PRG655

LAB ASSIGNMENT #1

Marks: 3% Due: Week 3 lab class

Design a **C# Console Application** that will run a **Windows form** as described below. Your project should contain the following **classes**.

The first class named Technician should contain:

- **Data fields** to store a technician's name, a number of service calls handled by the technician, an **array** reference which refers to an array that will store the amounts of time spent on all service calls individually, and the average service call time.
- **Two properties:** The first property will be used to get and set (i.e., read and write) a technician's name. The second property will be used to get (i.e., read only) the average service call time.
- **An instance constructor** that will initialize all data fields and create the array. Please note that the number of service calls handled by a technician (i.e., the size of the array) will be obtained from the user.
- Methods to get all data from the user and to compute the total time spent on all calls
 for each technician individually, as well as the average service call time for each
 technician respectively.

The second class named Service will contain the Main() method to:

- Create any number (obtained from the user) of objects of the **Technician** class, i.e. an array of **Technician** objects, and call all necessary methods to get the technicians' data.
- Run/Show a Windows form that will be created by Main() and passed the array of Technician objects.
- The **Service** class will also contain the **static constructor** that will be used to briefly explain the purpose/use of this program.

The third class is the Windows form class, which will display a table that contains all technicians' names and their total and average service call time individually. This form will also display the names of the technicians with the highest total and the highest average call time respectively. It will also contain a button that will show the second form when clicked to draw/display a bar graph to graphically display the average service call time for each technician individually. An appropriate title, technicians' names and the values of their corresponding average call times should be also shown in the bar graph. The second form should also contain a menu item to terminate/exit the application.

Your program is required to be shown in the lab class and submitted on the BlackBoard before the deadline.

Prepared by: Goran Svenk