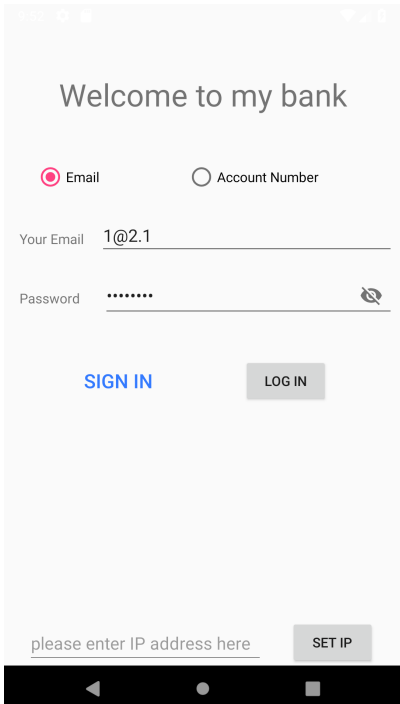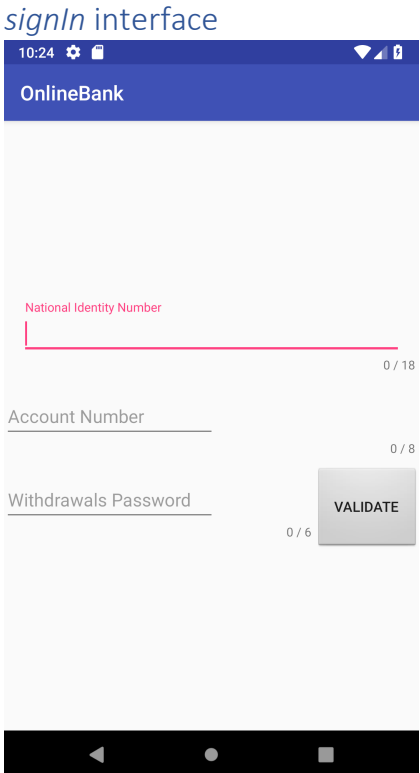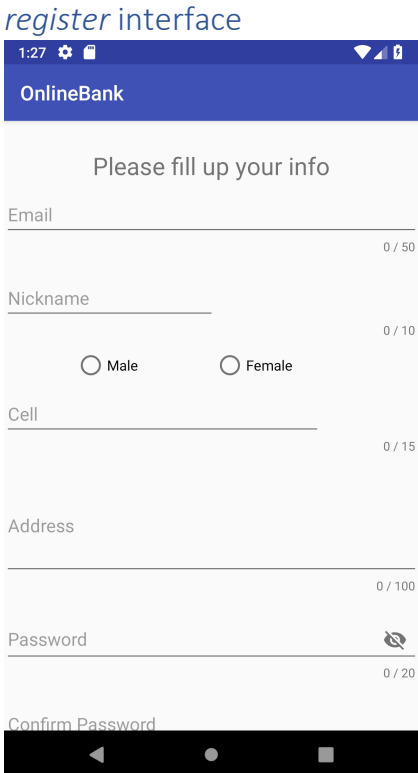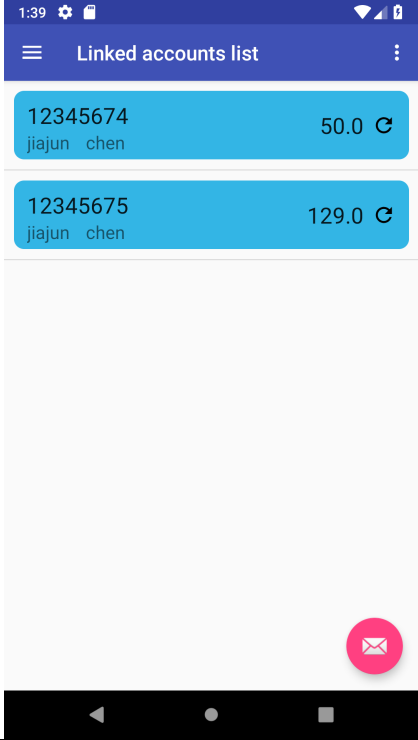# Simple simulated mobile banking App

- The purpose of making this simulated app is totally out of interests on mobile software development and the wish to implementing known knowledge from college into real practice.

- This simulated mobile banking app mocks several basic services provided by mobile banking app on the market, such as account register and login, transfer and payee maintenance.

- The development process includes the development of the application on Android platform, server code and database code.

- The development process goes through four parts:
  1: clients provide their demands;
  2: analysis of the demands from clients;
  3: software design which includes two sub parts, overall design and detailed design.
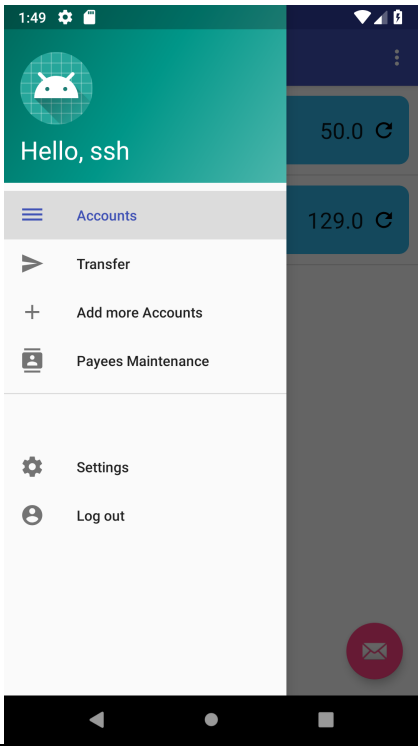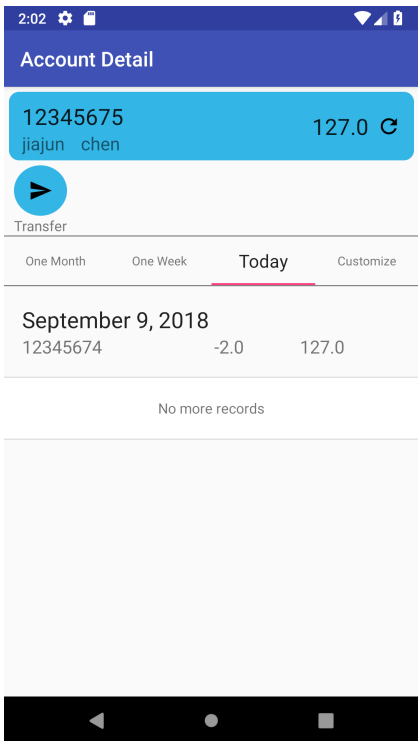 4: software development.

Demo

Interface/View	Interface description
main interface Welcome to my bank ○ Email ○ Account Number Your Email 1@2.1 Password •••••••• 👁 SIGN IN LOG IN please enter IP address here SET IP	User can press Account Number radioButton to switch to account number login option; User can press passwordToggle button to switch between hidden or revealed password; ←used for testing
Android widgets/view used: ViewText/EditText; RadioButton, RadioGroup; TextInputEditText: passwordToggle; Button	
related views	
Press SIGN IN button	Goto Interface *signIn*
Press LOG IN button	Goto Interface *accounts list*

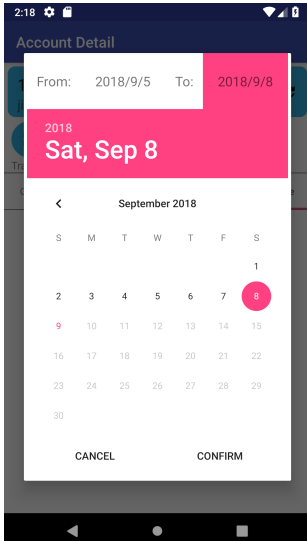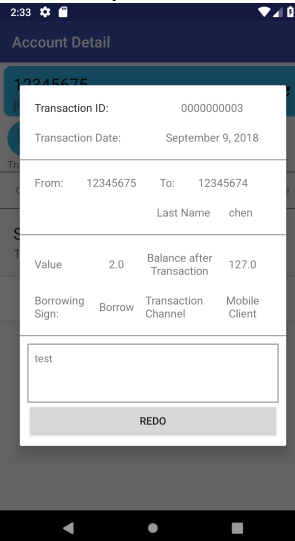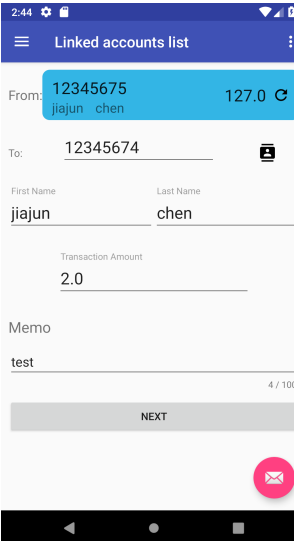| Interface/View	Interface description
signIn interface 10:24 ⚙ ▢　　　▼◢▮ **OnlineBank** National Identity Number 0 / 18 Account Number 0 / 8 Withdrawals Password　　　VALIDATE 0 / 6 ◁　　●　　▢	User enters National Identity Number (e.g. ID), bank account number which the client owns, and withdrawal password of the account entered. Press Button VALIDATE to verify the identity (making sure the user has already owned a bank account in this bank so that he can request to open mobile banking service)
Android widgets/view used: TextInputEditText; Button	
related views	
Press VALIDATE button	Goto Interface *register*
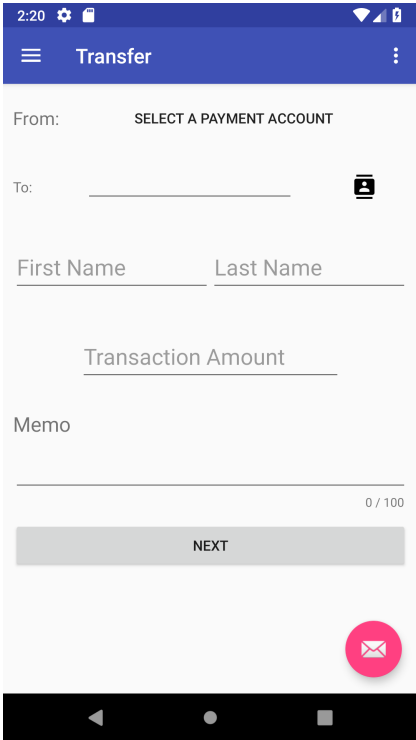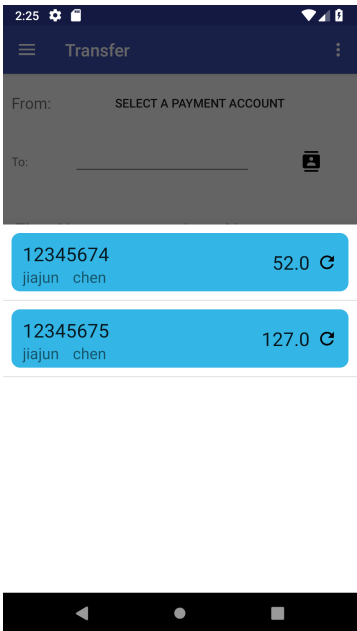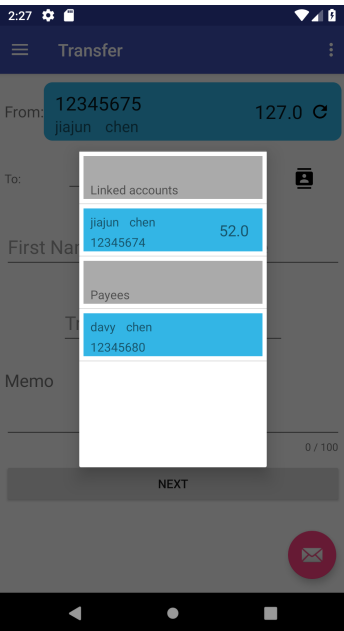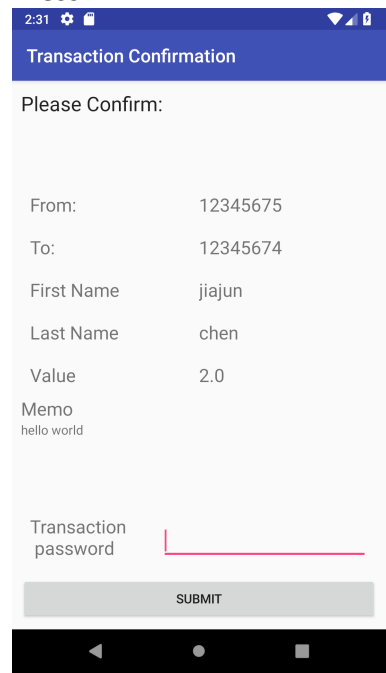
Interface/View	Interface description
register interface 1:27 ⚙ ▢ ▼◢▐ **OnlineBank** Please fill up your info Email _____ 0 / 50 Nickname _____ 0 / 10 ◯ Male ◯ Female Cell _____ 0 / 15 Address _____ 0 / 100 Password ⌀ _____ 0 / 20 Confirm Password ◀ ● ■	Once the user is verified to be a legit bank account owner, he is required to fill personal info to finish mobile banking registration. If the user finishes the registration, the bank account number which the user entered in *signIn* interface will be automatically linked to this mobile banking registration. The user can manage this account through mobile bank app.
Android widgets/view used: ScrollView RadioButton, RadioGroup TextInputEditText; Button	

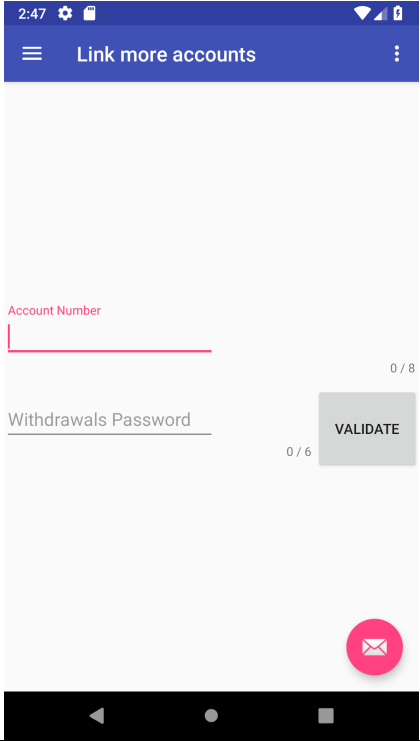| Interface/View	Interface description
Accounts list interface 1:39 ⚙ 🔲 　　　　　▼◢🔋 ≡　Linked accounts list　⋮ 12345674 jiajun　chen　　　　50.0 ⟳ 12345675 jiajun　chen　　　　129.0 ⟳ ✉	If the user logs in successfully, it will bring him to this interface which shows the bank accounts which have been linked to this mobile banking registration. This is a drawer layout. The user can access the drawer by clicking the hamburger button.
Android widgets/view used: Drawer Layout RecyclerView CardView	
related views	
Press Hamburger button	Goto Interface *drawer*
Press any CardView (any account linked)	Goto Interface *Account Detail*

Interface/View	Interface description
drawer interface	The user can navigate to personal profile page by clicking the header of the navigation drawer (the green part), to accounts list, bank transfer, add more accounts, payee maintenance, settings and log out by clicking the respective menu option. New content will be loaded into the existing activity by fragment transaction.

Android widgets/view used:
Navigation Drawer

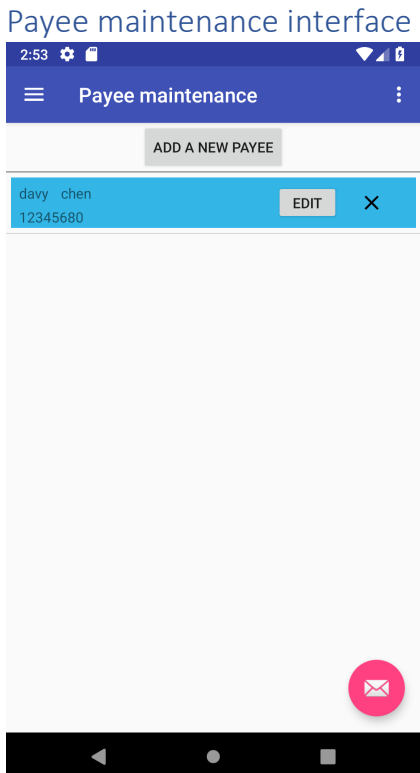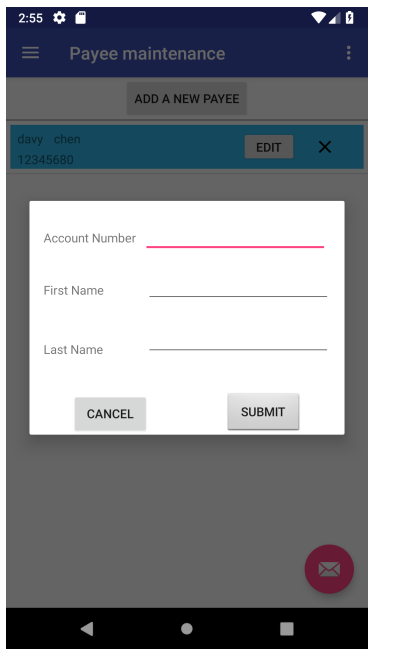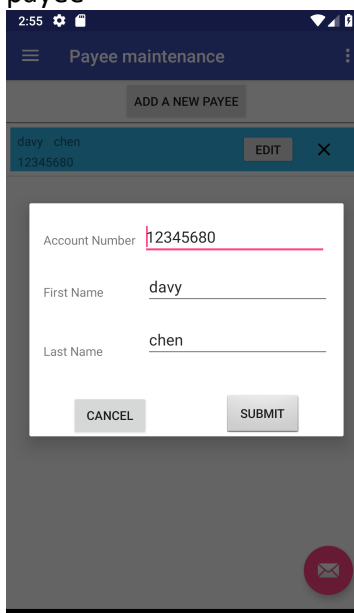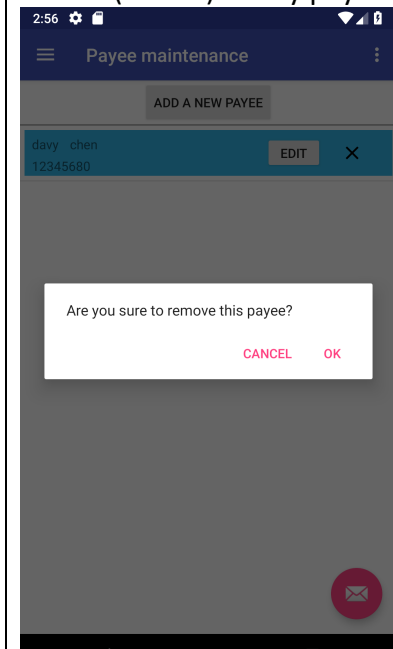| related views	
Press Header of the drawer (green part)	Goto Interface *Personal Profile*
Press Accounts menu button	Goto Interface *Accounts list*
Press Transfer menu button	Goto Interface Transfer
Press Add more Accounts menu button	Goto Interface *Add more Accounts*
Press Payee Maintenance menu button	Goto Interface *Payee Maintenance*
Press Settings menu button	Goto Interface *Settings*
Press Log out menu button	Goto Interface *Log out*

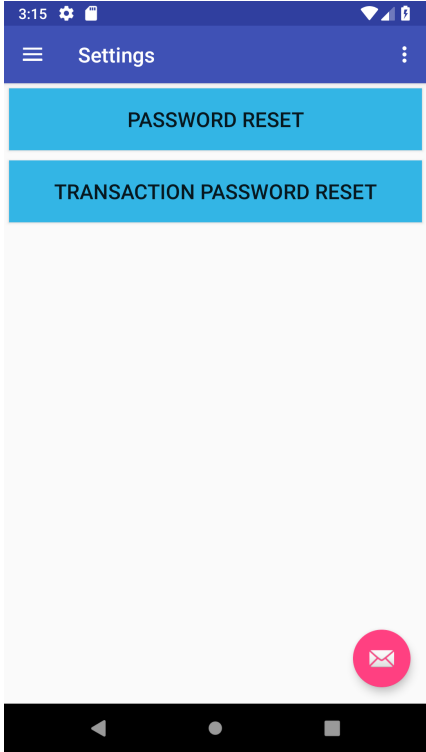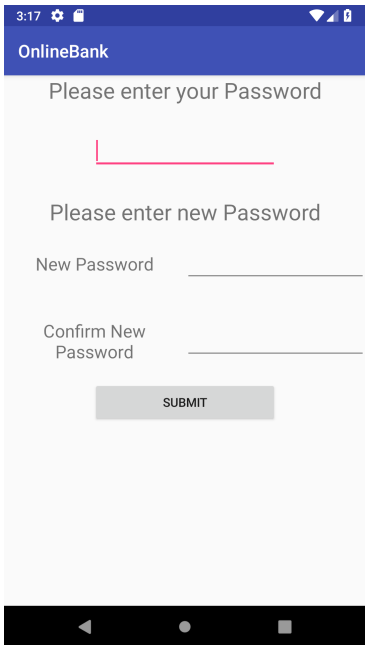| Interface/View	Interface description
Account Detail interface 2:02 ✿ 🗂 ▼◢ 🔋 **Account Detail** **12345675** 127.0 ↻ jiajun chen ➤ Transfer One Month One Week **Today** Customize **September 9, 2018** 12345674 -2.0 127.0 No more records ◀ ● ■	Account detail shows recent transaction. The user can select transaction history in today, one week, one month and a customized date range. Transaction history will load and display 10 transaction detail at a time. The user needs to pull up to request to load more. The user can initiate a new transfer, of which the payment account is this selected account by pressing the Transfer button under the cardView (blue part).
Android widgets/view used: TabLayout, RecyclerView, SwipeRefreshLayout, AlertDialog, DatePicker	
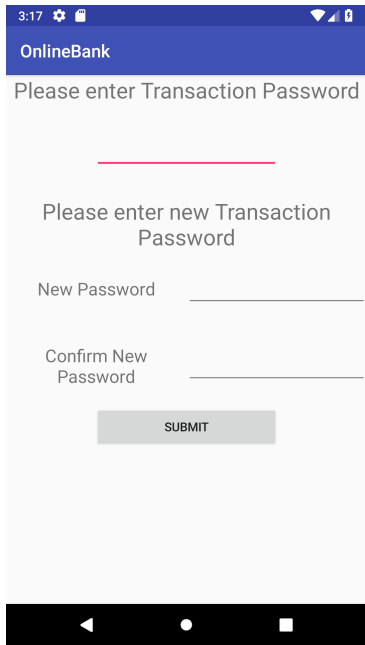
Related views		
Press Transfer button	Goto Interface *Transfer*	
Press Customize tab	Press any transaction detail	

2:18 ✿ 🗂 ▼◢ 🔋
Account Detail
 	
From: 2018/9/5   To: 2018/9/8
 	
2018
Sat, Sep 8
 	
‹   September 2018
S   M   T   W   T   F   S
                    1
2   3   4   5   6   7   **8**
9   10   11   12   13   14   15
16   17   18   19   20   21   22
23   24   25   26   27   28   29
30
CANCEL   CONFIRM
 	
◀   ●   ■
	2:33 ✿ 🗂 ▼◢ 🔋
	Account Detail
	
	Transaction ID: 0000000003
	Transaction Date: September 9, 2018
	
	From: 12345675 To: 12345674
	             Last Name chen
	
	Value 2.0 Balance after 127.0
	              Transaction
	
	Borrowing Borrow Transaction Mobile
	Sign: Channel Client
	
	test
	
	REDO
	
	◀ ● ■
		Redo button will appear only when the user presses a transaction detail of which Borrowing sign is –(Borrow). By pressing Redo, app will navigate to Interface *Transfer* with everything filled up with same text. The next picture shows how it looks.
		
		2:44 ✿ 🗂 ▼◢ 🔋
		☰ Linked accounts list ⋮
		
		From: **12345675** 127.0 ↻
		       jiajun chen
		
		To: 12345674 🗃
		
		First Name Last Name
		jiajun chen
		
		Transaction Amount
		2.0
		
		Memo
		test
		                      4 / 100
		
		NEXT
		
		✉
		
		◀ ● ■
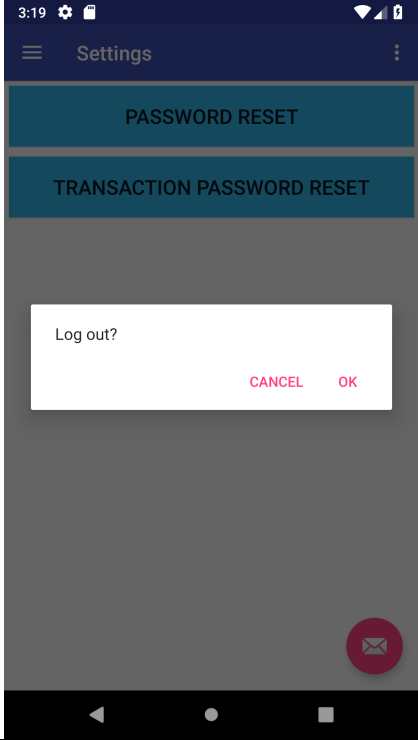
Interface/View	Interface description
Transfer interface	User has to select a payment account, recipient account, name of the recipient account, transaction amount and optionally transaction memo/summary.

Android widgets/view used:
TextInputEditText, BottomSheetDialogFragment
RecyclerView, Button

Related views

Press Select A PAYMENT ACCOUNT button	Press select Recipient Account button	Press NEXT
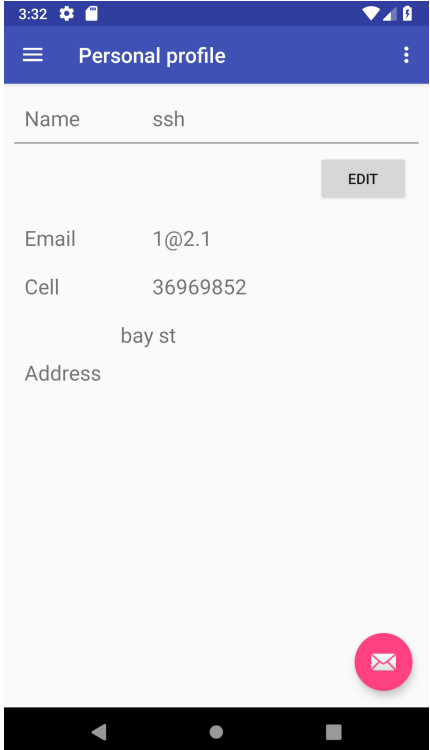
Interface/View	Interface description
Add more Accounts interface 2:47 ⚙ 🔋 ▼◢🔋 ☰ **Link more accounts** ⋮ Account Number _____ 0 / 8 Withdrawals Password _____ 0 / 6 VALIDATE ✉ ◀ ● ■	User enters bank account number which clients owns and withdrawal password of the account entered. Press Button VALIDATE to verify the identity (making sure the user who is using the device is the owner of this bank account)
Android widgets/view used: TextInputEditText; Button	

Interface/View	Interface description
Payee maintenance interface	User can add, delete and edit payees/recipients in this page.

Android widgets/view used: RecyclerView AlertDialog

Related views		
Press ADD A NEW PAYEE button	Press Edit button of any payee	Press X(delete) of any payee

Interface/View	Interface description
Settings interface 3:15 ⚙ ▯ ▼⊿🔋 ☰ **Settings** ⋮ **PASSWORD RESET** **TRANSACTION PASSWORD RESET** ✉	User can change login password and transaction password in Settings

Android widgets/view used: Button

Related views	
Press PASSWORD RESET button 3:17 ⚙ ▯ ▼⊿🔋 OnlineBank Please enter your Password _____ Please enter new Password New Password _____ Confirm New Password _____ SUBMIT	Press TRANSACTION PASSWORD RESET button 3:17 ⚙ ▯ ▼⊿🔋 OnlineBank Please enter Transaction Password _____ Please enter new Transaction Password New Password _____ Confirm New Password _____ SUBMIT

Interface/View	Interface description
Log out interface 3:19 ⚙ 🔋 ▼◢🔋 ☰ Settings ⋮ **PASSWORD RESET** **TRANSACTION PASSWORD RESET** Log out? 　　　　　CANCEL　　OK ✉ ◀　●　■	Ask the user whether he really wants to log out. If yes, current activity will be destroyed, and main/login interface/activity will be started.
Android widgets/view used: AlertDialog	
Related views	
Press OK	Goto Interface *main*

Interface/View	Interface description
Personal Profile interface	This interface shows user's personal info.
	The user can press EDIT to edit some of the personal profile.

Android widgets/view used:
Button

Related views
Press EDIT button