



Create a banking app using OOP's based programming

The App should have the following features

Simple Tasks

1. Create account (During account creation username,password and the initial depoist amount should be specified.)
 2. The account holders should be able to login and logout from the account using password.
 3. Account holders should be allowed to credit and debit Money.
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Difficult Tasks

1. Remove account Holder
 2. The app should have checks which limits the withdrawal of amount bigger than the cuurent balance in the account.
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Defining the account holder class

In []:

```
class AccountHolder():
    def __init__(self,user_name,password,initial_deposit):
        self.user_name = user_name
        self.password = password
        self.bal = initial_deposit
        self.login_check = False

    def login(self,pwd):
        if self.password == pwd:
            self.login_check = True
            print("logged in")
            login_menu(self)
        else:
            print("wrong password")

    def deposit(self,amt):
        self.bal = self.bal+amt
        print("current balance:",self.bal)

    def withdraw(self,amt):
        if self.bal>=amt:
            self.bal = self.bal-amt
            print("current balance:",self.bal)
        else:
            print("not sufficient balance")
```

```
def logout(self):
    self.login_check = False
    print("Logout successful")
```

Global list used to store the account holder objects

```
In [ ]: acc_hold = []
```

Global variables used for program state

```
In [ ]: # variables used to check the state of things
        running = True
```

Login Menu

```
In [ ]: def login_menu(user):
        while user.login_check:
            print("For deposit press 1: ")
            print("For withdrawal press 2: ")
            print("For logout press 3: ")

            x = int(input("Enter your choice: "))

            if x == 1:
                dep = int(input("Enter deposit amount: "))
                user.deposit(dep)

            elif x == 2:
                wit = int(input("Enter withdrawal amount: "))
                user.withdraw(wit)

            elif x == 3:
                user.logout()
```

Function exit the banking app

```
In [ ]: def exit():
        global running
        print("closing the app")
        running = False
```

Fucntion to find user object from the list of account holders

```
In [ ]: def find_user(user_name):
        user = None
        for acc in acc_hold:
            if acc.user_name == user_name:
                user = acc
                break
        else:
            user = None

        return user
```

Function for the main menu of the banking app

```
In [ ]: def main_menu():
    print("Welcome to the banking app.")
    print("For login press 1: ")
    print("For creating new account press 2: ")
    print("For exiting the app press 3: ")

    x = int(input("Enter your choice: "))

    if x == 1:
        user_name = input("Enter the user name : ")
        password = input("Enter the password : ")

        user = find_user(user_name)
        if user == None:
            print("Please check the user name")
        else:
            user.login(password)

    elif x == 2:
        user_name = input("Enter the user name: ")
        password = input("Enter the password: ")
        int_dep = int(input("Enter a deposit amount: "))

        user = find_user(user_name)
        if user == None:
            acc_hold.append(AccountHolder(user_name,password,int_dep))
            print("Account created successfully")
        else:
            print("Username already exists")

    elif x == 3:
        exit()
```

While true loop to keep the app running.

```
In [ ]: while running:
    main_menu()
```

Home work

1. Add a methods that allows the user to check his current balance. This should also be provided as a option in the `login_menu` function
2. Add a method that does login and logout animation

```
In [ ]:
```