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1. Introduction

1.1 Purpose of Document

This document specifies the objective, scope and goal of the **Online Bank System** project. This project deals with some functionalities of the Bank website, such as creating bank accounts, checking bank balance, taking loans etc. This document is intended to direct the design and implementations of the target project.

1.2 Project Members

Project Name :   Online Bank System

Team Lead :   Mehul Agarwal

Team Members : Kushalkumar Dipakkumar Gajjar
              Faizan Ali
              K Sai Eswar
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1.3 Overview

The online bank system is composed of several components, including the customer portal, admin portal, and the database. The customer portal provides customers with access to various banking services, such as checking account balances, transferring funds, and paying bills. The admin portal provides bank staff with access to the system's back-end, where they can manage customer accounts, monitor transactions, and perform other administrative tasks. The database is used to store customer information, transaction data, and other relevant information.

1.4 Project Scope

The scope of this project is a web-based system that supports Bank Management. This includes but is not limited to all the files that made up the project but does not include the external tools used in the files and in the project. A database system will also be a part of the project.

1.5 Project Purpose

1.5.1 Users

The target audience of the project includes:

Customers:
>   The facilities of the online banking system are implemented for the customers to use them. They can use them on their own terms at their convenience.

Administrators:
>   Administrators check for the proper functioning of the Banking System. They can see and analyze the non-confidential data of the users and oversee the customer service department as well. They are the managers of the Banking System.

1.5.2 Technical Requirements

The online bank system requires a device with an internet connection and a modern web browser to access the customer portal. The system has been tested and is compatible with popular web browsers, such as Google Chrome, Mozilla Firefox, and Apple Safari.

1.5.3 Responsibilities

The primary responsibilities of the new system:

- provide customers direct access to up-to-date and accurate information
- allow differential access to web pages based on type of user
- allow customers to request new features and provide feedback
- allow administrators to see and maintain the account and its related information

Other desired features of the new system:

      a consistent "look and feel" throughout the website
      confidential data protection for the customers and administrators

2. Functional Objectives

2.1 High Priority

1. The project shall include a robust login system differentiating between customer and administrators clearly and then showing separate web pages to both types of users based on their accessibility.
2. The dashboard after login will have sections for viewing profile, showing account details and all the other sections.
3. The project shall also include account creation, account details updation, and account deletion request.
4. Customers can view their account balance and also see their list of transactions.
5. Customers can send money to other bank accounts which will also be reflected on the account which received the money.
6. A loan system shall also be implemented where customers can opt and repay loans.
7. It shall include a home page having various options such as logging and signing up, having an about column, showing the services available etc..

2.2 Medium Priority

1. The system shall also implement the Insurance system as well.
2. It shall provide loans based on different types such as Home Loan, Car Loan, Education Loan etc..
3. It shall allow users to upload documents such as KYC, Aadhar Card etc…

2.3 Low Priority

1. It shall implement a currency converter tool using APIs.
2. Graphs shall be implemented such as Transaction Graphs, Interest Rate statistical Graphs, etc..
3. A search bar shall also be there that takes the user to the respected section based on the user search result.
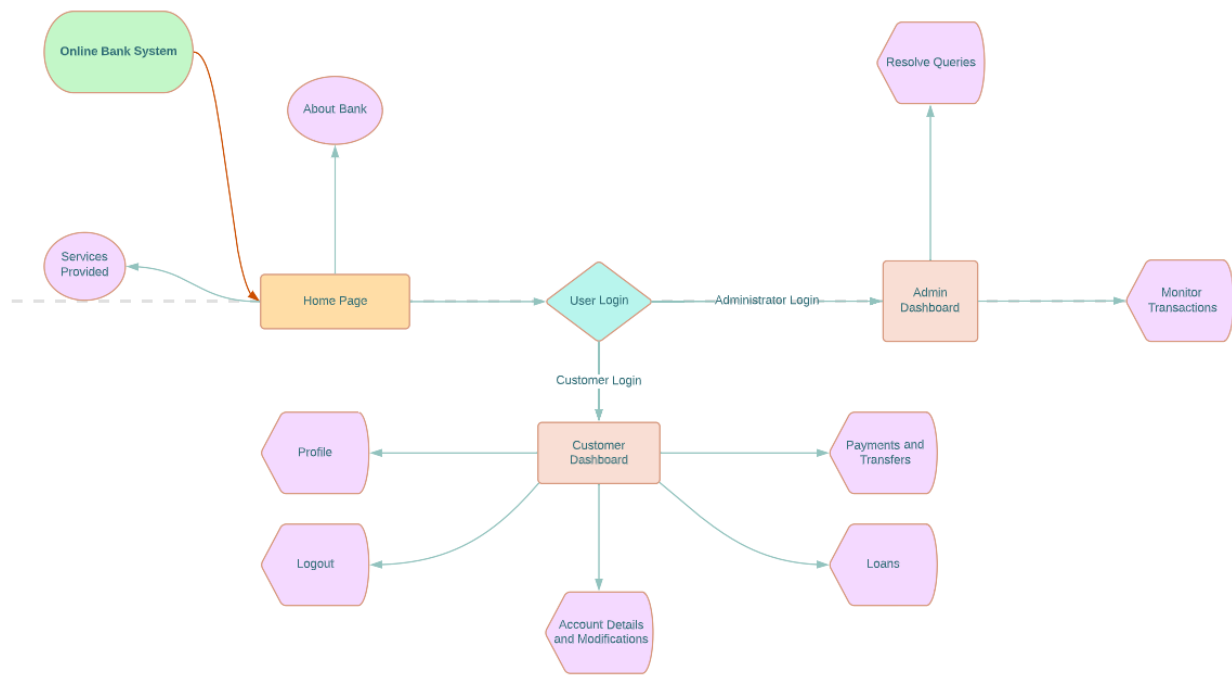
3 Technology Used

The system uses:

> A database service(MongoDB or MySQL)
> Bootstrap Front-End Framework
> Nodejs Library
> Express with NodeJS

4. The Context Model

4.1 Goal Statement

The goal of the project is to make a fully functional basic Online Banking System and understand the fundamentals of Full Stack Development.

4.2 Context Diagram

5. The Use Case Model

Use Case Name	Actor	Description	Pre-Conditions	Post-Conditions
Login System	Customer	A customer logs into the online bank system using their username and password.	The customer has a valid online bank account.	The customer is successfully logged into the system.
Dashboard	Customer	A customer views their dashboard after logging into the online bank system, which displays a summary of their accounts, recent transactions, and account activity.	The customer has a valid online bank account.	The customer sees a summary of their account information on the dashboard.

Apply for Loan	Customer	A customer logs into the online bank system and applies for a loan.	The customer has a valid online bank account.	The loan application is successfully submitted, and the customer sees an updated account summary.
View Account Summary	Customer	A customer logs into the online bank system and views a detailed summary of their accounts, including the balance, recent transactions, and account activity.	The customer has a valid online bank account.	The customer sees a detailed summary of their account information.
Transfer Funds	Customer	A customer logs into the online bank system and transfers funds between their accounts or to another customer's account.	The customer has a valid online bank account and sufficient funds to complete the transfer.	The funds are successfully transferred, and the customer sees an updated account summary.

Monitor Transactions	Administrator	A bank staff member logs into the online bank system and monitors customer transactions, flagging any suspicious activity.	The Administrator has a valid admin account.	The transactions are monitored, and any suspicious activity is flagged.
Submit Customer Queries	Customer	A customer logs into the online bank system and submits a query related to their account.	The customer has a valid online bank account.	The customer query is successfully submitted.
Respond to Customer Queries	Administrator	A bank staff member logs into the online bank system and responds to customer queries.	The Administrator member has a valid admin account.	The customer queries are successfully responded to.

6. Conclusion

The online bank project is a secure and convenient solution for customers who are looking for an alternative to traditional banking services. With 24/7 access to their accounts, customers can manage their finances on their own schedule. The system's user-friendly interface, and range of features make it a reliable and efficient solution for both customers and administrators.