

Golestan system implementation

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Description of the project:

This project contains several parts but mainly we can separate all of them in 6 parts:

1. Login
2. Main Window
3. Report card presentation
4. Enrolment form
5. Weekly schedule presentation
6. Database

Part 1

Database

For storing and accessing data by multiple users it was decided to use database.

Data are stored in a database with name of “archive.db”

Located at the directory of the program. Database has five tables first is related to the information of the students

student table

studentId	name	password	gender	SirName	DoB	courseNo	student No	father
int	str	str	bool	str	date	str	int	str

Password is used to enter the system DoB is the date of birth of the student courseNo is the number of courses that the student has passed successfully.

The second table is related to the Teachers

teacher table						
teacherId	Name	SirName	college	scientific grade	password	gender
int	str	str	str	str	str	bool

Again password is the string that each teacher uses to enter the golestan system.

The third table is class-lesson table it means those things that come in table when you want to enroll and select each of them each class-lesson has its own teacher – place of holding – Time and TA

id	teacher id	class id	college	start time	end time	units	TA id	days code	year	cemester
int	int	int	int	float	float	int	int	itn	int	int

Units is the number of unit each class-lesson has days code is the codes of the days that this class-lesson holds (Saturday->1 sunday->2 Monday->4 Tuesday->8 Wednesday->16 Thursday->32)

The sum of all days is dayscode. Cemester can only take two values 1 or 2.

The fourth table is related to enrolment it shows us which student has enrolled in which class-lesson

enrolment table			
student	class-lesson	first grade	second grade
id	id		
int	int	float	float

First grade and second grade is the result of the exams of the midterm and the endterm and is set only by the related teacher.

The last table is the table of class it means that each class room has its own row in this table

class table		
id	classAddress	college
int	str	str

Part 2

Login form

This graphical form is the first part of the program that the user faces it has two text boxes that take a user name and password and by a query over the student table or

teachers table determines whether they are valid or not and if they were the user can see the main window just like the golestan system .

Login form is implemented as a class called `LoginWindow` and its contents is located at `loginwindow.cpp` and `loginwindow.h`

Part 3

Main window

Main window is the main part of the program where you can access several parts of the program. Just like golestan it has 6 tabs. As we mentioned before at this phase this program does three 1.giving report card 2.giving weekly schedule 3. Enrolment

For accessing the first one go to (آموزش) to access the second go to (دانشجویی) tab and for the last one go to (ثبتنام) and press the related push button.

Part 4

Report card presentation

At this part first using a query on the student table of the database we obtain name , sir name , college and national number then put them In their proper labels.

Now its repord card turn

The report card table consists of a grid view that using the information taken from database shows the name of the lesson , number of units and the score of any lesson. Then add them as a row to the gridview .

After obtaining the score of all lesson the program sums up all the scores and then finds the average and also the number of passed units is added to the label.

Part 5

Enrollment

This part was aimed to makes us able to choose class-lessons and checks that they do not locate at the same time exactly just like golestan

But unfortunately for lack of time and some problems we weren't able to do that.

Part 5

Weekly schedule

In this part first of all using the database we find the student name , number of units , college and studying level then we put them at the related labels.

We put specific code for days and hours in the weekly schedule for example : Saturday code is “a” and that of Sunday is “b” and ...

Code of classes that hold at 8-10 pm is 1

Code of those that hold at 10-12 is 2

And..

So if one student has class at Sunday from 13 to 15 then this class time is saved as a3 at the related label.

This way weekly schedule of a student is formed.

These information is taken from the database.