SOFTWARE REQUIREMENT SYSTEM (SRS)

AUTOMATION FINANCE MANAGEMENT SYSTEM

S VELMURGAN 2021503317

N JAWAHARLAL NEHRU 2021503313

M ASHOK KUMAR 2021503309

N KAVINKUMAR 2021503323

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INTRODUCTION:

Purpose

- **Financial Control:** FMS provides tools for monitoring and controlling financial activities. It helps ensure that financial transactions adhere to established policies and regulations, reducing the risk of fraud or financial mismanagement.
- Accuracy and Efficiency: Automation of financial processes through an FMS improves accuracy and efficiency by reducing manual data entry errors and streamlining repetitive tasks. This leads to faster and more reliable financial reporting.
- **Budgeting and Planning:** FMS assists in the creation, monitoring, and adjustment of budgets. It provides insights into spending patterns, revenue projections, and helps align financial activities with organizational goals.
- **Financial Reporting:** The system generates detailed financial reports, offering a comprehensive view of an organization's financial health.
- Cash Flow Management: By providing real-time visibility into cash inflows and outflows, FMS helps organizations manage their cash flow effectively. This is critical for maintaining liquidity and meeting short-term financial obligations.
- **Risk Management:** FMS enables organizations to identify and manage financial risks. It provides tools for scenario analysis and modeling, allowing businesses to assess the potential impact of different financial decisions.

Scope:

The scope for a Finance Management System is significant, as it addresses the core financial functions within an organization and plays a crucial role in ensuring financial health and sustainability. Here are some aspects that define the scope and potential benefits of implementing a Finance Management System:

- > Streamlining and automating routine financial tasks, such as accounting, invoicing, and expense management, leads to increased efficiency and accuracy.
- ➤ Supporting strategic decision-making through budgeting, forecasting, and financial planning helps organizations align their financial goals with overall business objectives.
- ➤ Identifying, assessing, and managing financial risks helps organizations proactively address challenges and uncertainties, contributing to long-term stability.
- ➤ Generating comprehensive and real-time financial reports provides insights into the organization's financial performance, facilitating data-driven decision-making.
- ➤ Effectively managing cash flow, working capital, and liquidity ensures that an organization can meet its short-term obligations and seize strategic opportunities.
- ➤ Optimizing the allocation of financial resources based on priorities and strategic objectives contributes to the efficient use of capital and supports growth initiatives.
- ➤ Implementing robust financial processes and maintaining an audit trail enhances accountability, transparency, and trust among stakeholders, including investors and regulatory bodies.
- ➤ Providing decision-makers with accurate and timely financial information empowers them to make informed choices that align with the organization's strategic direction.
- A robust Finance Management System should be scalable to accommodate the growing needs of the organization, whether it involves expanding operations, acquiring new subsidiaries, or handling increased transaction volumes.

OVERALL DESCRIPTION:

Product Perspective

- Finance Management System (FMS) is designed to provide a comprehensive and integrated solution for managing an organization's financial activities. The product perspective involves considering how the system functions and interacts within the broader organizational ecosystem.
- The system may be modular, with distinct components addressing specific financial functions such as accounting, budgeting, expense management, and reporting. This modularity allows for flexibility in customization and scalability.
- Integration with other enterprise systems, such as Enterprise Resource Planning (ERP), Human Resources (HR), and payroll systems, is crucial. This ensures seamless data flow between different business functions, minimizing data silos.

Product Functions

A Finance Management System (FMS) encompasses a range of product functions to effectively manage an organization's financial processes. These functions cover various aspects of financial management and contribute to the overall efficiency and accuracy of financial operations. Here are key product functions typically associated with a Finance Management System:

- Record and track financial transactions.
- > Manage general ledger entries.
- ➤ Create and manage budgets for different departments or projects. Support forecasting and scenario analysis for financial planning.
- Track and manage expenses.
- Implement approval workflows for expense requests.
- > Integrate with corporate credit cards and reconcile expenses.

USER CLASSES AND CHARECTERISTIC:

The users of the system are the members and the administrators who maintain the system.

Member

The members are assumed to have basic working knowledge of computers and internet browsing.

Admin

The administrators handle the internals of the system. They will be able to rectify the errors/crashes in case of power failure/system overload. Admins have superuser permissions, and can modify the database and add/remove/edit features at their will.

FUNCTIONAL REQUIRMENT:

User Authentication and Authorization:

- The system should provide secure user authentication.
- Role-based access control should be implemented to ensure that users have appropriate permissions based on their roles.

Accounting and General Ledger:

- The system should support recording and tracking of financial transactions.
- It should facilitate the management of the general ledger, ensuring accuracy and consistency.

Accounts Payable(AP) and Receivable (AR):

- Provide modules for managing accounts payable, including vendor invoices and payments.
- Include functionality for tracking customer invoices, receivables, and collections.

NON-FUNCTIONAL REQUIRMENT:

Non-functional requirements define the aspects of a system that are not related to specific behaviors or features but rather describe how the system performs certain functions. For a Finance Management System (FMS), these non-functional requirements are crucial for ensuring the system's overall performance, security, usability, and other important characteristics. Here are some important points regarding non-functional requirements for a Finance Management System:

Performance:

- **Response Time:** Define acceptable response times for various operations (e.g., generating reports, processing transactions).
- Scalability: Specify how the system should scale to handle increased data volume and user load.

Security:

- **Data Encryption:** Specify that sensitive financial data should be encrypted during transmission and storage.
- Access Controls: Define role-based access controls to restrict user access based on their roles.
- Audit Trails: Ensure that the system maintains detailed audit trails for all user activities and system changes.

Reliability and Availability:

- **System Uptime:** Specify the required level of system availability (e.g., 99.9% uptime).
- **Backup and Recovery:** Define procedures for regular data backups and recovery processes in case of system failures.

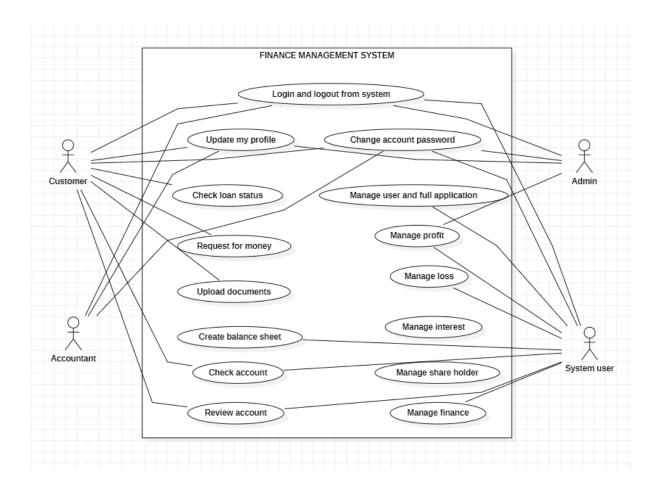
Usability:

- **User Interface Design:** Specify user interface design guidelines for consistency and ease of use.
- **Training Requirements:** Define the level of training required for users to effectively navigate and use the system.

Scalability:

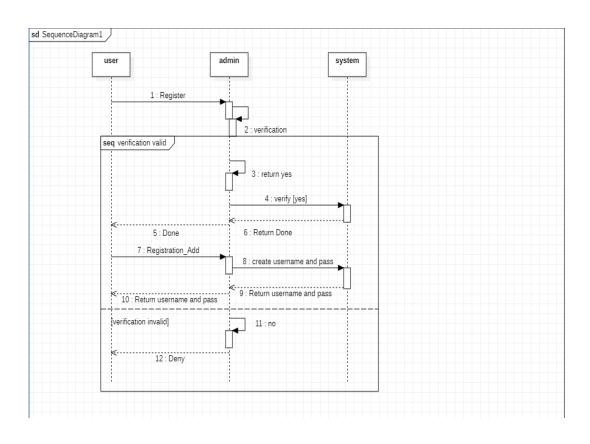
- Capacity Planning: Define how the system should scale to accommodate future growth in data and user numbers.
- **Performance under Load:** Specify acceptable system performance under various levels of load.

USE CASE DIAGRAM:

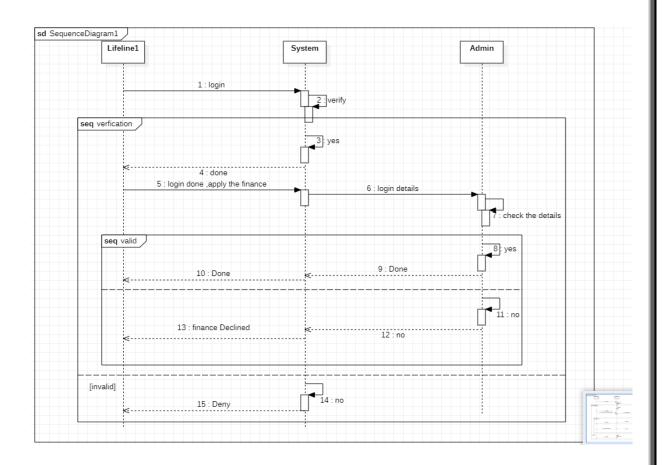


SEQUENCE DIAGRAM:

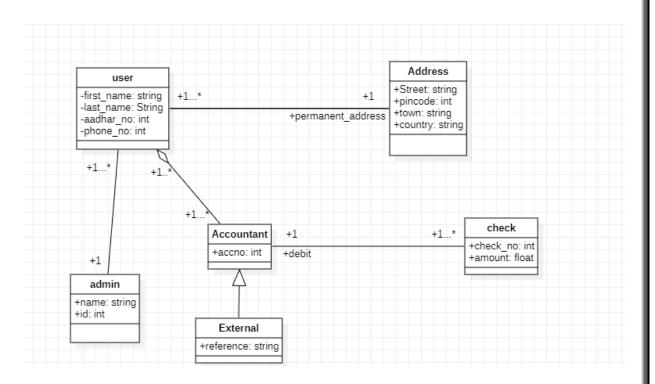
1. Sequence diagram for opening an account:



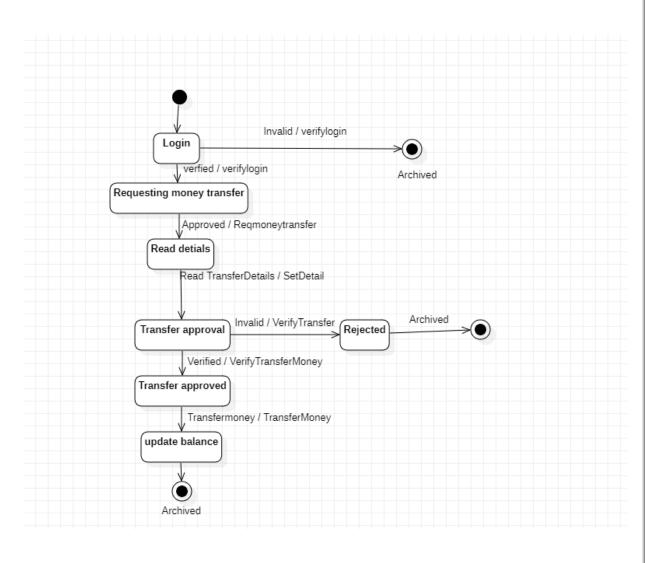
2. Sequence diagram for applying loan:



CLASS DIAGRAM:



STATE MACHINE DIAGRAM:



ACTIVITY DIAGRAM:

o For applying finance

