

predict churn customers in bank management system by

using classification algorithm

INTRODUCTION

The Bank Management System project is a software application designed to streamline the

operations of a bank. The system provides an efficient platform for managing various banking

activities such as account opening, customer management, transaction processing, loan

management, and financial reporting. The system is designed to be user-friendly, secure, and

scalable, and it can be customized to meet the specific needs of the bank.

The system provides an easy-to-use interface for customers to access their accounts, perform

transactions, and view their transaction history. It also provides a comprehensive dashboard for

bank administrators, clerk and managers to monitor the system's performance and track key

performance indicators.

This system also provide a feature for a bank to predict whether their customers leaves their bank

or not by using classification alogorithms.

Overall, the Bank Management System project is a valuable tool for banks looking to stay

competitive in today's rapidly changing financial landscape

Front End: HTML

Backend: flask and MySQL

MAIN OBJECTIVES

The objectives of customer churn prediction in a bank management system are:

- To build a model that can accurately predict whether a customer leave the bank or not by using classification algorithm
- To build a comprehensive bank management system, it is crucial to incorporate all the
 essential bank-related tasks and functionalities. The system provides an easy-to-use
 interface for customers to access their accounts, perform transactions, and view their
 transaction history. It also provides a comprehensive dashboard for bank administrators,
 clerk and managers to monitor the system's performance and track key performance
 indicators.

.MODULES DESCRIPTION

1. ADMIN

- **Login**: Admin can login to this application
- **View customers :** Admin can view customers
- Add managers : admin can managers.
- Add clerk: Admin can add clerk
- **View complaint :** Admin can view complaints from the user and reply.
- **View Feedback :** Admin can view feedback from the user
- add branch : Admin can add branch
- **Send bank notification:** send notification to user

2. MANAGER

• **Login :** Manager can login to this system

• **View customers:** Can view customers

• **View transaction :** can view customer transaction

loan request : can approve/reject/view loan request

• view clerk: manager can view clerk

3. CLERK

• **Login**: login to this system

- Add customers: add customer to the bank and view them and create bank
 account for them
- Make transactions transfer money from one acc to another
- **Deposit/withdrawal**: deposit/withdrawal of customer

4. CUSTOMER

Login: login to the system

• View balance : can view his balance

• **View his profile:** customer can view his profile.

View transaction : customer cam view his previous transaction

Request loan – can request loan available

■ **Transfer fund:** can transfer fund from one acc to another

• **Send feedback:** sent feedback to admin

• **Send complaint:** can sent complaint to admin

• View bank notification: can view notification from bank

5. CHURN PREDICTION

 Predict whether a customer leaves the bank or not by using Classification algorithms.

TECHNOLOGIES USED

- The machine learning technologies used in the customer churn prediction project
- **CLASSIFICATION**
- Classification is a type of supervised machine learning technique in which a model is trained to predict the class or category of a new observation based on its characteristics or features. The goal of classification is to identify the underlying patterns in the data that distinguish different classes or categories.
- In classification, the data is divided into a training set and a test set. The training set is used to train the model, and the test set is used to evaluate the performance of the model on unseen data.