

Bank Account System Documentation

This Python script implements a simple Bank Account System using the Tkinter library for the graphical user interface (GUI) and SQLite for data storage. The system allows users to create accounts, deposit and withdraw funds, delete accounts, and view account details.

Table of Contents

1. Database Setup
2. Tkinter GUI
3. Functions
4. Widgets and Layout

1. Database Setup

- The SQLite database named 'bank.db' is created to store account information.
- A table named 'accounts' is created with columns: account_number, account_holder, and balance.

2. Tkinter GUI

- The Tkinter library is used for creating the graphical user interface.
- The main window (**'window'**) is created with a title, dimensions, and non-resizable.
- Various widgets such as labels, entry fields, buttons, and a treeview (to display account details) are used.

3. Functions

show_accounts()

- Retrieves all accounts from the database and displays them in the result_text Treeview widget.

create_account()

- Adds a new account to the database with the specified account number and holder name.
- Initial balance is set to 0.0.
- Updates the status label and refreshes the displayed accounts.

deposit()

- Deposits a specified amount into the selected account.
- Updates the account balance in the database.
- Updates the status label and refreshes the displayed accounts.

withdraw()

- Withdraws a specified amount from the selected account.
- Updates the account balance in the database.
- Updates the status label and refreshes the displayed accounts.

delete_account()

- Deletes the selected account from the database.
- Updates the status label and refreshes the displayed accounts.

**4. Widgets and Layout **

- Entry fields for entering account number, account holder name, deposit amount, and withdrawal amount.
- Buttons for creating accounts, depositing, withdrawing, and deleting accounts.
- Labels for guiding the user in entering information.
- **'result_text'** Treeview widget to display the list of accounts.
- Status label to provide feedback on the outcome of operations.

Additional Notes

- The code includes commented-out portions for a button to manually trigger the `show_accounts()` function. Uncomment and use if necessary.
- The script uses global variables for simplicity. In a larger application, it might be beneficial to use classes and methods for better organization and encapsulation.