

Formative Assessment 2

Mini Project : Banking System

Dear Students, We have covered core python, now it's time to test your coding and logical skills, also to know how confident you are with the syntax, i'm giving you a small project: Write a python program to replicate a Banking system. The following features are mandatory:

1. Account login
2. Amount Depositing
3. Amount Withdrawal Other than the above features you can add any other also.

You should make a video presentation explaining the code and output and upload it to your github account. Submit the github link here.

PS: Explanation should be in English (Score : code (5) + video (2) + extra features (2) + Timely submission (1))

```
username="user123"
```

```
password="pass123"
```



```
In [*]: class BankAccount:
    def __init__(self, username, password):
        self.username = username
        self.password = password
        self.balance = 0

    def login(self, username, password):
        return username == self.username and password == self.password

    def deposit(self, amount):
        if amount > 0:
            self.balance += amount
            return True
        else:
            return False

    def withdraw(self, amount):
        if 0 < amount <= self.balance:
            self.balance -= amount
            return True
        else:
            return False

    def check_balance(self):
        return self.balance

account = BankAccount("user123", "pass123")

def main():
    while True:
        print("\nWelcome to the Banking System")
        print("1. Login")
        print("2. Exit")
        choice = input("Enter your choice: ")

        if choice == '1':
            username = input("Enter username: ")
            password = input("Enter password: ")
            if account.login(username, password):
                print("Login successful.")
                while True:
                    print("\nSelect an option:")
                    print("1. Deposit")
                    print("2. Withdraw")
                    print("3. Check Balance")
                    print("4. Logout")
                    option = input("Enter your choice: ")
                    if option == '1':
                        amount = float(input("Enter amount to deposit: "))
                        if account.deposit(amount):
                            print("Deposit successful.")
                        else:
                            print("Invalid amount. Deposit failed.")
                    elif option == '2':
                        amount = float(input("Enter amount to withdraw: "))
                        if account.withdraw(amount):
                            print("Withdrawal successful.")
                        else:
                            print("Insufficient funds or invalid amount. Wi")
                    elif option == '3':
```

```
        print("\nYour balance is:", account.check_balance())
    elif option == '4':
        print("Logging out...")
        break
    else:
        print("Invalid option. Please try again.")
else:
    print("Invalid username or password. Please try again.")
elif choice == '2':
    print("Exiting...")
    break
else:
    print("Invalid choice. Please try again.")

if __name__ == "__main__":
    main()
```

Welcome to the Banking System

1. Login

2. Exit

Enter your choice: 1

Enter username: user123

Enter password: pass123

Login successful.

Select an option:

1. Deposit

2. Withdraw

3. Check Balance

4. Logout

Enter your choice: 1

Enter amount to deposit: 552

Deposit successful.

Select an option:

1. Deposit

2. Withdraw

3. Check Balance

4. Logout

Enter your choice: 1

Enter amount to deposit: 55

Deposit successful.

Select an option:

1. Deposit

2. Withdraw

3. Check Balance

4. Logout

Enter your choice: 3

Your balance is: 607.0

Select an option:

1. Deposit

2. Withdraw

3. Check Balance

4. Logout

Enter your choice:

In []: