

Disain Test Case

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Obyektifitas Materi

- Memberikan landasan yang cukup dalam memahami *test case* sebagai salah satu dasar dari testing.
- Memberikan dasar-dasar metode disain *test case* beserta contoh ilustrasinya.

Materi

- Test Case
- Blackbox Testing
- White Box Testing

Definisi *Test Case*

- ***Test case*** merupakan suatu tes yang dilakukan berdasarkan pada suatu inisialisasi, masukan, kondisi ataupun hasil yang telah ditentukan sebelumnya

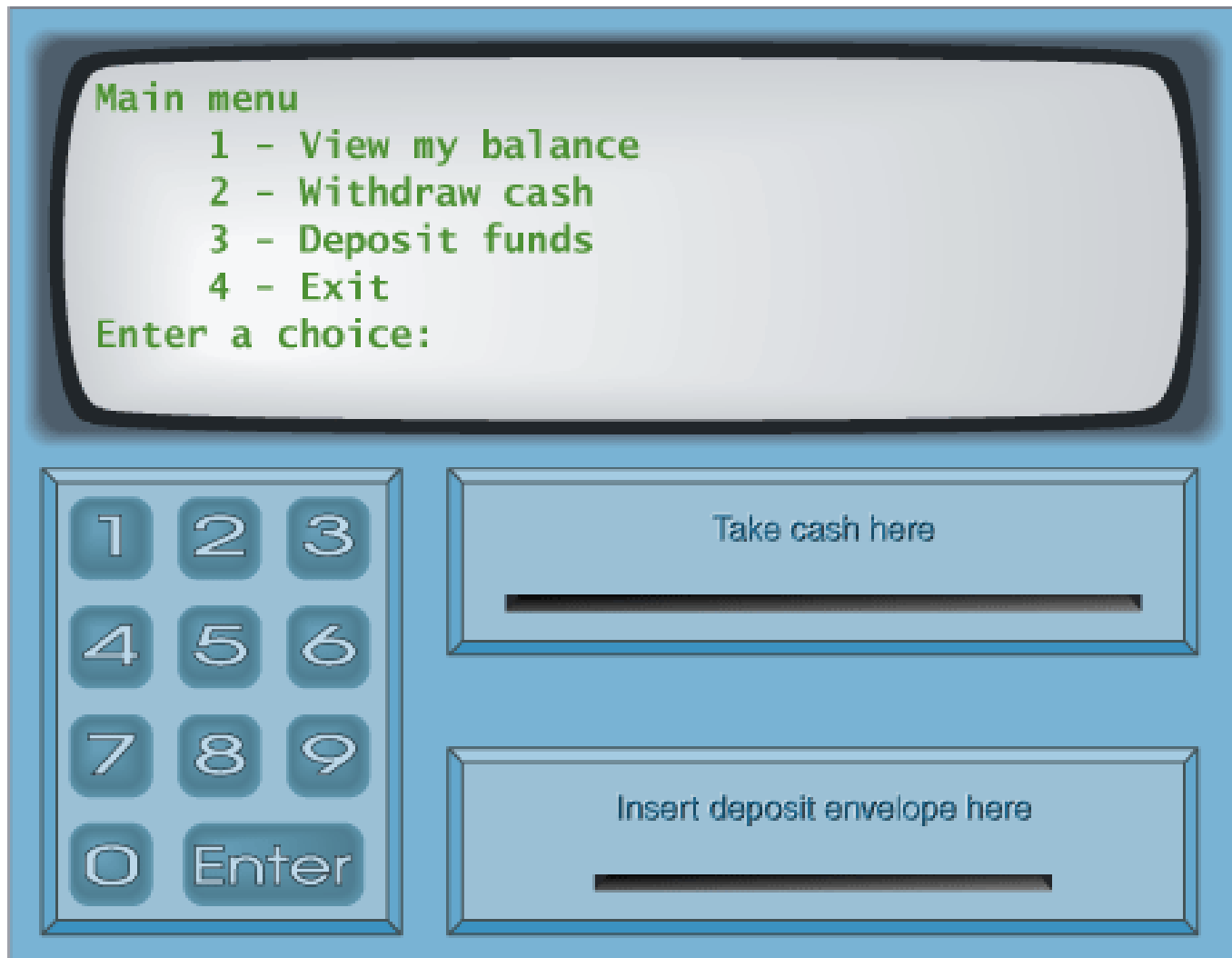
Kegunaan *test case*

- Untuk melakukan testing kesesuaian suatu komponen terhadap spesifikasi – ***Black Box Testing***.
- Untuk melakukan testing kesesuaian suatu komponen terhadap disain – ***White Box Testing***



Studi Kasus: ATM System

ATM System



The image shows a stylized representation of an ATM interface. It features a light blue background with a darker blue border. At the top is a large, rounded rectangular screen displaying a menu in green text. Below the screen, on the left, is a numeric keypad with buttons for digits 1-9, 0, and an 'Enter' button. To the right of the keypad are two horizontal slots for cash and deposit envelopes, each with a label above it.

Main menu

- 1 - View my balance
- 2 - Withdraw cash
- 3 - Deposit funds
- 4 - Exit

Enter a choice:

1 2 3

4 5 6

7 8 9

0 Enter

Take cash here

Insert deposit envelope here

ATM System

Layar

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Masukkan PIN:

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Utama

1. Melihat Saldo
2. Mentransfer Uang
3. Mengambil Uang
4. Logout

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Melihat Saldo

1. Saldo anda adalah

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Mentransfer Uang

1. No Account Penerima:

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Mentransfer Uang

1. Jumlah uang yang dikirim:

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Mentransfer Uang

1. Uang berhasil terkirim

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Mengambil Uang

1. Jumlah uang yang diambil:

Kotak Uang

Kotak Kartu

Kotak Kuitansi

Menu Mengambil Uang

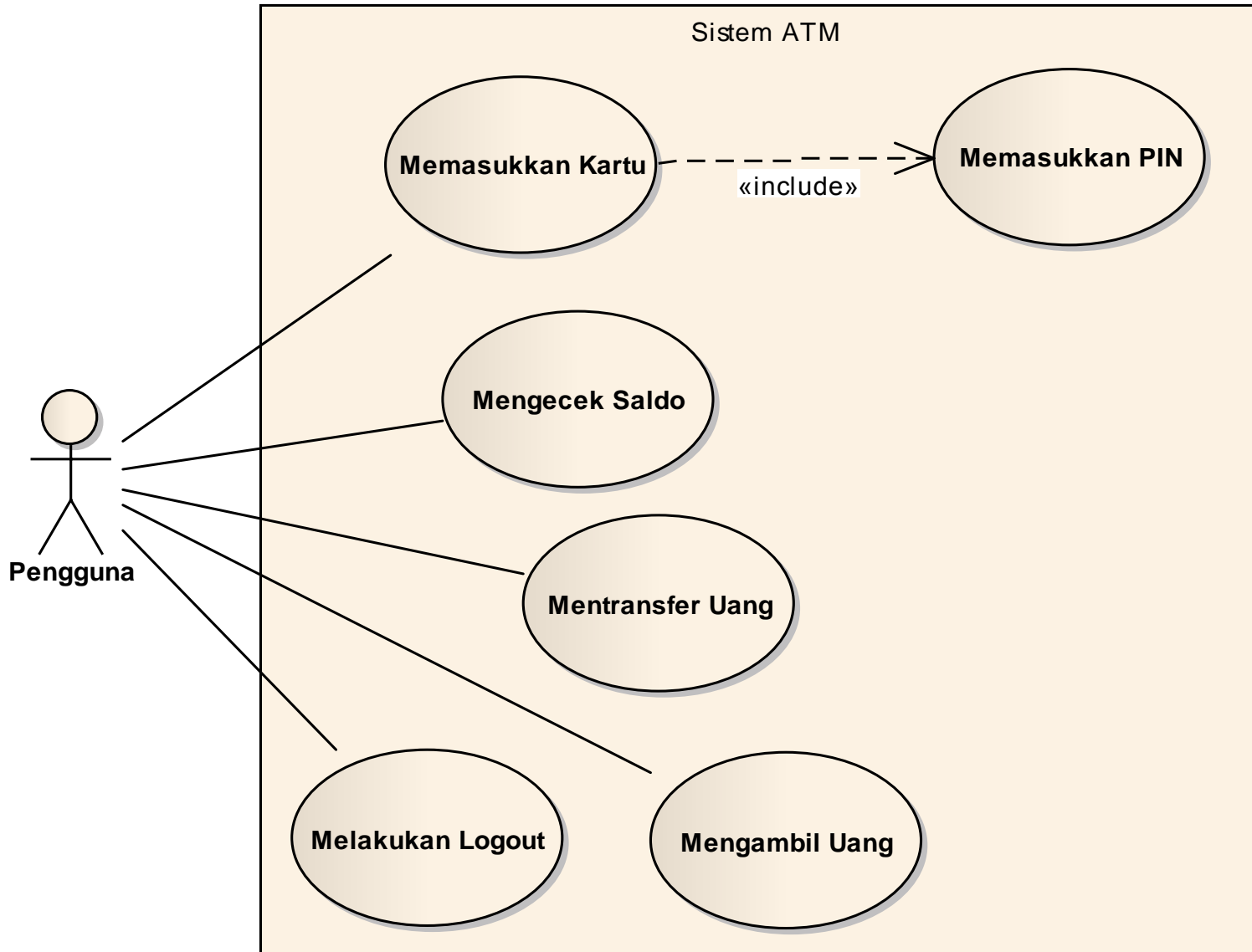
Uang berhasil diambil

Kotak Uang

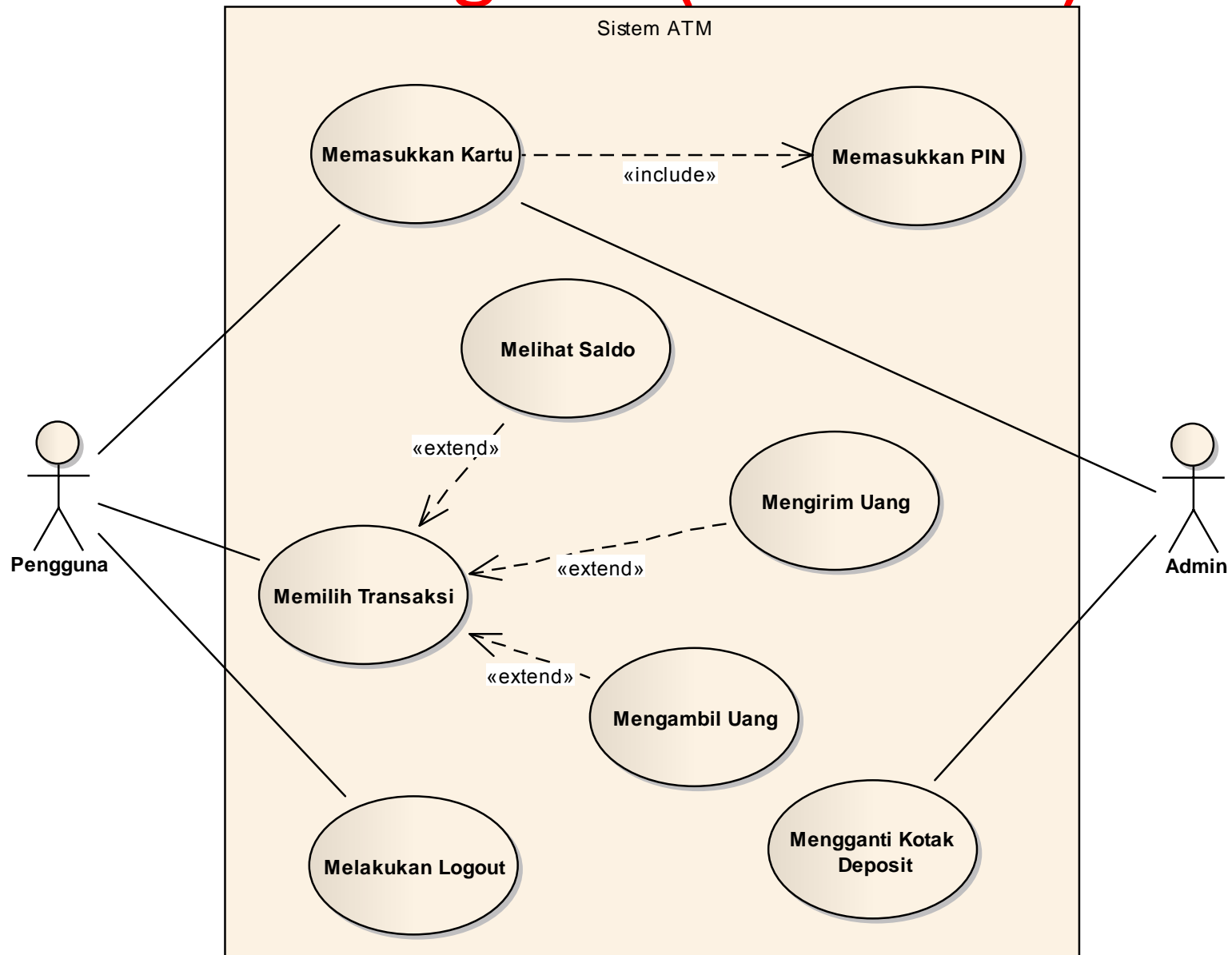
Kotak Kartu

Kotak Kuitansi

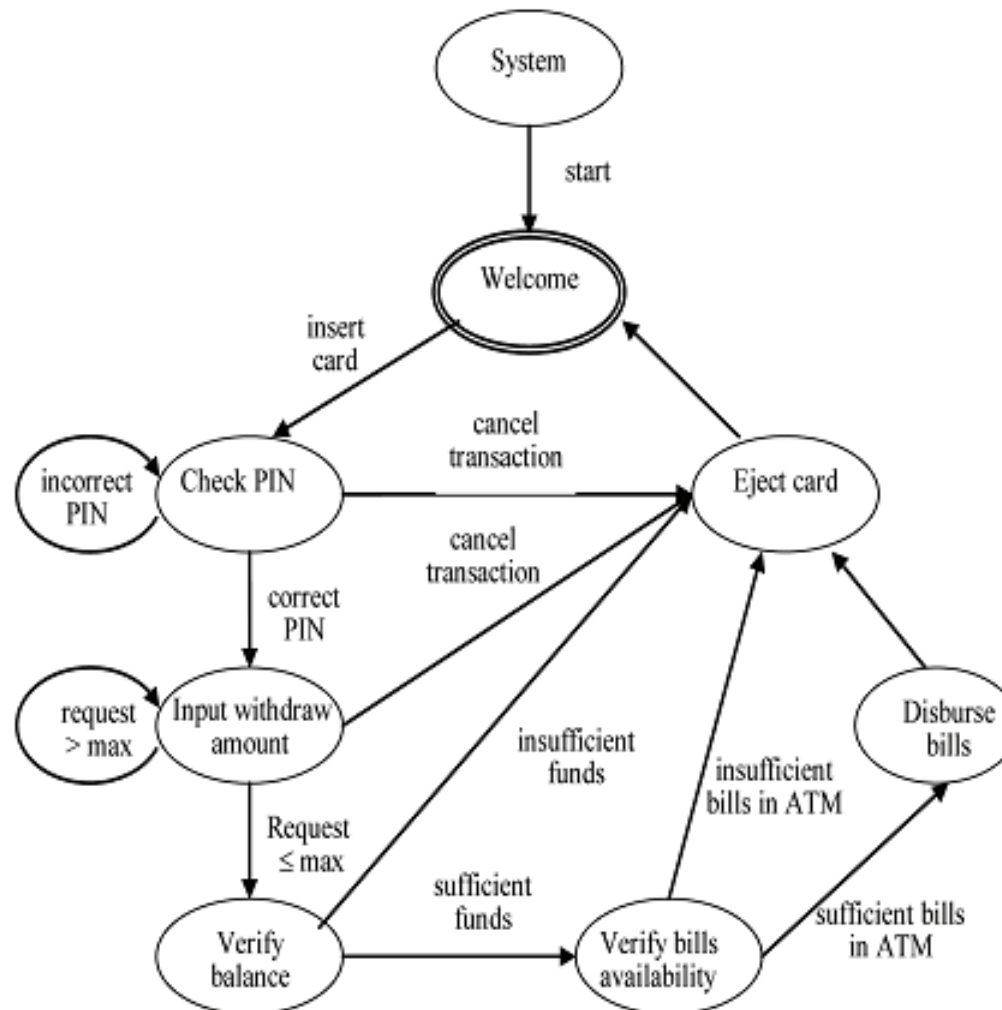
Use Case Untuk Test Case



Use Case Diagram (Alternatif)



Gambaran Umum Sistem ATM dalam Penarikan Uang



Bagaimana Membuat Test Case
Sistem ATM tersebut?

Contoh Template Test Case

Test Case Template (Doc:T_01)

Test Case #:	Test Case Name:	Page: 1 of ..
System:	Subsystem:	
Designed by:	Design Date:	
Executed by:	Execution Date:	
Short Description:		

Pre-conditions

Step	Action	Expected System Response	Pass/ Fail	Comment
1				
2				

Post-conditions

Contoh Test Case 1 (Black Box)

Test Case Example1 (simple test)

Test Case #: 2.2

Test Case Name: Change PIN

Page: 1 of 1

System: ATM

Subsystem: PIN

Designed by: ABC

Design Date: 28/11/2004

Executed by:

Execution Date:

Short Description: Test the ATM Change PIN service

Pre-conditions

The user has a valid ATM card - The user has accessed the ATM by placing his ATM card in the machine

The current PIN is 1234

The system displays the main menu

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Click the 'Change PIN' button	The system displays a message asking the user to enter the new PIN		
2	Enter '5555'	The system displays a message asking the user to confirm (re-enter) the new PIN		
3	Re-enter '5555'	The system displays a message of successful operation The system asks the user if he wants to perform other operations		
4	Click 'YES' button	The system displays the main menu		
5	Check post-condition 1			

Post-conditions

1. The new PIN '5555' is saved in the database

Test Case Example2 (complex test may be divided into more than test cases)

Test Case #: 2.3

Test Case Name: Change PIN

Page: 1 of 1

System: ATM

Subsystem: PIN

Designed by: ABC

Design Date: 28/11/2004

Executed by:

Execution Date:

Short Description: Test the ATM Change PIN service

Pre-conditions

The user has a valid ATM card - The user has accessed the ATM by placing his ATM card in the machine

The current PIN is 1234

The system displays the main menu

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Click the 'Change PIN' button	The system displays a message asking the user to enter the new PIN		
2	Enter '5555'	The system displays a message asking the user to confirm (re-enter) the new PIN		
3	Re-enter '5555'	The system displays a message of successful operation The system asks the user if he wants to perform other operations		
4	Click 'YES' button	The system displays the main menu		
5	Check post-condition 1			
6	Repeat steps 1,2,3 using another PIN say '6666' and click 'NO' button	The system is exited and displays a greeting message asking the user to place his ATM card in the machine		
7	Check post-condition 2			
8	Repeat steps 1,2, using another PIN say '7777'	The system displays a message asking the user to confirm (re-enter) the new PIN		
9	Enter a wrong confirmation (say '9876')	The system displays a message of unsuccessful operation and asks the user to confirm the correct PIN		
10	Re-enter '7777'	The system displays a message of successful operation The system asks the user if he wants to perform other operations		
	Click 'NO' button	The system is exited and displays a greeting message		
	Check post-condition 3			

Post-conditions

1. The new PIN '5555' is saved in the database
2. The new PIN '6666' is saved in the database
3. The new PIN '7777' is saved in the database

Buatlah Test Case dari sistem ATM Tersebut!

Contoh permasalahan

Penarikan uang :

- Masukkan kartu ATM
- Masukkan PIN
- Pilih jumlah uang yang akan di ambil
- Mengambil uang yang di pilih

kebutuhan fungsional : ATM digunakan untuk mengambil uang

kebutuhan non fungsional : per ATM hanya mampu digunakan oleh satu user pada waktu penarikan uang