User stories

Required Feature:

1. Delivery Driver User Story:

    As a delivery driver, I can drop the parcel into the locker and enter the basic information of the parcel and addressee into the system so that the locker can send message and user can pick up the parcel.

    Acceptance Tests:
    - If the delivery driver touches the screen, then the screen will appear in two modes: Delivery Driver or Addressee.
    - If the delivery driver chooses Delivery Driver mode, then the system needs the manager's username and password.
    - If the delivery driver enters his manager's username and password, then he can log in manager system and store the information of the addressee.
    - If the delivery driver finish entering the information, then the delivery driver will exit the manager system.

    Fail Tests:
    - If the two modes cannot show on the screen, an error message will be displayed.
    - If the login pages cannot show on the screen after the delivery driver choose the mode, an error message will be displayed.
    - If the manager system cannot show on the screen after the delivery driver log in, an error message will be displayed.

    An estimate of the length of the story in story points: 4

2. LockerManager User Story:

    As a LockerManager, I can text the message to the addressee based on the information entered by the delivery driver so that the message can notify the addressee that the parcel has arrived.

    Acceptance Tests:
    - If a locker is filled with a parcel, then the state of the locker will set to occupy state from the idle state.
    - If the state of a locker is occupied state, then generate a 6-digit password and get the name and phone number of the owner of the parcel.
    - If a 6-digit password and the name and phone number of the owner of the parcel are gotten, then the locker will text the message with the proper format to the addressee.

    Fail Tests:

- If the state of the locker cannot set to occupy state after the locker is filled with a parcel, then an error message will be present.
- If a 6-digit password cannot be generated after the locker is filled with a parcel, then an error message will be present.
- If the locker cannot text the message to the addressee after the locker is filled with a parcel, then an error message will be present.

An estimate of the length of the story in story points: 3

3. LockerManager User Story 2:

As a LockerManager, I can check the 6-digit password input by addressee so that the locker can be opened and the addressee can pick up the parcel..

Acceptance Tests:
- If a password input, then searches the list of lockers to find a match between password input and password in the locker.
- If a locker is matched, then open the locker.
- If the parcel is picked up and the locker is closed, then reset the locker state.

Fail Tests:
- If there are not any lockers that match the inputted password, then an error message will occur.
- If the state cannot be reset after the parcel is taken, an error message will occur.

An estimate of the length of the story in story points: 3

4. Message User Story:

As a Message, I can provide the phone number of the addressee and 6-digit password correctly so that the addressee can pick up the correct parcel from the locker.

Acceptance Tests:
- If the addressee receive the message, then the addressee notice the parcel has arrived.
- If the addressee touches the screen, then the screen will appear in two modes: Delivery Driver or Addressee.
- If the addressee chooses Addressee mode, then the system needs the phone number of the addressee and 6-digit password.
- If the addressee enters his phone number and a 6-digit number, then the locker contains the correct parcel that will be opened.
- If the addressee want to leave, then he closes the locker and the locker will reset its state, and the screen will go back to the welcome page.

Fail Tests:
- If the two modes cannot show on the screen, an error message will be displayed.

- If the login pages cannot show on the screen after the addressee choose the mode, an error message will be displayed.

An estimate of the length of the story in story points: 4

5. Locker State User Story:

As a Locker State, I can reset the state of a locker to idle mode after the addressee picks up their parcel so that the locker can be occupied again by a new parcel.

Acceptance Tests:

- If the parcel is taken from the locker, then the state of the locker will reset to an empty state.
- If the state of the locker is emptied state, then the information of the addressee and the 6-digit password will be deleted.

Fail Tests:

- An error message occurs when the state of the locker cannot reset to an empty state after the parcel is taken.

An estimate of the length of the story in story points: 2

6. Addressee User Story:

As an Addressee, I can using the 6-digit password received so that the parcel can be picked up.

Acceptance Tests:
- If the addressee touch the screen, then the screen will appear in two modes: Delivery Driver or Addressee.
- If choose the Addressee mode, then the system need a 6-digit password to open the locker.
- If the correct password input, then the locker contains the parcel can be opened.

Fail Tests:
- If two modes cannot show on the screen, then an error message will be present.
- If there are not any lockers that match the inputted password, then there is an error message display on the screen.

An estimate of the length of the story in story points: 3

7. Password User Story

As a Password, I can generate a random 6-digit number as password so that locker manager can using this password specify a new parcel. In addition, I can set the password by given 6-digit number so that locker can generate a password of user input. I also can compare with another Password to figure out which locker need to open.

Acceptance Tests:
- If the manager want a new password, i can generate a new random 6-digit password.
- If the manager want to compare to another Password, then I will return true if same and return false otherwise.
- If a given number need to be set, then the Password will change by the given 6-digit number.
- If a given number to be set is not a 6-digit number, then the Password will not set it correctly.

Fail Tests:
- If the system could not generate a new random 6-digit password, then the system will output an error message.

An estimate of the length of the story in story points: 4

Optional Feature:

1. QR Code User Story:

   As a QR code, I can be scanned by machine rather than entering the information of the phone number of the addressee and 6-digit password by hand so that the addressee can open the locker easier.

   Acceptance Tests:

   - If the addressee receive the message, then the addressee notice the parcel has arrived.
   - If the addressee touches the screen, then the screen will appear in two modes: Delivery Driver or Addressee.
   - If the addressee chooses Addressee mode, then the system needs the QR code that are provided by the addressee.
   - If the scanner machine scan correct QR code, then the locker contains the correct parcel that will be opened.
   - If the addressee want to leave, then he closes the locker and the locker will reset its state, and the screen will go back to the welcome page.

   Fail Tests:
   - If the QR code that the addressee provided does not match any lockers, then there is an error message.

   An estimate of the length of the story in story points: 4

2. Locker User Story:

As a Locker, I can store fresh vegetables and fruits so that the person who is disabilities outdoor does not need to go shopping in the supermarket.

Acceptance Tests:

- If the Delivery driver delivers fresh vegetables and fruits, then the delivery driver enters the information of the addressee, and the fresh vegetables and fruits are stored in the locker.
- If the addressee comes to take their parcel, then the locker will be opened for the addressee after they enter their phone number and the 6-digit password.

Fail Tests:

- If the locker does not set to expired state after the parcel is not taken within a week, then there is an error message display.
- The invalid state name input will be catch in StateFactory class

An estimate of the length of the story in story points: 6

3. Locker User Story 2:

As a Locker, I can restrict the storage time of the parcel in the locker so that the addressee will take the parcel as soon as possible.

Acceptance Tests:

- If a parcel is stored in the locker, the system will give the addressee a week for picking up.
- If the parcel is not taken after a week, then the state of the locker will set to expired state.
- If the state of the locker is expired state, then the information of the addressee will move to the blocking list kept in one month, and the delivery driver will take the parcel to the parcel station when he comes next time.
- If the parcel is taken by the delivery driver, then the system will text a warning message to the addressee that the parcel is moving to the parcel station and the state of the locker reset to an idle state.

Fail Tests:

- The 6-digit password input will be checked and handled error if there is any in Password class.
- The invalid state name input will be catch in StateFactory class

An estimate of the length of the story in story points: 3

4. Time User Story:

  As a timer, I can provide storage time of the parcel. When the package is stored for more than ten days, I will send a message to the addressee about the parcel pick-up.

  Acceptance Tests:

  - If the system receives a timeout signal, the system will send an email to the addressee and notice the delivery driver.
  - If the delivery driver has put the parcel in the box, the timer will record the current date and start recording time.

  Fail Tests:

  - If the timer cannot start recording after the parcel has been put, an error message will occur.

5. Camera Monitor User Story:

  As a Camera monitor, I can monitor any movement of action of any object so that the addressee and the parcel can be guaranteed their safety.

  Acceptance Tests:

  - If a person wants to check the camera record, then he needs to enter the username and password to log in camera management system.
  - If the manager wants to let the camera work, then start recording on the camera monitor and set its state to work state.
  - If the manager wants to let the camera stop working, then stop recording on the camera monitor and set its state to stop state.

  Fail Tests:

  - If the state does not change after the manager asks the camera to work, then an error message will occur.
  - If the state does not change to stop state after the camera stop working, then an error message will occur.

  An estimate of the length of the story in story points: 3

Wish-list Feature:

1. Capture Signature Machine User Story:

As a capture signature machine, I can screenshot the signature of the addressee and send it to a delivery driver so that the delivery driver can know the parcel has received by the addressee successfully.

Acceptance Tests:

- If the addressee takes the parcel from the locker, then the system needs the addressee a signature.
- If the addressee signs the signature, then the capture signature machine will screenshot the signature of the addressee.
- If the capture signature machine gets the screenshot, then the screenshot will send to the delivery driver.

An estimate of the length of the story in story points: 4