Object-Oriented Analysis and Design Laboratory
Session 3: Use Case and Scenario

Project name: Easy Wallet

System Analyst: Sirapop Issariyodom 58090041

Project Owner: Thanakorn Tragoonrungsi 58090017

Actors:
1.) Payer

2.) Payee

3.) Shop partner

Use cases:
1.) Register

2.) Login

3.) Edit Profile

4.) Search promotion

5.) Receive promotion

6.) Use promotion

7.) Pay Payment

8.) Create payment

9.) Look and search history

10.) User authentication

11.) Setting

1.) Brief use case models for all use cases

1.) Register

       1.) Brief use cases

User can apply to use this application by entering name, surname, email, phone number, and information of bank account. Then, user can create his own id, password, and face scanning. After that, the system will send the confirmation message to the phone number or email to confirm the user.

2.) Login

       1.) Brief use cases

User must login before using this application. After login, the application will authenticate user by using fingerprint scan and face scan depending on user setting.

3.) Edit profile

       1.) Brief use case

User can change some information such as bank account, id, or password. User can add and delete bank account but there is at least one bank account in the user. In addition, there is some information that user cannot change such as, name and surname. After user save the new information will update.

4.) Search promotion

       1.) Brief use case

User can search the promotion by select the filter such as search by shop name, or search by time. Moreover, user can add favorite for the shop when there is new promotion from the favorite shop, user will receive the notification.

5.) Receive promotion

       1.) Brief use case

After user select the promotion, use can click to receive the promotion for using. Then user can go to check in the promotion of the account.

6. Use promotion

       1.) Brief use case

When user shop or pay something with shop partner and it has the condition following the promotion in the user's promotion which already received. The application will show that user can use this promotion.

7.) Pay payment

       1.) Brief use case

User chooses the bank account or other financial transaction application to pay this current payment. Then, shop partner or payee will scan the QR code of user. The information of payment will show on user screen. After that user must scan his fingerprint to authenticate himself and confirm this payment. But if the amount of money in choosing bank account is not enough or user cancel the payment, the payment is going to fail.

8.) Create payment

       1.) Brief use case

When user is going to pay payment. The user or payer will select the bank account and show the QR code to Payee or shop partner. Then Payee will scan the QR code of payer to send the information.

9.) Look and search history

       1.) Brief use case

User can look the history of his financial transaction or payment. User can also search for check each history such as search by date, search by shop name, or search by payer/payee.

10.) User authentication

       1.) Brief use case

User must authenticate himself when using application by using fingerprint scanning or face scanning. Moreover, when user confirm each payment.

11.) Setting

       1.) Brief use case

User can edit its interface of application such as theme, color, language, and notification.

2.) One fully-dressed use case model for the most complicated use case

Use case name: Pay payment

Scope: Pay the payment between payer and payee/shop partner

Level: User-goal level: complete transaction process between payer and payee/ shop partner

Primary actor: Payer

Stakeholders and Interests:

       Payer: want to pay or complete transaction process

       Payee/Shop partner: want to sell their products or service

Precondition: User has successfully register bank account and has enough amount of money in the bank account. User already authenticated by application before transaction.

Success Guarantee: Transaction or payment complete, the amount of money which user paid, deduct from user's bank account. Then the shop partner/payee receive that money.

Main Success Scenario:

1.) User choose the bank account which is already register in the application

2.) The payee/shop partner scan the user's QR code.

3.) The information of transaction will show on the user/payer screen.

4.) User/payer confirm the transaction by authenticate and confirm.

5.) The money will deduct from user's bank account and transfer to payee/shop partner bank account.

Extensions:

a.) User fail authentication

1.) the transaction will not complete.

2.) the system will cancel the transaction and send notification to both payer and payee

b.) Insufficient balance

1.) User can choose another bank account or cancel the transaction

2.) if user choose another bank account, user must choose the bank account which has the balance more than the cost in transaction.

3.) if user cancel, the transaction will not complete.

c.) System failure at any moment

1.) the transaction will not complete and the system will send the notification to both payer and payee.

3.) Casual use case model for one selected use case

Use case name: Pay payment

1.) Casual use cases

Main Success Scenario:

User chooses the bank account or other financial transaction application to pay this current payment. Then, shop partner or payee will scan the QR code of user. The information of payment will show on user screen. After that user must scan his fingerprint to authenticate himself and confirm this payment.

Alternate Scenario:

- If the amount of money in choosing bank account is not enough, the application will let user to choose bank account again until there is enough money to deduct.
- The payment will not complete until user confirm the payment, which means that user can cancel the payment any time before confirmation.