

Use Case “Make transaction”

1. Brief description

This use case describes the interaction between software, the user and the interbank when transaction occurred

2. Actors

2.1. Customer

2.2. Interbank

3. Preconditions

After user scan a barcode to rent bike or return bike

4. Basic Flow of Events

Step 1. The software display the payment screen (see Table 1)

Step 2. The user submit their card information

Step 3. The software checks the format of the information

Step 4. The software asks the Interbank to make transaction

Step 5. The Interbank processes the transaction

Step 6. The software display and save transaction information (see Table 2)

Step 7. The software sends an email of transaction info to the user

5. Alternative flows

Table N-Alternative flows of events for UC Make transaction

No	Location	Condition	Action	Resume location
1.	At step 3	If the transaction info have invalid format	<ul style="list-style-type: none">The software inform customers that the transaction info have invalid format	At step 1
2.	At step 4	If the transaction info is invalid	<ul style="list-style-type: none">The software inform customers that the info is invalid	At step 1
3	At step 5	If the balance is not enough	<ul style="list-style-type: none">The software inform customers that the balance is not enough	At step 1

6. Input data

Table 1-Input data of the payment method

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Card holder name		Yes		NGUYEN VU MINH
2.	Card number		Yes		1254 2679 5624 7824

No	Data fields	Description	Mandatory	Valid condition	Example
3.	Issuing bank		Yes		vietinbank
4.	Expiration date		Yes	Consist of month and last 2 digits of year	10/25
5.	Security code		Yes		564

7. Output data

Table 2-Output data of the successful transaction screen

No	Data fields	Description	Display format	Example
1.	Transaction ID	Unique ID for the transaction	<ul style="list-style-type: none"> Unique string of number and uppercase characters 	3CWK98J37FK9
2.	Card holder name			NGUYEN VU MINH
3.	Changed amount	Total money the customer has paid for the order	<ul style="list-style-type: none"> Comma for thousands separator Positive integer Right alignment 	100,000
4.	Transaction description	Description of the order		Rent a standard bike
5.	Balance	Amount of money left in customer's bank account	<ul style="list-style-type: none"> Comma for thousands separator Positive integer Right alignment 	123,456,789
6.	Transaction data and time	Date and time of the transaction	<ul style="list-style-type: none"> In the format of hour:minute day/month/year 	18:30 28/02/2021

8. Postconditions

If success then the lock on the scanned bike will be unlocked and the system will deduct 40% of the value of the bike in user's card or account.

