ATM-MACHINE

COMPUTER SCIENCE (083) PROJECT 2021-22

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INDEX

INTRODUCTION

FEATURES OF THE SOURCE CODE

LOGIC AND FUNCTIONALITY OF THE APPLICATION

UTILITIES AND SCOPE OF THE APPLICATION

DATA FLOW DIAGRAM

INTRODUCTION

- An automated teller machine (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. Anyone with a credit card or debit card can access cash at most ATMs.

- ATMs are convenient, allowing consumers to perform quick self-service transactions such as deposits, cash withdrawals, bill payments, and transfers between accounts.

- The cost incurred in servicing a customer through the ATM is one-third of the cost incurred otherwise. As the transactions are handled through softwares, scope for human error or misappropriation is reduced. ATM has become an important issue, not only in retaining consumers, but also as a competitive advantage while boosting the overall profitability.

- So, our objective behind creating this "ATM Machine" application was to create a simulation of an actual ATM machine for getting grips with it's functionality before they need to use one in public. It's also a computer based trainer which can facilitate users with intellectual disability to learn how to access their personal bank accounts.

FEATURES OF THE SOURCE CODE

01

Tkinter module for GUI

The tkinter package (“Tk interface”) is the standard Python interface to the Tcl/Tk GUI toolkit. We have used import* statement to import all names into the current calling module.

02

Tk Architechture

We have used Tk architecture in our source code, Tk is a Tcl package implemented in C that adds custom commands to create and manipulate GUI widgets. which can be customized easily.

03

Framework of the Source Code

The current-value setting of some widgets are connected directly to application variables by coupling the widget variables. The utility command, wm, is used for interacting with the window manager. The bind method from the widget command has allowed to watch for certain events and to have a callback function trigger when that event type occurs.

04

Programme specific components

Required number of widgets are added to the main window. User defined functions are used for the purpose of applying the event trigger on the widgets.

LOGIC AND FUNCTIONALITY OF THE APPLICATION

- At the beginning the Entry screen is visible to the the users, which consists of a keypad, input box and instructions on the display window.

- The user can enter the PIN number specified in the Read me file assuming that a virtual debit/credit card is already inserted into the machine. If he/she enters a correct pin then he/she is allowed to enter the menu screen or else the message "Incorrect PIN, Try Again" message is displayed accordingly.

- The user is provided with four options in the menu screen, either he/she can withdraw their desired amount by clicking on "Withdraw" button, or he/she can deposit the desired amount by clicking on the "Deposit" button or he/she can check his/her current balance by clicking the "Balance" button, or else he/she can exit the simulator and move back to the Entry screen by clicking the "Exit" button.

- The current balance in the user's account will get updated according to the available aforementioned actions performed by the user, and he/she can check the updated current balance after performing each actions by clicking on the "Balance" button.

UTILITIES AND SCOPE OF THE APPLICATION

01

This application provides the users a coherent simulation of an actual ATM machine for getting grips with it's functionality before they need to use one in public.

02

It helps them to manage their personal budgets more efficiently without data redundancy, duplicity and many others.

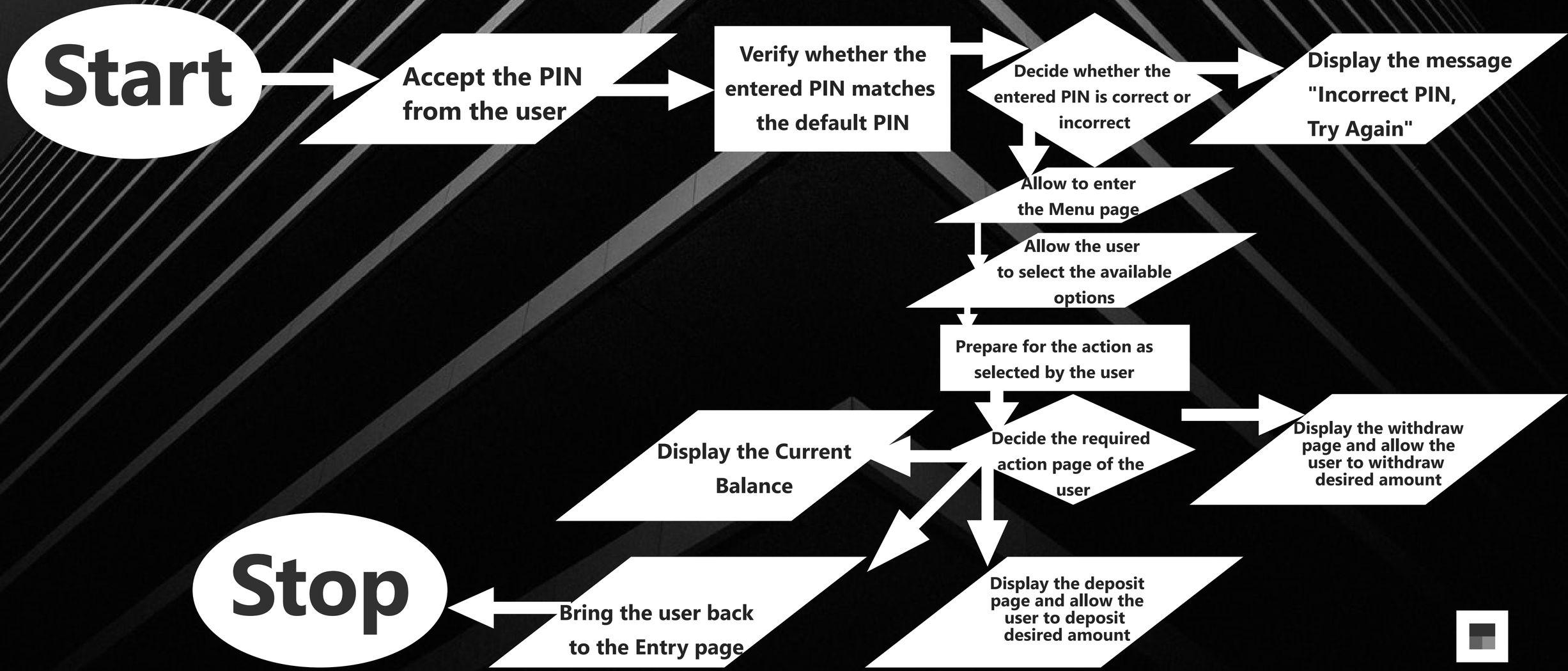
03

This project can also be improved later in a multiple ways, like opening a bank account or creating a joint account, give loans with proper amount of interest and many more.

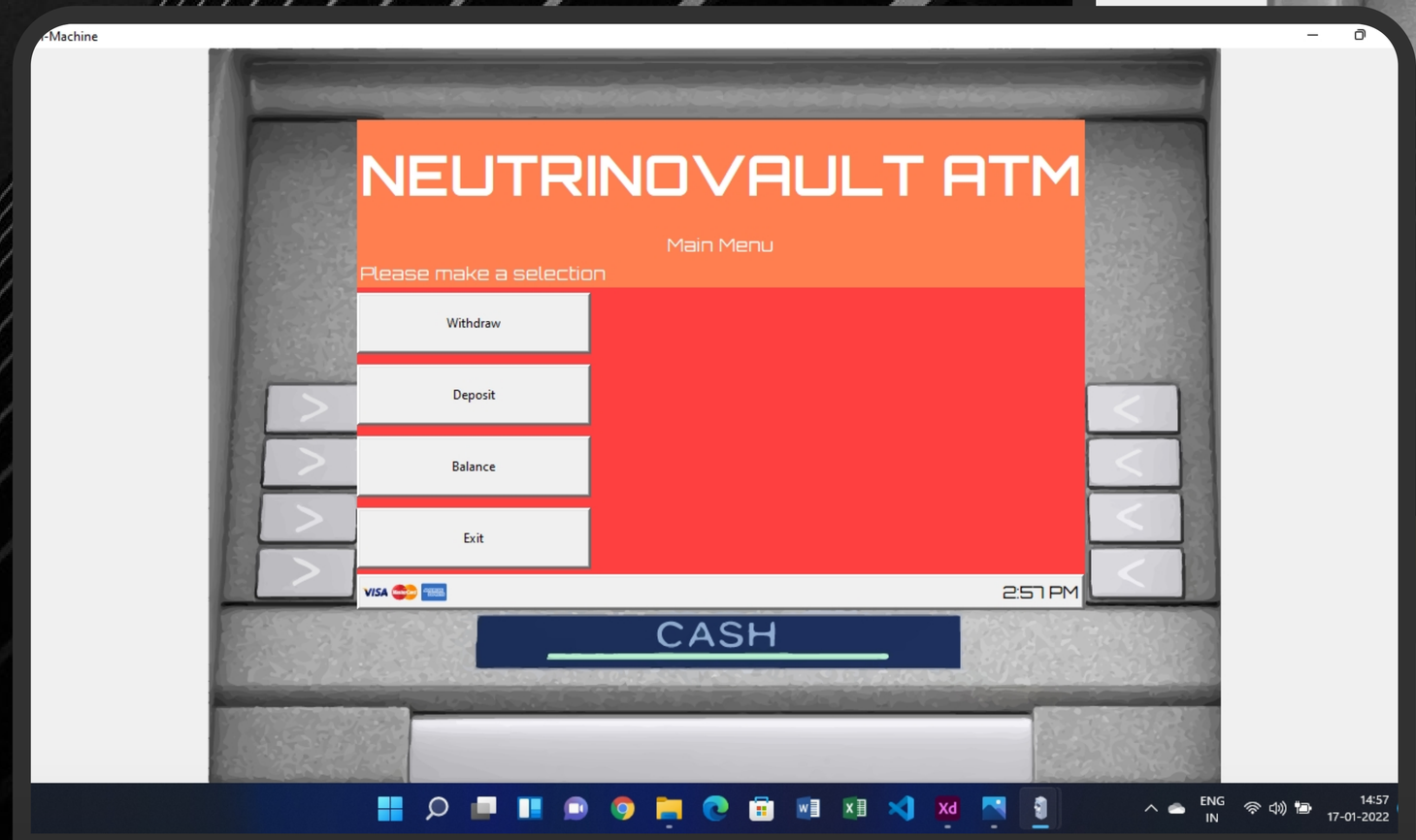
04

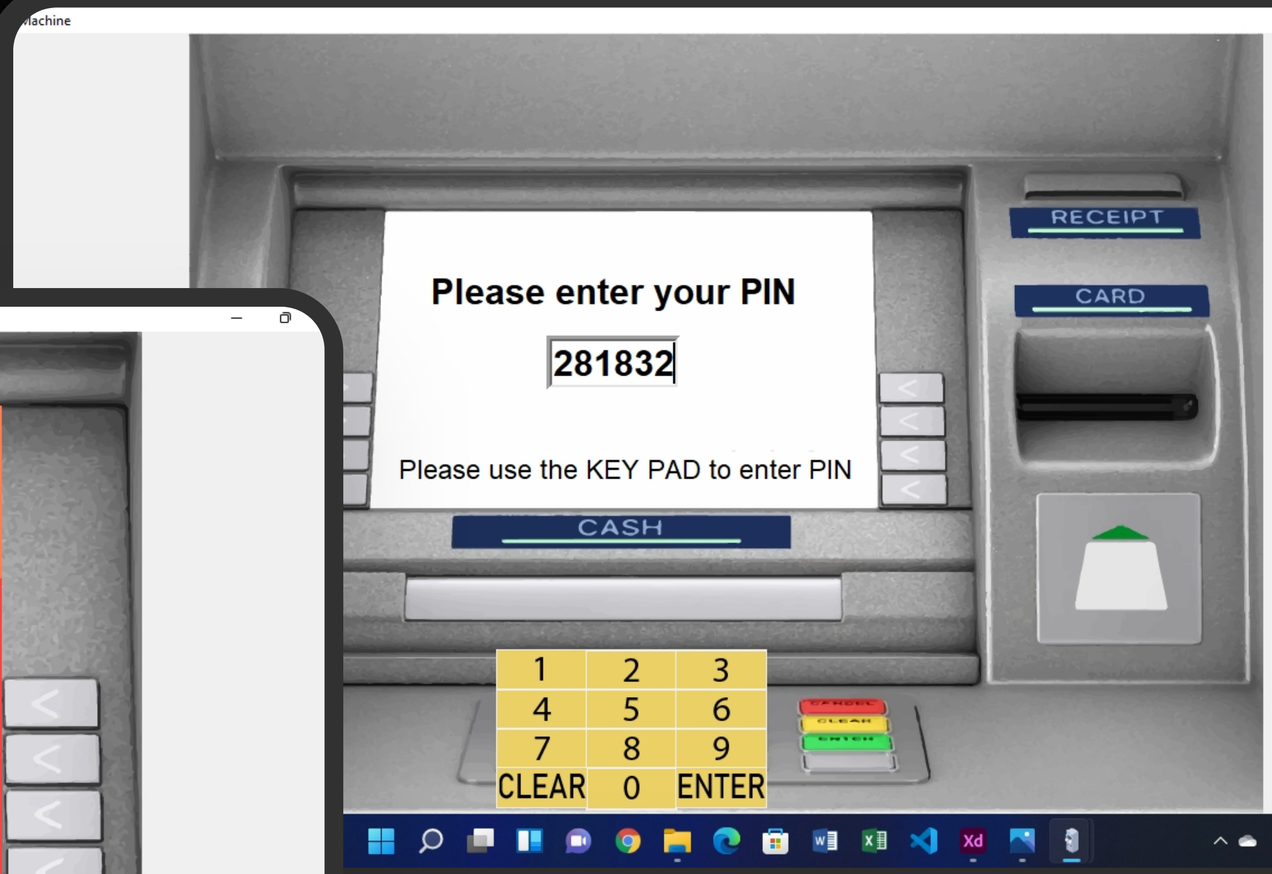
The GUI of the software can be improved to make the application appear more enthralling to the users.

DATA FLOW DIAGRAM



OUTPUTS


NEUTRINOVAULT ATM
Main Menu
Please make a selection
Withdraw
Deposit
Balance
Exit
2:57 PM
CASH


Please enter your PIN
281832
Please use the KEY PAD to enter PIN
RECEIPT
CARD
CASH
1 2 3
4 5 6
7 8 9
CLEAR 0 ENTER