




PRESENTATION

[AUTOMATE THE BORING STUFF]

Application : ICICI bank database management system (with additional calculative tools) (completely self coded)

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Facilities provided to the user within the program:

- Display all existing records/accounts in the database
- Create a new account
- Edit personal details of a specific account
- Display all (personal and financial) details of an account.
- Delete an account.
- Withdraw money from a specific account
- Deposit money into an account.

Additional Tools :

- Mathematical calculator
- Simple interest calculator
- Compound interest calculator.

-->PHOTO IMAGE AT TOP:

-ICICI BANK LOGO ON TOP (using (importing) pillow module for uploading and customising pic)

-->Button widgets to be created :

-Tools (will be inside a frame, all calculators will have master as the frame tools):

1)Calculator +

2)Simple Interest Calculator +

3)Compound Interest Calculator +

-No selection required (placed one after the other, eg. row 1 and row 2, same column):

4)Create Account +

5)Display All records +

-ID SELECTION REQUIRED (buttons placement : 2,2,1 for the respective facilities):

6)Deposit Money

7)Withdraw Money

8)Display Details (with balance)

9)Edit Personal Details

10) Delete Account

-->Label widgets to be created :

1) Enter Id no. (to tell the user to enter the id no. for buttons which require selection of id)

-->Entry widgets to be created

1) Enter ID : widget to enter ID for further application in buttons that require selectin id

BLUEPRINT (CREATED BEFORE STARTING TO CODE

Main Window of program

The screenshot shows a software window titled "IMOBILE MANAGEMENT SYSTEM". The background is orange with the ICICI Bank logo at the top. Below the logo is a red-bordered "TOOLS" section containing three buttons: "Calculator", "Simple Interest Calculator", and "Compound Interest Calculator". The main area contains several large, light-gray buttons with red text: "Create Account", "Display All Records", "Deposit Money", "Withdraw Money", "Display Account Details", "Edit Personal Details", and "Delete Account". There is also a label "ENTER ID NO." next to a small white input box.

IMOBILE MANAGEMENT SYSTEM

i ICICI Bank

TOOLS

Calculator Simple Interest Calculator Compound Interest Calculator

Create Account

Display All Records

ENTER ID NO.

Deposit Money Withdraw Money

Display Account Details Edit Personal Details

Delete Account

BLUEPRINT VS OUTCOME OF MAIN WINDOW

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Libraries I used to create the program-

- **Tkinter** which is a user-friendly library which can let the developer create a GUI, with full customisability. The methods in it are highly modifiable and easy to use.
 - *Tkinter is a two-step driven module, where each widget needs to be created first and then placed.*
- **Sqlite3** is a relational database management system, which has similar commands to MYSQL, but is lighter on the system to boot. Its library is imported for updating, creating, deleting tables in a database.



```
#creating or establishing connection to an existing database
```

```
bank_db = sqlite3.connect('bank_database.db')
```

```
#create cursor : for operating and controlling items and commands inside mysql database
```

```
b= bank_db.cursor()
```

```
# Committing Changes to the databaase
```

```
bank_db.commit()
```

```
#closing connection with the database
```

```
bank_db.close()
```

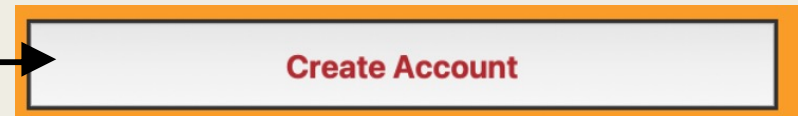
This is an excerpt from my code, it is the basic syntax for sqllite.

.execuute(“”) is used for executing SQL commands.

Tkinter Widgets

The three main widgets based on which the program was built :

1. Buttons – useful in giving commands and executing.



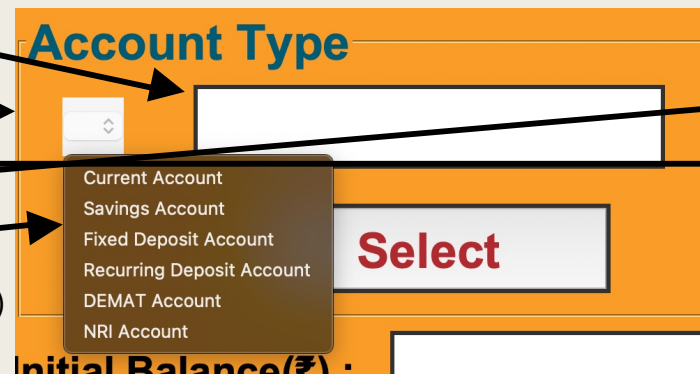
2. Labels – useful in displaying information on screen



3. Entry : creates an entry/input box/widget

4. Other widgets included:

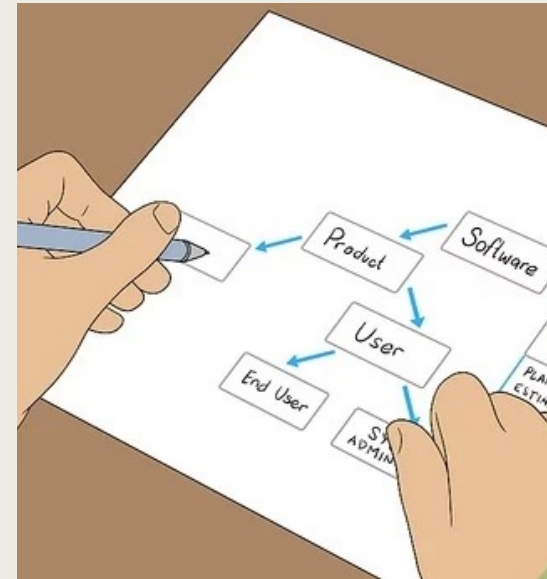
- Frame
- Scrollbar
- Listbox
- OptionMenu
- PhotoImage (LOGO MAIN PAGE)

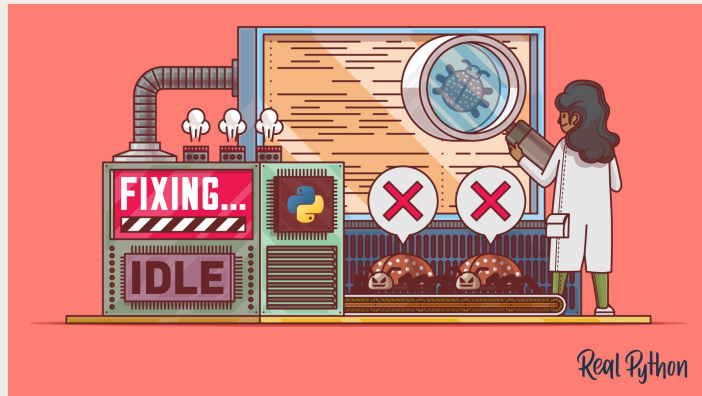


How I Created the program?

- Watched A 6hour video course on YouTube
- Read some material on internet
- Made a blueprint
- Went with reverse engineering the program
 - *First created the design and then the functions.*
- While creating the program in order to make stuff much more interesting and representable, I kept adding new things and it kept getting better.
Let me take an example;

I had a display function created already for displaying all records, but for displaying n number of records I didn't have enough space, although not needed for our level, but just for better application, I researched how to create a scroll bar menu, and even after completing the program I took 2 hours to just design the scroll bar of records.

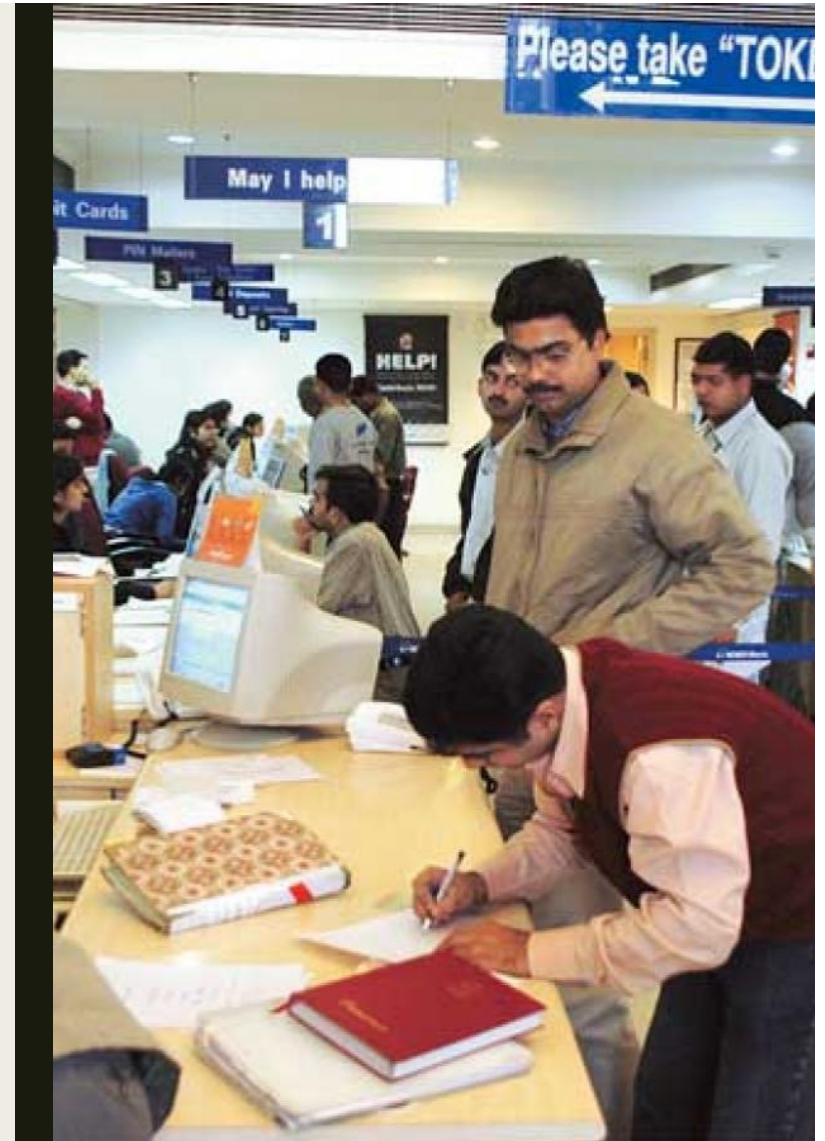




ISSUES I FACED WHILE CREATING THE PROGRAM

Reason Behind Creation of the program

- Most transactions happen digitally, but the details of the people making these transactions must be stored safely in a confined space.
- Easier withdrawal and depositing of money
- Creating, editing and deleting accounts becomes easier
- The program itself is a bit tacky and colorful making it more eye-catchy for laymen users
- Additional tools from the banking realm are also added, so that user must not need to take the burden of opening another app,





IMPROVMENTS THAT CAN BE
MADE IN THE PROGRAM

Use of ---→ **visual** editor



THANK YOU