

Criterion B: System Design

The design of the program will be minimal and simple, in order for it to be a user-friendly application. The client does not have any preference for the GUI, they mention the application must have few elements on the screen at a time and everything that appears has to be functional. The client does not care for aesthetic or visual satisfaction, he demands the program should increase productivity and efficiency in their work. The data would be stored in a database online – the database will be a free third-party application.

In order to meet my client's requirements, I first have to outline all the inputs the client wants. According to the inputs I will assign the datatypes to them. The client has also stated they would prefer to see the data inserted in the form of a table, in fact, it would be preferable to have the table beside the area the data is inserted – much like a store checkout system where the keyed in item appears right beside.

For this task I will use NetBeans, because the task is graphically intensive and NetBeans has numerous tools to facilitate the creation of such applications. I will have to import few libraries (SQL libraries) and few GUI tools (calendar) into NetBeans in order to complete the task.

Table 1: Trainer

FIELD NAME	DATA TYPE	DESCRIPTION
ID	Integer	Primary key, keeps track of number of inputs, and unique identification

Name	String	Full name (or First name) of trainer
Age	Integer	Age is recorded in whole numbers and years only
Address	String	Holds the address of the trainer
Mobile	Integer	Stores a mobile phone number (usually eleven digits for phones in Bangladesh)
DateReg	String	Stores date of registration in string format, however, data is inserted through GUI calendar.

Table 2: Member

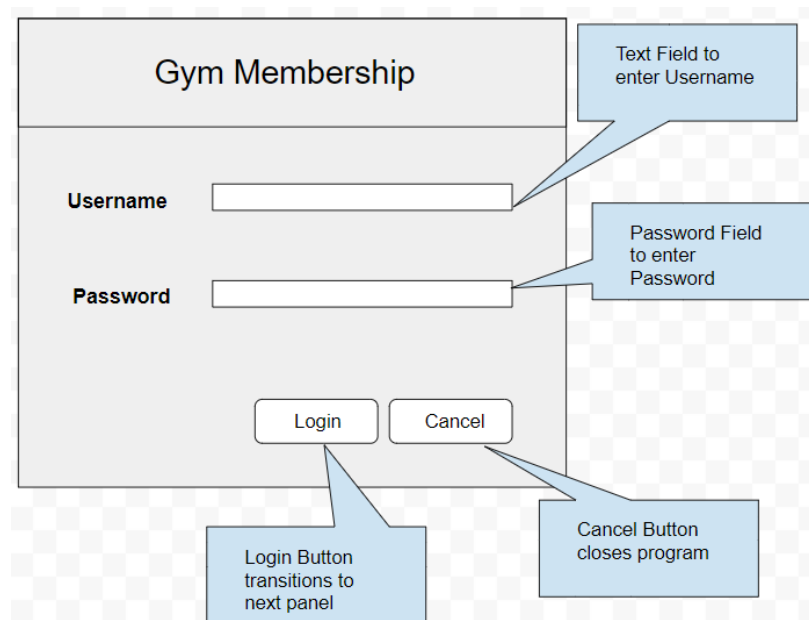
FIELD NAME	DATA TYPE	DESCRIPTION
ID	Integer	Primary key, keeps track of number of inputs, and unique identification
FirstName	String	Stores only first name of member

LastName	String	Stores only last name of member
DOB	String	Holds the Date Of Birth of the member. Data is inserted through GUI calendar
Mobile	Integer	Stores a mobile phone number (usually eleven digits for phones in Bangladesh)
Gender	String	Selects gender from a drop-down menu.
Address	String	Holds the address of the member
Subscription	String	Selects a subscription plan (payment plan) from a drop-down menu
Amount	Integer	Stores the amount paid at the start of the subscription plan
Date	String	Selects the start date of the program using a GUI calendar
Trainer	String	Selects the trainer (name) from a drop-down menu. The trainer's name is added to the

		drop-down menu when the trainer is added to the trainer table
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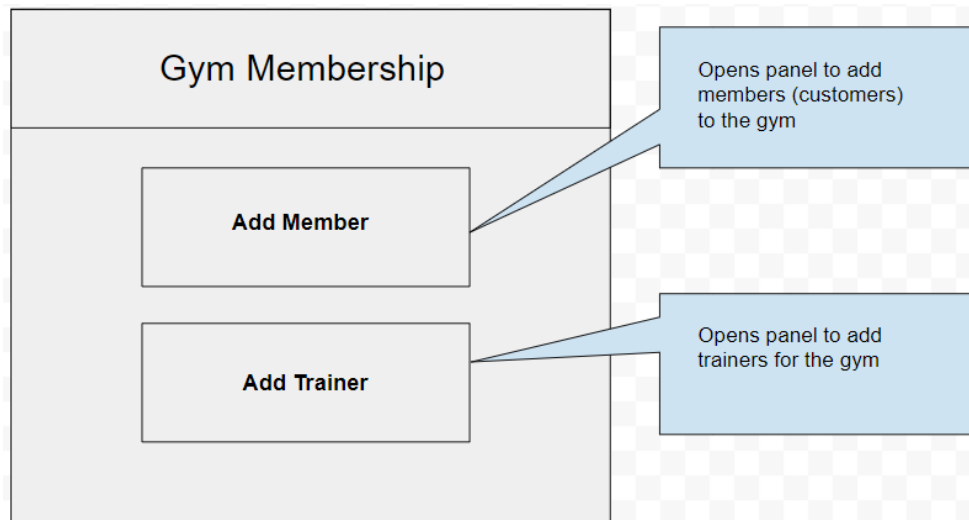
The initial design plan for the application:

Login panel:



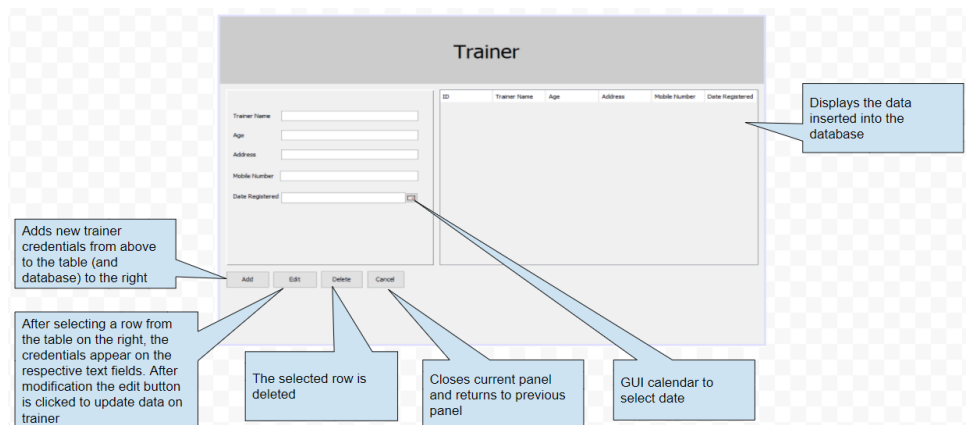
First panel after the login panel.

The type of membership selection panel:



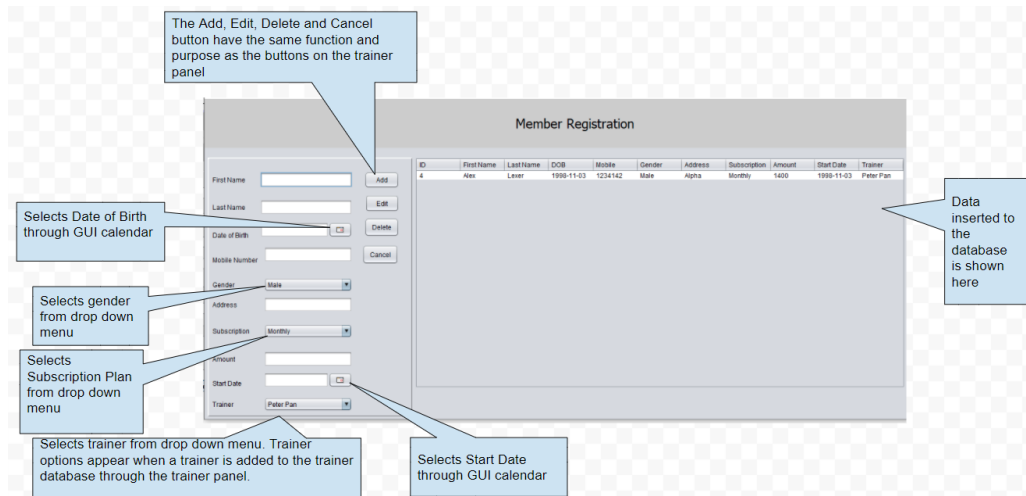
When trainer button is clicked, this panel appears.

Trainer table and data insert panel:



If member button was selected instead, it would open this panel.

Member table and data insert panel:



The Add, Edit, Delete and Cancel buttons have the same function and purpose as the buttons on the trainer panel

Selects Date of Birth through GUI calendar

Selects gender from drop down menu

Selects Subscription Plan from drop down menu

Selects trainer from drop down menu. Trainer options appear when a trainer is added to the trainer database through the trainer panel.

Selects Start Date through GUI calendar

Data inserted to the database is shown here

ID	First Name	Last Name	DOB	Mobile	Gender	Address	Subscription	Amount	Start Date	Trainer
4	Ken	Lenny	1990-11-03	1234567	Male	Alpha	Monthly	1400	1990-11-03	Peter Pan

[Word Count: 502]