Support ticket system handling requests:

In this assignment you are going to implement an application that will demonstrate the benefits of queues. The application will consist of two forms: one for creating tickets and one for handling tickets. The queue will be used to make sure that the tickets will be treated in FiFo order.

Below you see possible GUIs, although you are encouraged to make something more user-friendly.

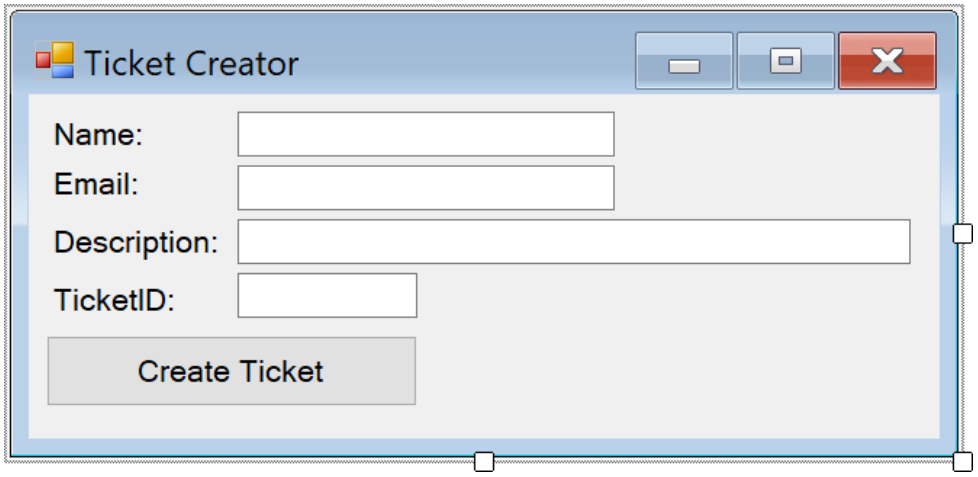

Figure 1: Possible graphical user interface for the ticket creator form

The user of this form can create tickets by filling in the required information and client on the button "Create Ticket". The ticket will then be added to a ticket queue (see UML class diagram).

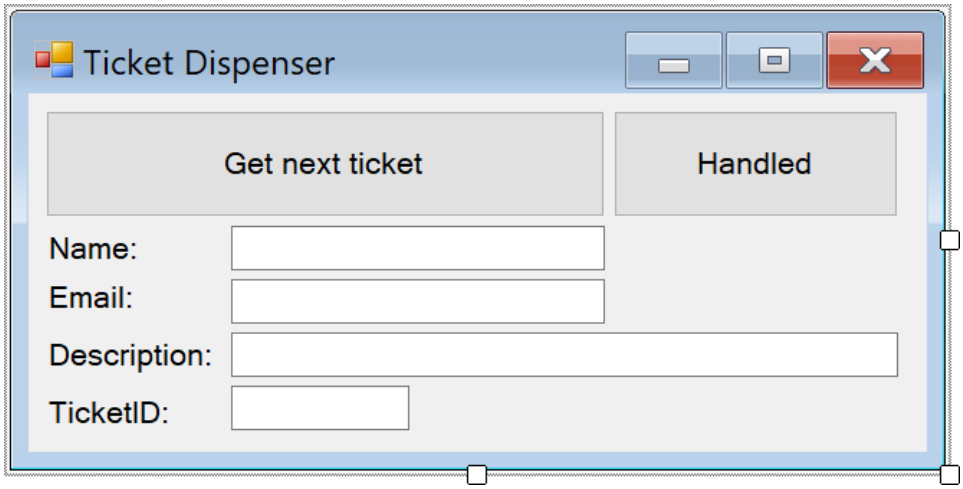

Figure 2: Possible graphical user interface for the ticket handling form

The user of this form can click on the button "Get next ticket" to get the first ticket from the ticket queue. This should disable the button until the ticket is handled. Once the support employee handled the ticket, they can click on the "Handled" button which should enable the "Get next ticket" button again and clear all the fields.

Below you may find a UML class diagram and requirements that you can use as foundation to implement the code.

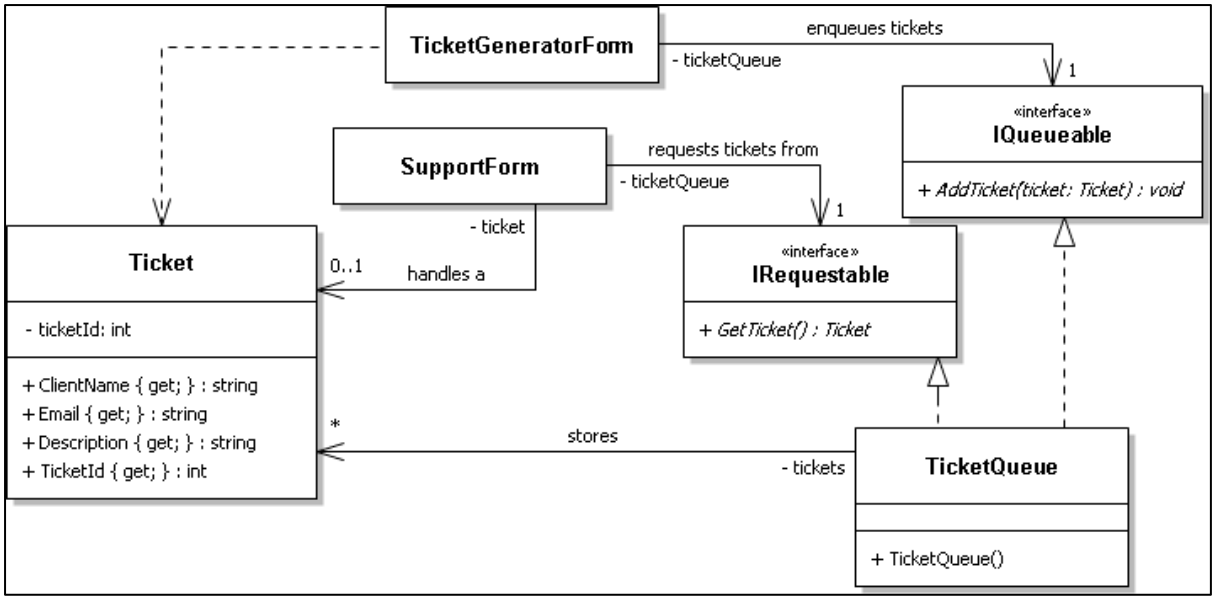

Figure 3: UML Class diagram for a support ticket system.

The TicketGeneratorForm can be seen in Figure 1, and the SupportForm can be seen in Figure 2. Make sure that you use a queue for “tickets” in TicketQueue.

A question you have to solve is how the TicketGeneratorForm and the SupportForm can share the same TicketQueue object.

Requirements:

Ticket creator:

FR-01: Add new tickets to the queue.

Support employee:

FR-02: Get the first ticket from the queue.
FR-03: Handle the ticket.