Credit Card System



Under the guidance of

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> Submitted by Team -1 Hello World

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1. Introduction

1.1 About this document

1.1.1 Purpose and scope of the document

The Purpose of the document is to mention the functional and nonfunctional requirements for the project credit card system and to mention all the necessary details related to the Project.

The scope of the document is to list all the requirements specifications formally.

1.1.2 Intended Audience

Team members and Mentor.

1.2 About Software System

Credit Card System is a windows-based application that deals with the approval of credit cards. It is reasonable for the administration of credit cards. It includes the details of the user he can check whether he is applicable for applying for the credit card, he can check the credit score and If he is applicable then he can apply for the credit card and can select which type of card he wants.

1.2.1 Scope of System

The scope of the System is explained through its module:

- I. Customer details This module will be used by the existing customers of the bank. They can see their bank account details by logging in and they will also be able to request a credit card.
- II. Bank Admin This module will be used by the bank admin. He will be able to see the pending request, approved request of the credit card. He will also see the customer details and some reports.

1.2.2 Exclusions

This system includes all the functional requirements and modules which is mentioned in this document. It will not exclude anything.

1.2.3 System Prospective

The credit card system is a windows-based GUI application that is developed for the bank customers and admin so that customers can easily apply for a credit card online without manually visiting the bank and bank admin can easily manage the data.

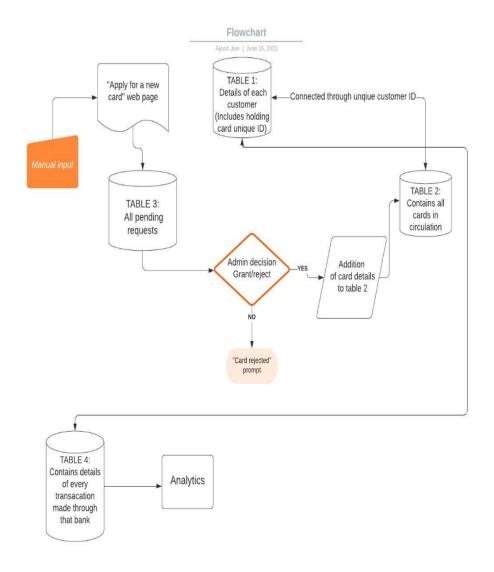
1.2.4 Impact of the System

This project is developed for the existing customers for the bank so that they can easily check their eligibility and can apply for the credit card if they are eligible. As the process will be only so they do not need to manually visit the bank it will save a lot of time for customers and the bank also.

1.2.5 Assumptions

- a. Customers must already have registered in the bank
- **b.** Admin has access to the information of customers who are applying for credit card

1.2.6 Data flow Diagram



2. System Requirements

2.1 Functional Requirements

2.1.1 Customer Details Module

- I. Users can log in through id and password.
- II. Users can see all the account details.
- III. Users can check whether he is applicable for applying for a credit card or not.
- IV. The user can check his credit score.
- V. User can apply for the card be selecting which type of card he wants and with what monthly limit.

2.1.2 Bank Admin Module

- I. Admin can see all the details of the customer.
- II. Admin can see all the pending and approved the request.
- III. Admin can approve or decline a request for the credit card by validating the customer's information.
- IV. Admin can see and analyse different reports

2.2 Technology stack

Front end: Tkinter library of Python

Back end: MySQL, Python, PHPMyAdmin

Report tool: Pandas and matplotlib

Version Control and hosting: Git and GitHub

3. Data analysis

Some Screenshots of the analysis of customer's data are mentioned below.

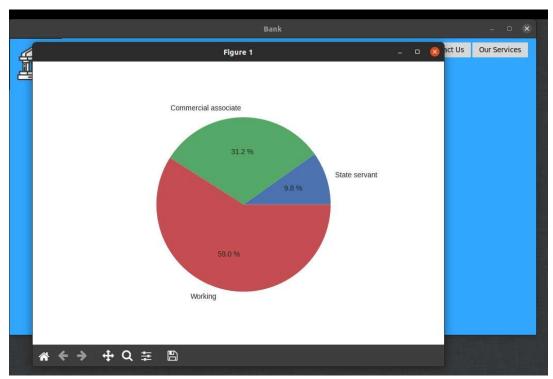


Fig 1: Profile of customer's applying for the credit card



Fig 2: Age vs Average income of the customer's



Fig 3: customer's Age vs their income

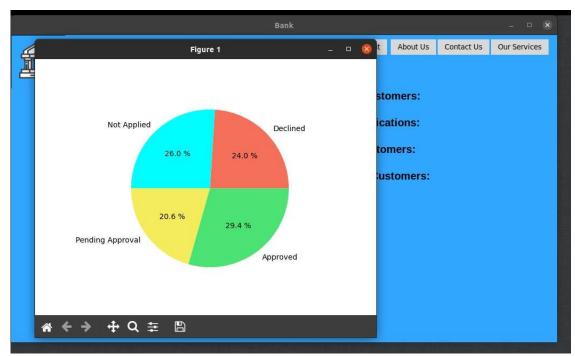


Fig 4: Types of Customers

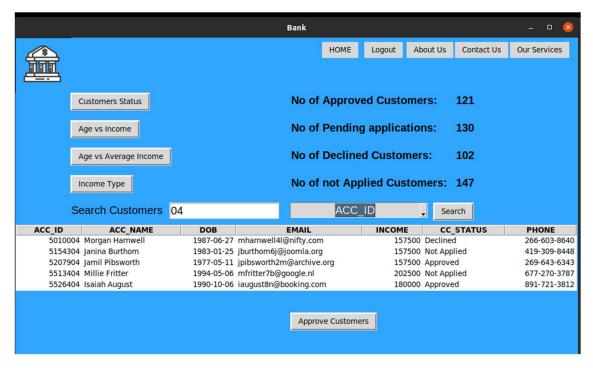


Fig 5: Bank Admin Dashboard

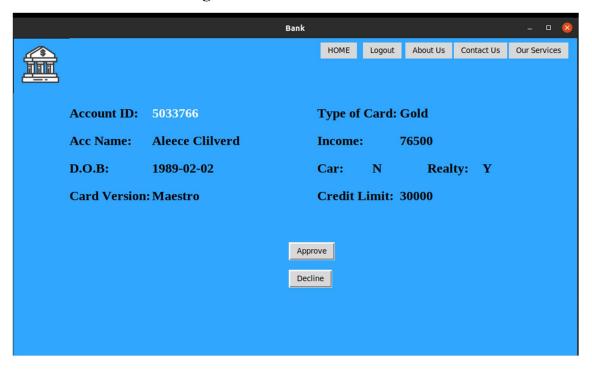


Fig 6: Bank Admin's Customer application page

4. Appendix

4.1 Source Code

 $4.1.1\ \underline{\text{https://github.com/Avinash-Kumar07/credit_card_system.git}}$

4.2 Resource Files

 $4.2.1 \ \underline{\text{https://github.com/Avinash-}}_{\underline{\text{Kumar07/credit_card_system/blob/master/customers.csv}}$