**COMPUTERISED LOAN RECORD MANAGEMENT SYSTEM**

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**1.1 BACKGROUND OF THE STUDY**

A financial institution is a company or organization that provides financial services and products to individuals, businesses, and other organizations. These services and products may include savings and checking accounts, loans, credit cards, investments, and other financial instruments. Financial institutions may include banks, credit unions, investment firms, and other types of companies that are involved in the financial industry.

Loans are a common financial product offered by financial institutions. They involve borrowing money from the institution and agreeing to pay it back, with interest, over a specified period of time. Financial institutions may offer various types of loans, such as personal loans, mortgages, car loans, and business loans, with different terms and interest rates. Borrowers typically need to meet certain eligibility criteria and provide collateral or other security in order to qualify for a loan from a financial institution. Loan records are information and documentation related to loans that are provided by a lender to a borrower. These records may include the terms of the loan, such as the interest rate, repayment schedule, and any fees or charges. They may also include the borrower's personal and financial information, as well as details about the loan, such as the loan amount, payment history, and status. Loan records are important for both the lender and the borrower, as they provide a record of the loan agreement and can be used to track and manage the loan. Proper management of loan records can help to ensure that the loan is repaid according to the terms of the agreement and can help to avoid potential problems or disputes. The loan record management process involves the tracking of loan applications and the subsequent management of the loan accounts after they are approved. It includes the collection of loan payments, monitoring of loan terms and conditions, and follow-up of customer service requests. This process also includes the tracking of the loan’s progress, such as the status of the loan and any changes in the customer’s credit profile. Additionally, the loan record management process includes the review of the loan’s collateral and the collection of documents associated with the loan. The loan record management process also involves the coordination of activities among the lender, borrower, and other parties involved in the loan transaction.

A computerized loan management system is a software application or system that is used to manage and track the loan records of an organization or institution. It typically includes features for storing and organizing loan information, such as borrower details, loan amounts, interest rates, and payment schedules. A computerized loan management system may also include features for tracking and managing loan payments, generating reports and analysis, and communicating with borrowers. The use of a computerized loan management system can help organizations and institutions to improve the efficiency and accuracy of their loan management processes. It can also help to reduce the risk of errors and ensure that loan records are accurate and up-to-date.

**1.2 STATEMENT OF THE PROBLEM**

Despite its usefulness, Manual loan management systems, in which loan records are managed and tracked using paper-based records or spreadsheet software, can suffer from a number of problems and limitations. These can include difficulty in organizing and storing large volumes of loan records, difficulty in accessing and retrieving specific records, and the risk of data loss or damage due to fire, flood, or other disasters. Manual loan management systems can also be prone to errors and inaccuracies, as data may be entered incorrectly or may not be updated in a timely manner. Additionally, manual loan management systems can be time-consuming and labor-intensive, requiring significant manual effort to enter, update, and manage loan records. This can lead to inefficiencies and increased costs and may result in poor customer service and satisfaction.

. **1.3 AIM AND OBJECTIVES**

To develop a computerized loan record management system.

**OBJECTIVES**

The objectives of this research work are as follows:

1. In the front-end development modern technologies such as HTML and CSS will be employed to create an interactive User interface as well as Django which is a Python web framework will be employed in developing the back end.
2. In storing and retrieving the collected dataset; MySQL, an open-source relational database, will be used as the database technology.
3. Vital testing will be carried out in ensuring the efficacy of the research work

**2.1 LITERATURE REVIEW**

Student Micro Loan Management System. A recent study by Chaudhari, J., Agarkhed, A., Shirole, V., & Mate, P. (2021). In the ever-changing financial world, lenders and students are looking for innovative, contemporary, and digital approaches to handle their loans through an automated management system that may reduce their workload. This system is required to make the process more adaptable, scalable, agile, and rapid while remaining economical and dependable. Student Micro Loan Management System is an application that provides users with information about the many forms of loans accessible to students. This program makes the life of a student and a lender easier by providing verified information regarding student micro loans. This project gives information on several aspects of student micro (tuition and facilities) loans that are made available to students.

Design and Implementation of Loan Management System using ISI Server, PhP and MySql a recent study by Kamruzzaman, M. M. (2019). Credit institutions are crucial organizations that play a significant role in society and the contemporary economy by providing loans to individuals, corporations, and other organizations. Prior to the establishment of such organizations, there was no safe location for individuals and companies to obtain credit, which generated a great deal of confusion. The suggested loan management system consolidates diverse loan portfolios on a single platform to aid in the atomization of credit institution service and management. Credit institution branches are linked to the loan management system. If the customer provides all needed information and submits all relevant papers, the loan underwriter will use the system to verify and authorize the transaction. The suggested system would automatically provide the applicant with the necessary information to proceed. From prospecting through closing, loan underwriters may manage and monitor different loan portfolios from many locations using a single platform. The suggested technology also streamlines decision-making procedures. This paper proposes an architecture for a debt management system based on ISI Server, PHP, and MySql. Clients, an internet connection, a server, and credit institution branches are the four key components of the proposed architecture. Clients may register, apply for, and track their loans online using a desktop, laptop, portable tablet, or mobile device. To put the structure into action, a trustworthy and secure server is used. Furthermore, the dependability and security issues that were considered when creating the system are listed below. Some of the proposed design is now being developed and tested, as is also described.

Wang, H., Guo, C., & Cheng, S. (2019). recently researched LoC — A new financial loan management system based on smart contracts. Current financial loan management systems are often deployed in a single-service configuration, and transactions are neither visible nor traceable to the majority of the roles involved. In the face of different cyber threats, their data privacy protection procedures are insufficient. To address these issues, we offer a loan on blockchain (LoC), a unique financial loan management system built on permission blockchain Hyperledger Fabric. As an example, consider the Chinese poverty alleviation loan. We propose locking and unlocking algorithms for smart contracts, as well as a digital account model for transferring assets between centralized and decentralized ledgers. To preserve data privacy, we use digital signatures and Oracle. Evaluations of chain code and unlocking codes reveal that our technology is appropriate in a real-world financial lending environment.

Priya, P., Durgadevi, D.P., Tejasri, M., & SherineGlory, J. (2021) recently researched an Integrated Web Based Loan Management System Using Machine Learning Model. In an ever-changing market where loan default rates are continually rising, maintaining loan information and mitigating the risks of loan defaulters is becoming increasingly challenging. Many lenders and borrowers, particularly in rural regions, have information that is difficult to follow. The borrower's information and transaction data are likely to be lost. In addition, they do not have direct access to the borrower's information. The lender is the only one who has access to the borrower's loan information. In light of these advances, this paper proposes a machine learning technique for lenders employing a web-based loan management system that can predict future loan defaulters reliably. Integrating prediction and management features enables the lender to keep track of the loan process and correctly identify loan defaulters, so reducing future loss. The lender and borrower can maintain track of transaction data and minimize mistakes by storing loan information in an information system. With the aid of a loan management system, several lending portfolios may be formed on a single platform.

**3.1 PROPOSAL METHODOLOGY**

The research approach is a rigorous investigation like this to uncover new facts or information about the existing system. This study’s research technique comprises firsthand information from some financial institute and the internet.

**3.1.1 INTERVIEW**

The primary goal of utilizing interviews as a data-gathering strategy is to collect data in a comprehensive and intensive manner. The researcher met with the project coordinators from the department and obtained trustworthy information based on the questions provided by the researcher.

**3.1.2 DIRECT OBSERVATION**

This approach was used to collect information/data for this study by examining how the manual system was carried out, the method provides varying degrees of control over the context in which they are used, and the careful inspection revealed the obvious flaws in the present system.

**3.1.3 INTERNET**

Internet as a method of data collection will be employed, the internet will be used in sourcing information on regions that appears tough or perplexing in order to attain a workable result.

**3.4 CHOICE OF PROGRAMMING LANGUAGE**

This research work will be a mobile-based application and will be implemented on a relational database system (SQLite). HTML, CSS and JavaScript will be employed in the front end while Django (python) will be employed for the backend programming. The above are the modern languages used in implementing this system.

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