meaning of the PC inside the monetary region as you would now have the option to make trades from your home with the development and watch out for what you have inside your record when you are believing that an of human exertion and paper works. All over the information require to be kept up on records and keeping up this is a dreary and dangerous cycle. As the exchanges increments, so the information as well. So the errand of keeping up them increments dramatically. To see an information may require part of paper to be looked. Anyway In the current framework the exchanges are done just physically yet in proposed framework we need to modernize all the financial exchange utilizing the product Banking framework.

1.1 Existing System has a Problem · Information protection is lacking. More manpower.

- Increased manpower.
- It takes a long time..
- Consumes a significant amount of pare jobs.
- Manual calculations are needed.
- There is no direct position for higher ranking officials.
- Computers are damaged due to a lack of care.

2. Proposed System of the Project:

The aim of the proposed system is to create a network of better offices. The proposed framework will overcome all of the existing framework's drawbacks. The system provides adequate protection while reducing manual labour.

3. Feasibility Study of our Project:

A feasibility analysis is conducted to determine if the project, when completed, would meet the needs of the organisation in terms of the amount of work, effort, and time spent on it. Achievability analysis allows the engineer to forecast the venture's success and value. An inquiry into the reach ability of a system proposition in terms of its utility, which is the impact on the organization's ability to achieve its goals.

Their client's requirements, as well as the efficient use of assets When a new application is proposed, it is usually subjected to an achievability review before being approved for development.

3.1 Technical Feasibility: The system should be evaluated first from a specialised standpoint. The evaluation of this attainability should be based on a blueprint of the framework's requirements in terms of data, yield, projects, and techniques. After determining a layout structure, the investigation should continue to recommend the type of hardware, as well as the method for constructing the framework and operating it.

3.2 Economic Feasibility: The creating framework should be advocated by cost and advantage . Standards to guarantee that exertion is focused on task , which will give best , return at the most punctual . One of the variables , which influence the advancement of another framework , is the cost it would require.

SYSTEM DESIGN

Arrangement is the underlying advance into the improvement stage for any planned thing or structure. Design is an innovative cycle. A fair arrangement is the best approach to convincing structure. The articulation "plan" is portrayed as "the path toward applying various procedures and principles to describe a cycle or a structure in sufficient detail to permit its real affirmation".



It very well may be portrayed as a pattern of applying various strategies and guidelines to describe a contraption, a cycle or a structure in satisfactory detail to permit its genuine affirmation.

Programming setup sits at the specific cycle of the PC programming measure and is applied paying little brain to the improvement perspective that is used. The structure design develops the compositional detail expected to create a system or thing.

As because of any purposeful technique, this item additionally has gone through the best arrangement stage changing all capability, execution and accuracy levels. The arrangement stage is a change from a customer arranged record to a chronicle to the designers or data base personnel.

1. System Design Goes Through Two Phases Of Development:

1.1 Design: The intelligent progression of a framework and characterize the limits of a framework. It incorporates the accompanying advances:

- Examines the current actual framework, including information streams, document substance, volumes, and frequencies, in addition to other things.
- Defines the format, content, and frequency of reports by preparing output specifications.
- Creates input boundaries, including arrangement, material, and most of info capacities.
- Creates requirements for editing, authentication, and control.
- Creates a legitimate plan walkthrough of the information stream, yield, information, controls, and execution system.

MODULES OF OUR PROJECT

A fully functional project based on Online Banking System that uses **PHP Language**. Following PHP project contains all the essential features which can be in use for the first year, second year IT students for their college projects. It has a number of features that will allow users to use internet banking features. This system as well as the web application's concept is all clear, it's the same as real-life scenarios and well implemented on it. To download free Online Banking System project in PHP with source code files, please scroll down to the bottom of this post for the Download button.

- Examines the advantages, risks, deadlines, as well as system limitations.

1.2 Physical Design: Actual framework delivers the functioning systems by describe the arrangement judgments that tell the engineers decisively what the up and-comer structure ought to do. It consolidates the going with progresses.

- Create a physical device.
- Input and output media must be defined.
- Create the database and define the backup procedures.
- Plan a physical design walkthrough and a physical knowledge flow through the device.
- Organize the system's implementation.
- Make a conversion plan and a deadline.
- Establish training protocols, classes, and aschedule.
- Create any new hardware or software specifications, as well as a test and deployment plan.
- Benefits, costs, conversion date, and device constraints should all be updated.

About Online Banking System PHP Project

Moving on, this Bank Management System Project in PHP focuses mainly on internet banking. Also, the system displays all the lists of statements. In addition, the system allows managing bank accounts too. This project is divided into two categories: Staff and Customer. In an overview of this web application, the staff can simply manage pending accounts. Meaning all the registration forms are forwarded to the staff's account where he/she has to approve it for further process. The staff has the right to manage customers, search customers, and credit amounts to the customer's account. Here, the depositing amount to the customer's account refers to a credit amount to the customer.

In terms of management of the customers, the staff needs to enter the account numbers for each in order to make changes. And similar goes to searching the records. He/she has to enter an account number for listing all the available information of the particular account. This includes name, id, gender, address, contact info, account details, remaining balance, PAN



number, citizenship number, and so on. This way, the staff can view active customer's accounts. And in order to credit the amount to a customer's account, the user has to enter an account number and amount to it. After a successful process, the customer can view their deposit statements from their accounts.

Customer Panel – Creating Bank Account

On the other hand, a user has to follow up steps in order to continue with internet bankings. The very first step is to create a bank account. For this, the user has to provide his/her personal details, PAN number, citizenship number, contact information, address, and select account type. Here, the account type contains current and saving accounts. After submitting the form, it requires approval from the staff users. And after approval, the system provides an account number to the user. Now, the customer has to apply for a debit card. The user needs to fill up certain fields for it. And finally, the user can now register for online banking. Under this section, the customer has to provide all the details such as account number, account name, debit card details, PAN number, etc. At last, the user can finally log in to use the internet banking feature.

Internet Banking – Fund Transfer, Beneficiary Accounts

With access to the internet banking feature, the customer can perform important things. Just like the real internet banking feature, this project allows you to view your profile, change password, transfer funds, and view bank statements. The system displays all the account details on the home screen with an overview of recent banking activities. In order to transfer funds to another account, the customer should first add and link with beneficiary accounts. For this, the system asks for the beneficiary account name, account number, IFSC code, and account type. After adding it, the customer can simply select among the available beneficiary account and enter amounts with remarks. In addition, the user can list and remove beneficiary accounts too.

Bank Statements and More

With this, the system lists out each and every activity under the bank statement. The bank statement section contains every detail required for the customer. It includes transaction date time, transaction id, descriptions, credit, debit amount, with the remaining balance. This way, the system will generate bank statements for each active customer looking upon their activities. In fact, each account will have its own respective passbook on the database which records each statement. Besides, the customer can view their account, profile, and change their password. The account section displays all the information related to the bank account whereas the profile section displays all the personal information.

Last but not least, a clean and simple dashboard is presented with simple color combinations for greater user experience while using this Online Banking System Project in PHP MySQL. For its UI elements, it fully uses Vanilla CSS as there's no involvement of any CSS framework like Bootstrap.

Presenting a new Online Banking Management System in PHP MySQL Project which includes a staff panel with the customer panel that contains all the essential features to follow up, and a knowledgeable resource for learning purposes. Available Features:

- Staff Panel
- Customer Panel
- Create Bank Account
- Manage Pending Accounts
- Apply for debit card
- Internet Banking Registration · View Active Customers
- Manage Customer's Account
- Search Customer's Account
- Credit Customer's Account/Deposit · Bank Statements
- Fund Transfer
- Manage Beneficiary Accounts · Change Password
- View Personal Account Details · View Profile



LIMITATION AND SCOPE OF OUR PROJECT

1. Limitation of Project:

Advancement has changed the manner in which various actually proficient customers do their banking. The start of online banks has made it practical for customers to lead all banking in every way that really matters, while always failing to visit an actual territory. Picking between online banking and customary banking is basically matter of tendency, yet the last offers a ton of features various customers would consider a huge weight.

2. Limited Accessibility:

Availability at conventional banks is restricted, as you can just lead business at their physical areas. In case you're making a trip or incapable to make it into the area during standard long stretches of activity, you won't have the option to work together.

3. Less Efficient:

Getting in the vehicle, heading to a bank and holding up in line to be served occupies your important time. It is more productive to do your banking on the web, where you can open new records, set up auto bill pay check account adjusts and move finances all from your own PC.

4. Future Look:

The "Banking On the web Framework is a major and goal-oriented venture. I am grateful for being given this incredible occasion to deal with it. As of now referenced, this venture has experienced broad examination work. Based on the examination work, we have effectively planned and actualized banking on the web Framework

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