

# PRG282 Milestone 1

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## Presentation layer

In the presentation layer I will Firstly create a login form This will contain 2 labels 2 buttons and a 2 textboxes.

Labels will be username and password with 2 textboxes for user to write in their details

Button 1 will be register Button 2 will be login if user has a password and username in the current database it will prompt him to the next window(detail window) When he clicks login. If he does not have a Username and password it will give him a error that his account does not have an account, Then he has to click on the Register button. This will add his username and password to the Database after that he can then click login and continue.

In the next window we will have Textbox labels and a picture box for student image for the following

Student Number

- Student Name and Surname

- Student Image

- DOB

- Gender

- Phone

- Address

- Module Codes

With 4 buttons Search insert Update delete

Search will search for student by Student Number insert will allow you to add a new student update will allow you to update current students details Delete will let you delete the student.

The image displays two windows from a software application. The top window, titled 'Details', contains several input fields and buttons. It has a 'Student Number' field with a 'Search' button next to it. Below this is a 'Student Name and Surname' field. To the right of these are 'Gender', 'Phone', and 'Address' fields. There is also a 'Student Image' field represented by a dashed rectangular box. At the bottom left of the 'Details' window is a 'DOB' field with a date picker showing 'Wednesday, 06 October 2021'. To the right of the 'DOB' field is a 'Module Codes' field. Below the 'DOB' field are three small square icons, the word 'insert', and two buttons labeled 'Update' and 'Delete'. The bottom window, titled 'Login', contains a 'Username' field, a 'Password' field, and two buttons at the bottom labeled 'Log in' and 'Register'.

## Business Logic Layer

The business Logic Layer will consist of 2 Objects “Students” and “Modules” these Objects will have there respected atrebutes.

### Students

- StudentName String
- StudentSurName String

- StudentNumber String
- StudentImage Image
- DateOfBurth Date
- Gender String
- StudentPhoneNumber String
- StudentAddress String
- ModuleCodes String

#### Modules

- ModuleCode
- ModuleName
- ModuleDescription
- ModuleResources

There will also be classes with functions

#### Login

- Get the username and password from the user
- pull the username and password from the database
- decript the password
- send user to the corrects form

#### Regester

- Get new username and password from user
- incript password
- send username and encrypted password to database
- send user back to login screen

#### AddData

- Get all the needed data from the user (
  - Student Number,
  - Student Name and Surname,
  - Student Image,
  - DOB,
  - Gender,
  - Phone,
  - Address
  - Module Codes)
- Save all the data in to the database

#### Data access layer

First I will add Using System.Data and system.data.sqlclient This will make it possible to use SQLconnection function After this

I will make 4 methods which will be

Insert

Update

Delete

Search

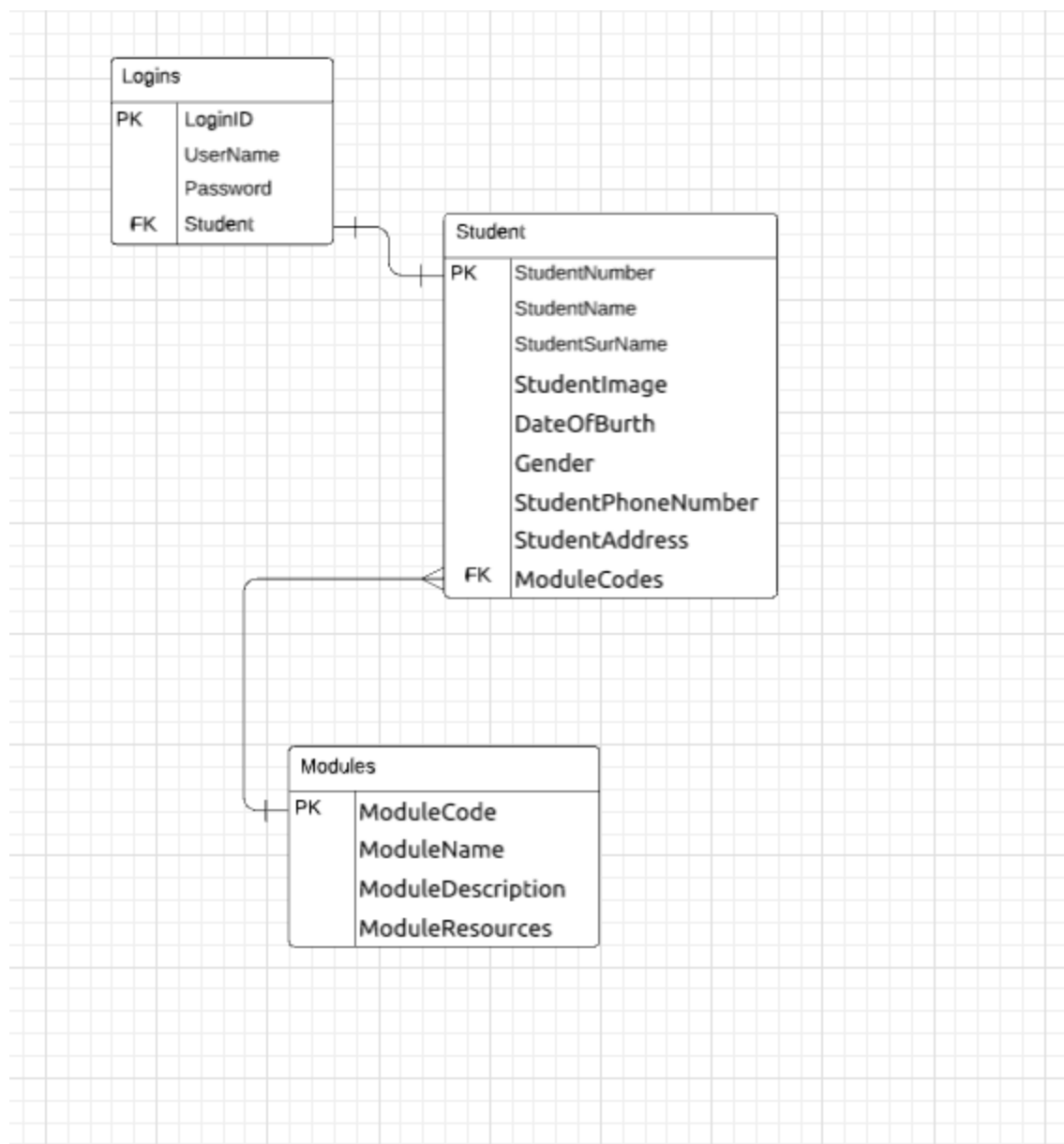
These methods will run SQL commands on the Database so we can delete a user update details search and insert a new user if we wanted

The Database will have SQL server Database connected to it With students table and in that table will be

- Student Number
- Student Name and Surname
- Student Image
- DOB
- Gender
- Phone
- Address
- Module Codes

Using this we can run queries on the Database like delete and update.

## Data Layer



The Data will be stored based on a per user basus the user can only acces the data that his/her username and password coresponds to and the student can see the modules ha/she has access to.