1, requirement gathering and analysis

- Who use the software and how?

    - who: Help Desk workers, internal customers, technicians

    - How: creating tickets and display information

2, Software design

According to the requirements, the codes need the following:

Ticket class: (All information must be provided as input while submitting the ticket.)

    variables:

        - Staff ID

        - creator name

        - contact email

        - Description

        - Ticket ID; counter static field plus2000

        - status: Open or Closed , Reopened.

    method:

        - generate_password: the method need to change the status to close

        - response_ticket: "Default response can be set as "Not Yet Provided"."; specifically resolve, reopen and provide a response to the ticket.

        - reopen_ticket

        - TicketStats, should contain information on ticket statistics and shall beable to return the statistics information.

main class:

    methods:

        - print_tickets_info

        - statistic

        - main:

- Create at least one instance of submitting tickets and include at least one ticket with the request of "Password change".

- After the tickets are created, display ticket statistics.

- Resolve some of the tickets, then display the ticket information and ticket statistics. o Reopen some of the resolved tickets, then display the ticket information and ticket statistics.

3, coding and implementation

See the file ticketingsystem.py

4, testing

Run the program to see if it is working, here are the example error in my test, and it is fixed by changing the method name.

Here is one of the error I encountered:

Traceback (most recent call last):

  File "c:/asignment/test.py", line 99, in <module>

   m = Main()

  File "c:/asignment/test.py", line 58, in __init__

   self.main()

  File "c:/asignment/test.py", line 91, in main

   ticket1.ticket_stats()

AttributeError: 'Ticket' object has no attribute 'ticket_stats'

5, deployment

Run the program from command line: python ticketingsystem.py

6, maintenance / post-deployment