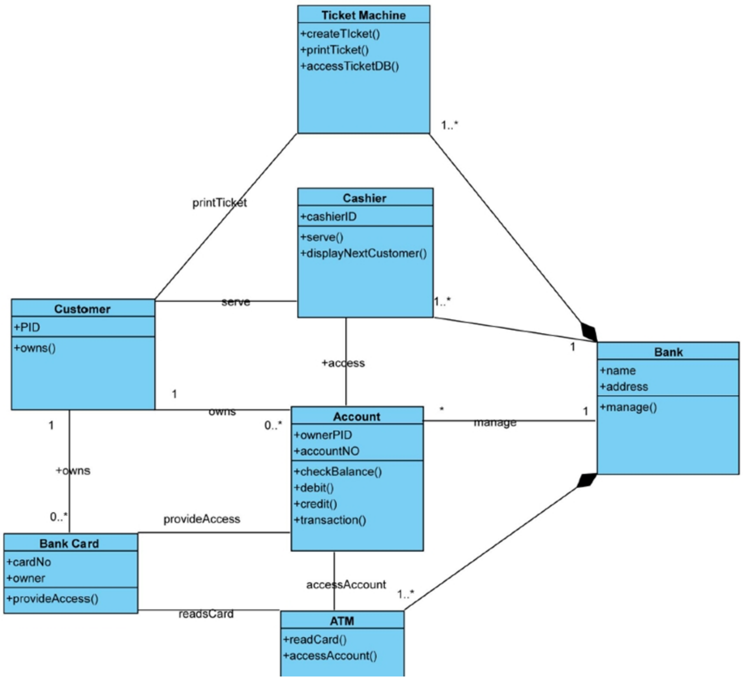
Banking System 测试文档

System Architecture

The system architecture is shown below:



1. Open Account 测试

正常需求测试：

id	password	Valid output	Real output
123	123	success	success

重复性测试：

id	password	Valid output	Real output
123	123	Success (lead to duplicate card id)	Success
123	123		

边界测试：

id	password	Valid output	Real output
1234		Fail	Fail
	1234	Fail	Fail
-123	123	Fail	Fail
12345	-123	Fail	Fail

2. Close Account 测试

正常需求测试：

open account:

id	password	Valid output	Real output

123	123	success	success

close account:

id	password	Account No	Valid output	Real output
123	123	1	Success	Success

open account:

id	password	Valid output	Real output
123	123	success	success

close account:

id	password	Account No	Valid output	Real output
123	123	2	Fail	Fail

open account:

id	password	Valid output	Real output
123	123	success	

close account:

id	password	Account No	Valid output	Real output
123456	123	1	Fail	Fail

open account:

id	password	Valid output	Real output
123	123	success	success

close account:

id	password	Account No	Valid output	Real output
123	123456	1	Fail	Fail

边界测试：

miss account：

close account:

id	password	Account No	Valid output	Real output
	123456	1	Fail	Fail

miss password：

close account:

id	password	Account No	Valid output	Real output
123		1	Fail	Fail

3. Deposit 测试：

open account:

Id	password	Valid output	Real output
123	123	Success & Account id	Success

deposit:

Account No.	Amount	Valid output	Real output
Account id	100	Success	Success

边界测试：

deposit:

Account No.	Amount	Valid output	Real output
Id that no created: eg. 10000	100	Fail	Fail
Account id	-1	Fail	Fail
	1	Fail	Fail

4. Withdraw 测试：

open account:

Id	**password**	**Valid output**	**Real output**
123	123	Success & Account id	

deposit:

Account No.	Amount	Valid output	Real output
Account id	100	Success	Success

withdraw:

Account No.	Password	Amount	Valid output	Real output
Account id	123	100	Success	Success

边界测试：

withdraw:

Account No.	Password	Amount	Valid output	Real output
Account id	123	1000	Fail	Fail
Account id	123	-1	Fail	Fail

2. Test_UI:

test_main.m:

T1: Unit Test:

T1.1: Open Account Unit Test

T1.1.1: Test normal:

```
function test_OpenAccount_normal(testCase)
end
```

	Test Case T1.1.1

Input	testCase.App = UI_Clerk_exported;
	db = Banking_system;

State	card_id = db.db_account('nextCardID') - 1;
Expected Output	Account added successfully.

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.1.2: test_OpenAccount_duplicate

```
function test_OpenAccount_normal(testCase)
end
```

	Test Case T1.1.2

Input	testCase.App = UI_Clerk_exported;
	db = Banking_system;

State	card_id = db.db_account('nextCardID') - 1;
Expected Output	Account added successfully.

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.1.3: test_OpenAccount_missPwd

```
function test_OpenAccount_missPwd (testCase)
end
```

	Test Case T1.1.3
Input	testCase.App.Identity_Input = 123
State	testCase.App.Identity_Input = 123
Expected Output	Password cannot be emtpy

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.1.4: test_OpenAccount_missAccount

```
function test_OpenAccount_missAccount (testCase)
end
```

	Test Case T1.1.4
Input	testCase.App. PW_Input = 123
State	testCase.App. PW_Input = 123
Expected Output	Id cannot be emtpy

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2: Close Account Unit Test

T1.2.1: test_CloseAccount_normal

```
function test_CloseAccount_normal (testCase)
end
```

	Test Case T1.2.1
Input	testCase.press(testCase.App.open_account);

	testCase.App.Identity_Input = 123；
	testCase.App.PW_Input = '123'

State	New test account
Expected Output	Account removed successfully.

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2.2: test_CloseAccount_WNum

```
function test_CloseAccount_WNum (testCase)
end
```

	Test Case T1.2.2

Input	testCase.press(testCase.App.open_account);
	testCase.App.Identity_Input = 123；
	testCase.App.PW_Input = '123'

State	New test account Wrong input remove account
Expected Output	Account removed Failed

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2.3: test_CloseAccount_WAccount

```
function test_CloseAccount_WAccount (testCase)
end
```

	Test Case T1.2.3
Input	Account is not your account
State	Wront account
Expected Output	Account removed Failed

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2.4: test_CloseAccount_WPwd

```
function test_CloseAccount_WPwd (testCase)
end
```

	Test Case T1.2.4
Input	Wrong password
State	Input error
Expected Output	Account removed Failed

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2.5: test_CloseAccount_missAccount

```
function test_CloseAccount_missAccount (testCase)
end
```

	Test Case T1.2.5
Input	Missing account
State	Input error
Expected Output	Id cannot be emtpy

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.2.6: test_CloseAccount_missPwd

```
function test_CloseAccount_missPwd (testCase)
end
```

	Test Case T1.2.6
Input	Missing password
State	Input error
Expected Output	Password cannot be emtpy

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.3: Deposit Unit Test

T1.3.1: test_Deposit_normal

```
function test_Deposit_normal (testCase)
end
```

	Test Case T1.3.1
Input	Input deposit normal info
State	Deposit money
Expected Output	Money added successfully

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.3.2: test_Deposit_WAccount

```
function test_Deposit_WAccount (testCase)
end
```

	Test Case T1.3.2
Input	Input wrong info
State	Withdraw money
Expected Output	Money add failed

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.4: Withdraw Unit Test

T1.4.1: test_Withdraw_normal

```
function test_Withdraw_normal(testCase)
end
```

	Test Case T1.4.1
Input	Input withdraw normal info
State	Input error
Expected Output	Money withdrawn successfully

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.5: Transfer Unit Test

T1.5.1: test_Transfer_normal

```
function test_Transfer_normal (testCase)
end
```

	Test Case T1.5.1
Input	Input transfer normal info
State	Input successfully
Expected Output	Money transfered successfully

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.6: change password Unit Test

T1.6.1: test_changepwd_normal

```
function test_changepwd_normal (testCase)
end
```

	Test Case T1.6.1
Input	Input change password normal info
State	Input successfully
Expected Output	Password changed successfully.

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.7: ATM Unit Test

T1.7.1: test_ATM_normal

```
function test_ATM_normal (testCase)
```

```
end
```

	Test Case T1.7.1
Input	Input ATM normal info
State	Input successfully
Expected Output	Money added successfully

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.7.2: test_ATM_withdraw

```
function test_ATM_withdraw (testCase)
end
```

	Test Case T1.7.2
Input	Input ATM normal info
State	Input successfully
Expected Output	Money withdraw successfully

- Test coverage: 1/1=100%
- Test result: 1 passed

T1.8: getTicket Unit Test

T1.8.1: test_ATM_withdraw

```
function get_ticket_normal (testCase)
end
```

	Test Case T1.8
Input	No input
State	Get ticket number
Expected Output	Ticket number is **

- Test coverage: 1/1=100%
- Test result: 1 passed