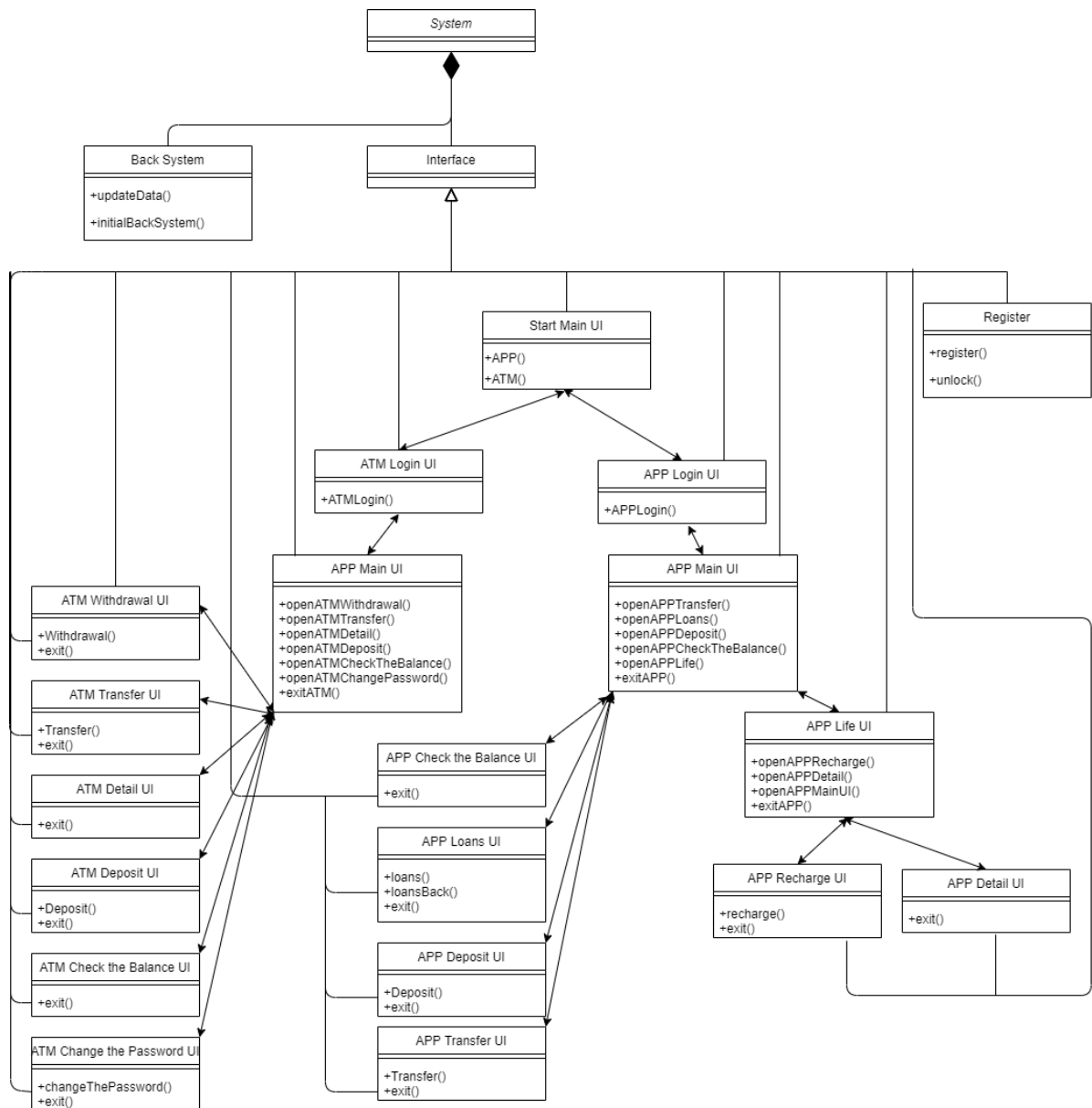


User Manual

User Manual

- 1.System Architecture
- 2.Main manual
 - 2.1.Basic
 - 2.2.ATM login
 - 2.3.ATM main
 - 2.4.ATM transfer UI
 - 2.5.ATM deposit UI
 - 2.6.ATM detail UI
 - 2.7.ATM change the password UI
 - 2.8.ATM withdrawal
 - 2.9.ATM check the balance UI
 - 2.10.APP login UI
 - 2.11.APP main UI
 - 2.12.APP transfer UI
 - 2.13.APP loans UI
 - 2.14.APP check the balance UI
 - 2.15.APP life UI
 - 2.16.APP recharge UI
 - 2.17.APP detail

1.System Architecture

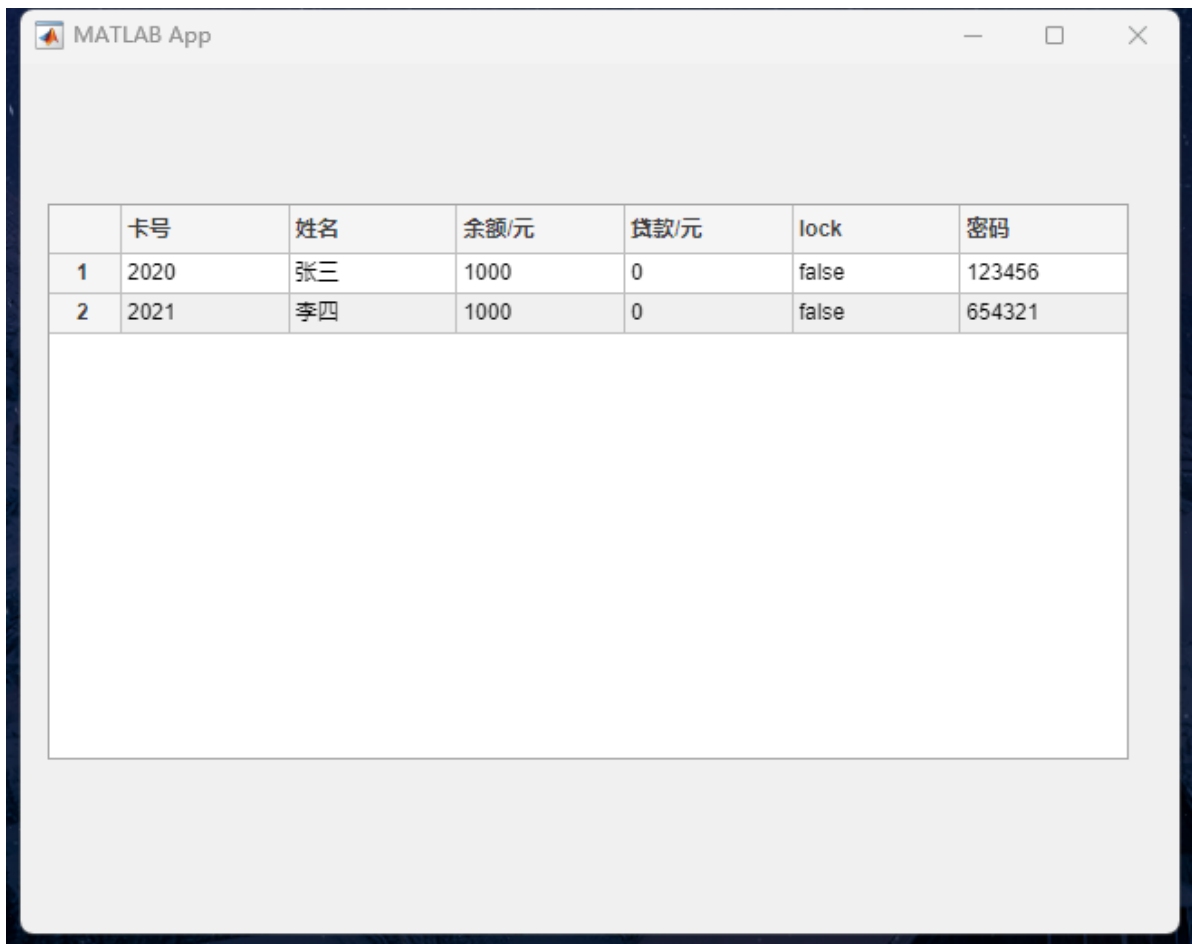


2.Main manual

2.1.Basic

In development folder, open `main.m` and run it. The system will begin to run. At beginning, there will be 3 UI show up.

backstage

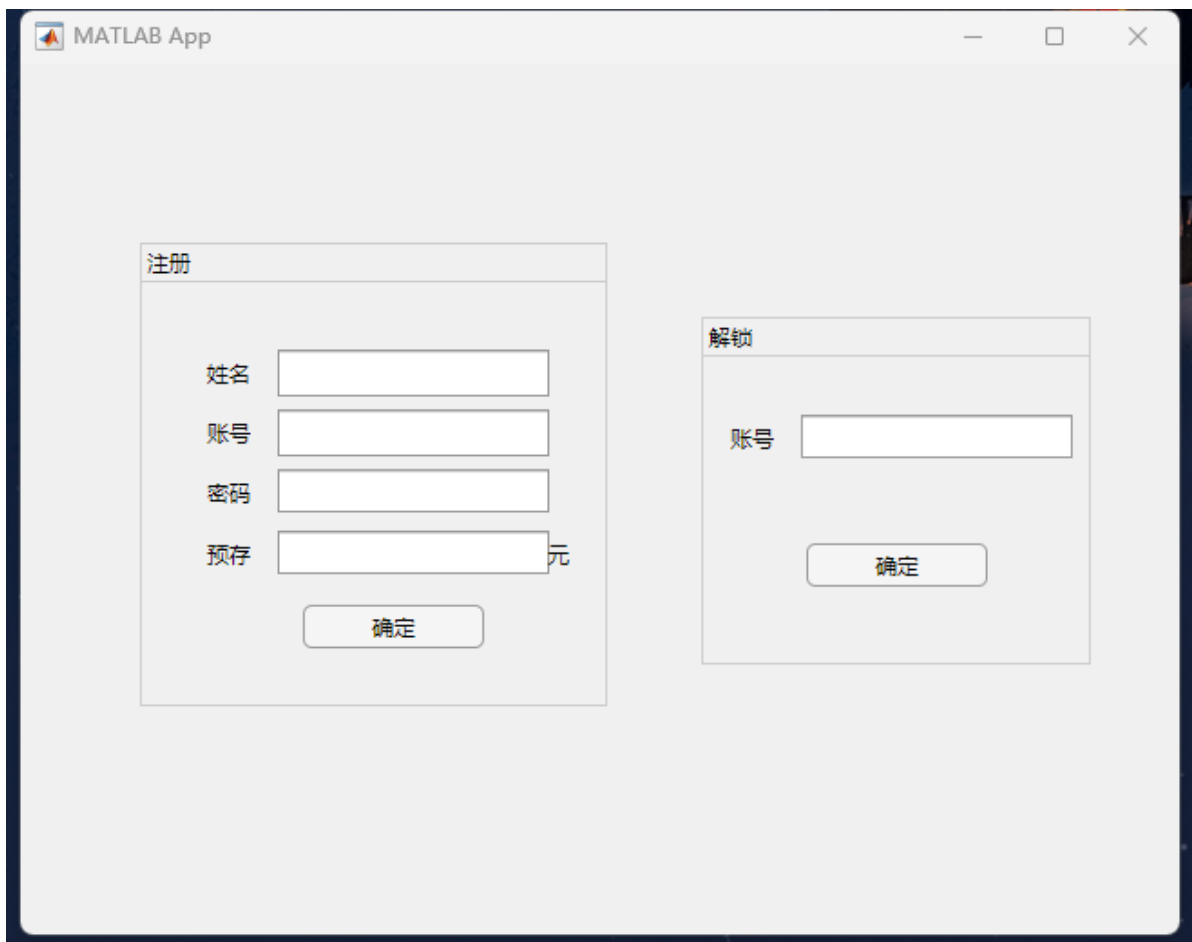


A screenshot of a MATLAB App window. The window has a title bar with the MATLAB logo and the text 'MATLAB App'. Inside the window, there is a table with 7 columns: an index column, '卡号' (Card Number), '姓名' (Name), '余额/元' (Balance/元), '贷款/元' (Loan/元), 'lock', and '密码' (Password). The table contains two rows of data. Below the table is a large empty rectangular box.

	卡号	姓名	余额/元	贷款/元	lock	密码
1	2020	张三	1000	0	false	123456
2	2021	李四	1000	0	false	654321

bank system's customers' information will show at here. (made for bank staffs)

register



A screenshot of a MATLAB App window. The window has a title bar with the MATLAB logo and the text 'MATLAB App'. Inside the window, there are two forms. The first form is titled '注册' (Register) and contains four input fields: '姓名' (Name), '账号' (Account Number), '密码' (Password), and '预存' (Pre-deposit) followed by a '元' (元) unit. The second form is titled '解锁' (Unlock) and contains one input field: '账号' (Account Number). Both forms have a '确定' (Confirm) button at the bottom.

注册

姓名

账号

密码

预存 元

确定

解锁

账号

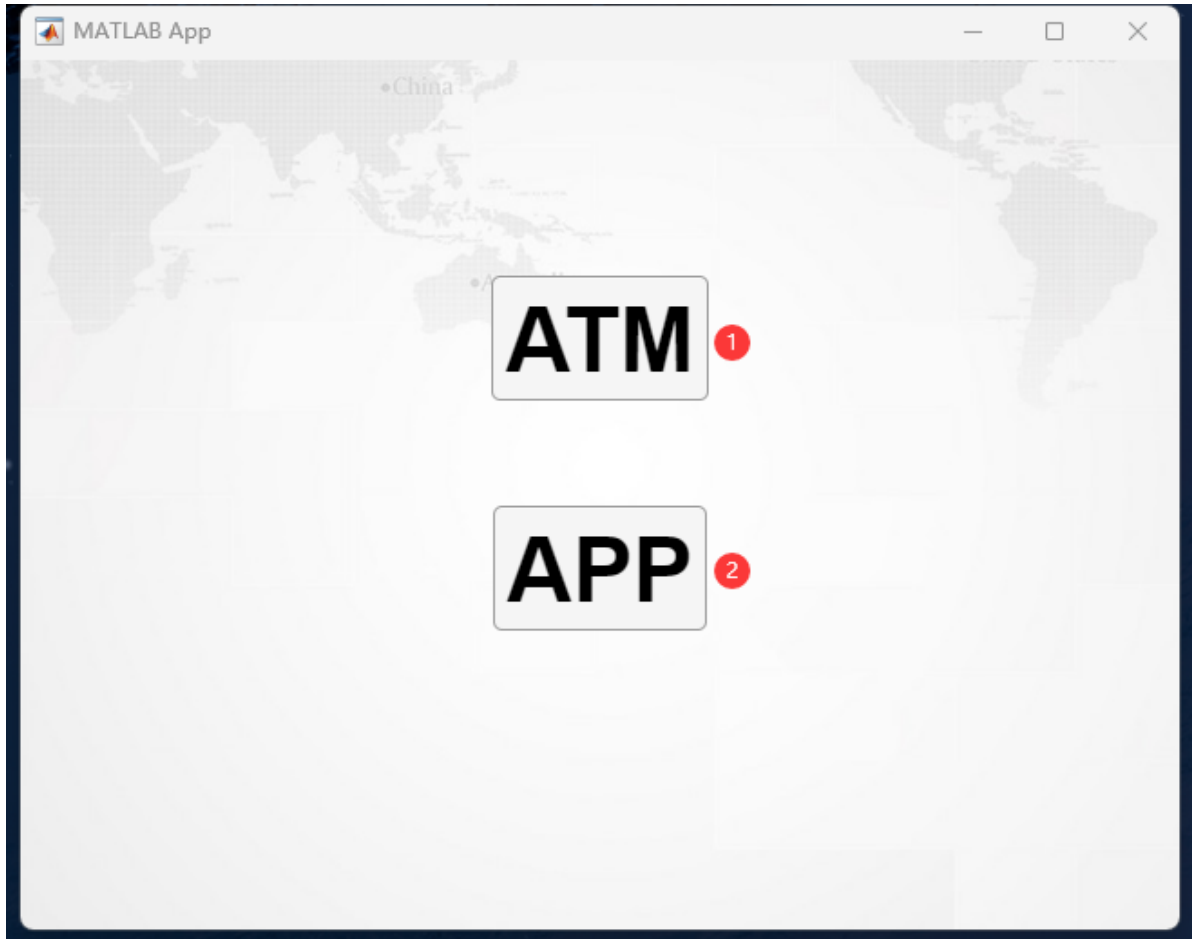
确定

customers can register here and unlock their account. (made for bank staffs)

Type the information needed and press "确定" button, we will verify whether the input is valid. For example, "账号" should not be the same with the account that already exists. Password should be 6 to 18 digits long. "预存" should be a number more than 0. Any invalid input will be blocked.

Type the account that needed to unlock. The account should be in our database and we will set it's "lock" to false. If the account doesn't exist, we will remind that the user does not exist.

main UI



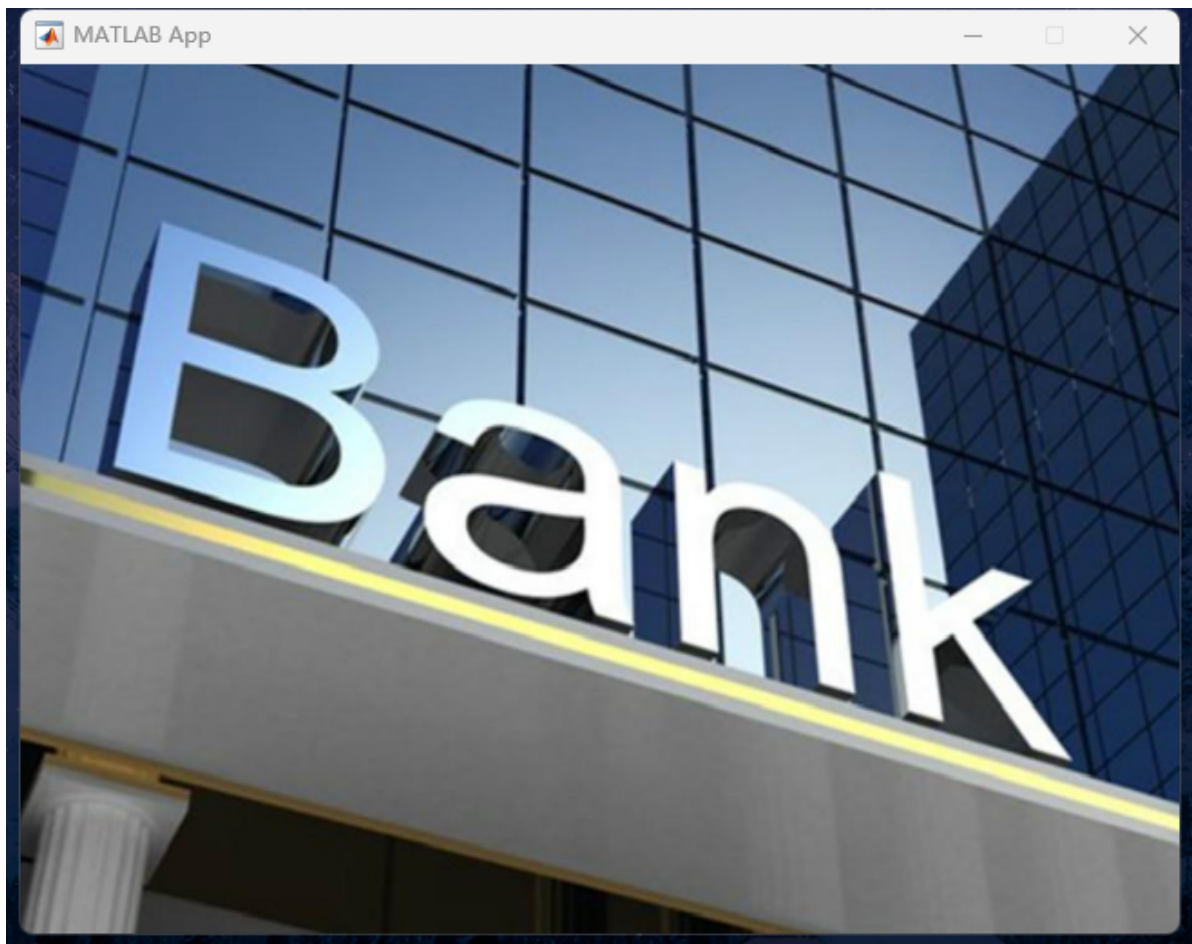
Press button ① to open ATM login UI.

Press button ② to open APP login UI.

2.2.ATM login



1. We set button "z" to represent "张三" and button "l" to represent "李四". When press the key, card be inserted will be show in ①.
2. The password of "张三" is "123456". The password of "李四" is "654321".
3. Press button "登录" to login if the password is correct. If wrong more than 6 times, the current card number will be frozen. You need unlock it on register UI.
4. Because of MATLAB, keys often stone forest. So we set two button to choose which card to insert.
5. Count down 60 seconds. If count to 0, UI will change to AD like below. Press any thing to restore.



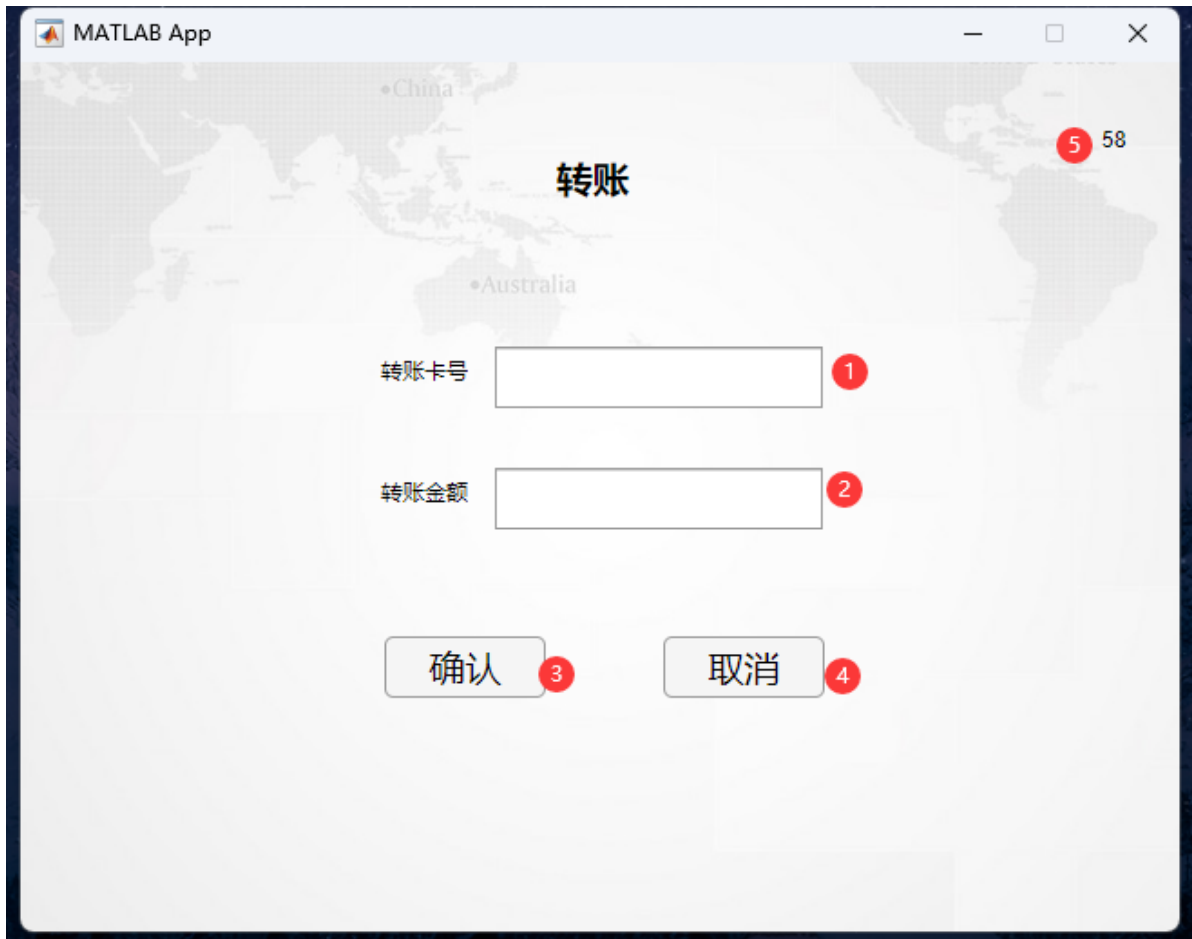
2.3.ATM main



1. press "转账" button, process will open ATM transfer UI.
2. press "存钱" button, process will open ATM deposit UI.

3. press "更改密码" button, process will open ATM change the password UI.
4. press "取款" button, process will open ATM withdrawal UI.
5. press "查看余额" button, process will open ATM check the balance UI.
6. press "退出" button, process will back to ATM login UI.
7. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.4.ATM transfer UI



The image shows a MATLAB App window titled "MATLAB App" with standard window controls (minimize, maximize, close). The app's interface is a light gray background with a faint world map. At the top center, the title "转账" (Transfer) is displayed in large black characters. Below this, there are two input fields. The first is labeled "转账卡号" (Transfer Card Number) and the second is labeled "转账金额" (Transfer Amount). Below these fields are two buttons: "确认" (Confirm) and "取消" (Cancel). Red numbered circles (1-5) indicate the sequence of actions: 1. Input card number, 2. Input amount, 3. Press Confirm, 4. Press Cancel, 5. Countdown timer (58 seconds).

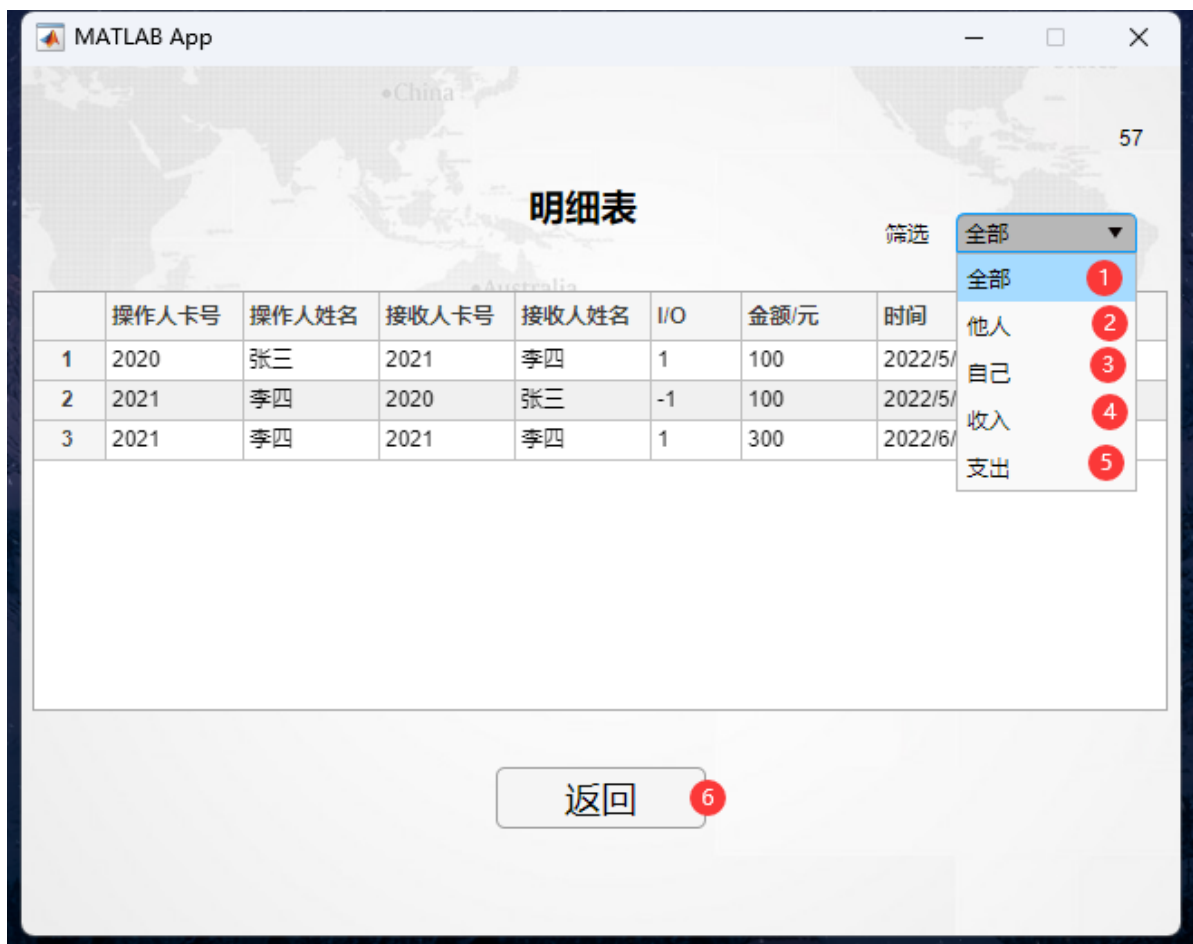
1. Input card number that you want to transfer.
2. Input the amount you want to transfer.
3. Press button ③ to confirm to transfer.
4. Press button ④ to back to main UI.
5. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.5.ATM deposit UI



1. Press key "t" to put 100 in real money and Press key "f" to put 100 in fake money.
2. Press button ② to confirm deposit.
3. Press button ③ to back to main UI.
4. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.6.ATM detail UI



Users can view all their payment list according to different categories here.

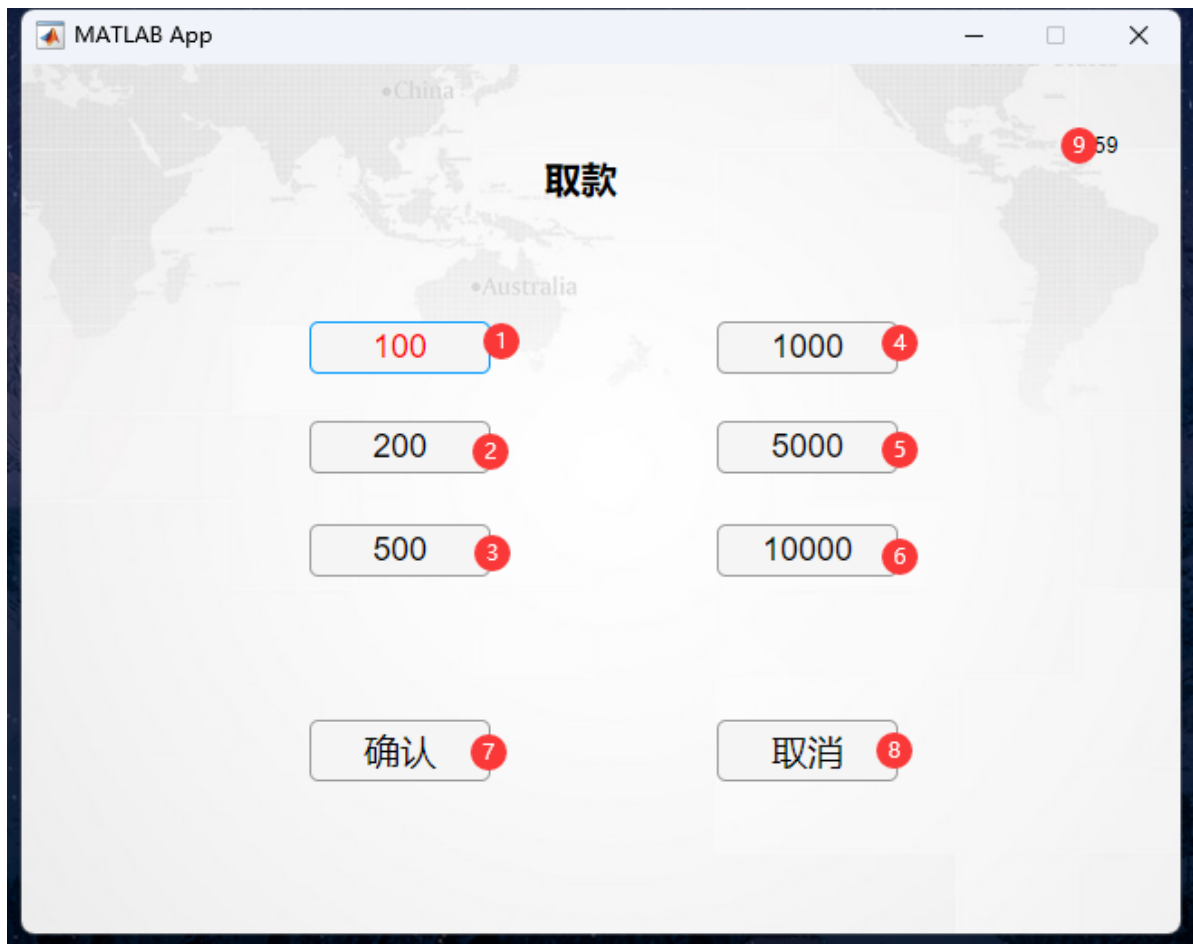
1. Change the value of filter into "全部", the table will show others-operated bills.
2. Change the value of filter into "收入", the table will show incomes.
3. Change the value of filter into "支出", the table will show outcomes.
4. Change the value of filter into "自己", the table will show Self-operated bills.
5. Change the value of filter into "他人", the table will show others-operated bills.
6. Press button ⑥ to back to main UI.
7. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.7.ATM change the password UI



1. Type the old password.
2. Type the new password.
3. Type the old password again.
4. Press button ④ to confirm to change the password
5. Press button ⑤ to back to main UI.
6. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.8.ATM withdrawal



1. withdrawal 100
2. withdrawal 200
3. withdrawal 500
4. withdrawal 1000
5. withdrawal 5000
6. withdrawal 10000
7. Press button ⑦ to confirm to withdrawal
8. Press button ⑧ to back to main UI.
9. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.9.ATM check the balance UI



1. The user's balance.
2. Press button ② to back to main UI.
3. Count down 60 seconds. If count to 0, UI will change to ATM login UI and the current card number will be frozen. You need unlock it on register UI.

2.10.APP login UI



1. We set ID "2020" to represent "张三" and ID "2021" to represent "李四".
2. The password of "张三" is "123456". The password of "李四" is "654321".
3. Press button "登录" to login if the password is correct. If wrong more than 6 times, the current card number will be frozen. You need unlock it on register UI.

2.11.APP main UI



1. press "转账" image, process will open APP transfer UI
2. press "贷款" image, process will open APP loans UI
3. press "余额" image, process will open APP check the balance button UI
4. press "首页" button, nothing happen
5. press "退出" button, process will back to APP login UI
6. press "生活" button, process will open APP change the password UI

2.12.APP transfer UI



1. Input card number that you want to transfer.
2. Input the amount you want to transfer.
3. Press button ③ to confirm to transfer.
4. Press button ④ to back to main UI.

2.13.APP loans UI



1. How many yuan did the user borrow.
2. Type amount.
3. Press to pay back.
4. Press to loan.
5. Press to back.

2.14.APP check the balance UI



1. The user's balance.
2. Press button ② to back to main UI.

2.15.APP life UI



1. recharge type 1
2. recharge type 2
3. recharge type 3
4. press "首页" image, process will open APP main UI
5. press "退出" button, process will back to APP login UI
6. press "生活" button, nothing happen

2.16.APP recharge UI



1. recharge type
2. recharge money
3. Press to confirm recharge
4. Press button ④ to back to life UI.

2.17.APP detail



Users can view all their payment list according to different categories here.

1. Change the value of filter into "全部", the table will show others-operated bills.
2. Change the value of filter into "收入", the table will show incomes.
3. Change the value of filter into "支出", the table will show outcomes.
4. Change the value of filter into "自己", the table will show Self-operated bills.
5. Change the value of filter into "他人", the table will show others-operated bills.
6. Press to back to life UI.