CS 202: IT Workshop I

End-semester Lab examination

18 November 2022, Time: 2 PM to 5 PM

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Design a GUI in Java for maintaining Student information records. The welcome screen will have two buttons: **Admin** and **User**. Upon clicking Admin or User separate forms will appear.

Admin form will have the following menu items: Add details, Delete details, and Modify details. Upon selecting a menu item, appropriate text fields will appear on the form and details should be taken using the text fields. There will be a “Submit” button. Upon clicking this, the information will be read from the text fields and an object will be created.

The User form will have the following menu items: View details by roll number, View details by name. Upon selecting, text fields will appear for entering the field and then the details will be displayed by fetching from the server.

All the information (student record) will be stored in a file on a server (*localhost*). You need to establish a TCP connection using socket whenever necessary.

You may assume additional fields/features/functionality/etc. if required (or to make the system more realistic). You are welcome to write additional methods/operations as you feel appropriate.

Marks distribution

10 for form design (GUI)

25 [5 for each correct operation (under action performed)]

5 for successful client-server communication

5 for implementation of object serialization concept

5 for code efficiency and good programming practice

**NB:** *Please note that there is partial marking. You shall get marks for coding the logic of a method correctly even if the whole program does not work properly. So, code the logic for all the methods and the logic of all the methods does not require GUI concepts/Network concepts/etc.*