Object Oriented Programming

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Final Project

EXAMINATION SYSTEM

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Course: BS(DS)

Section: C

Introduction:

This report explain the model and system used to create “final project from Fast NUCES” it also tells about the concepts and how the data flows in the system, in addition it also guides how to use Software and procedures to get the required results.

Hierarchy:

The System Posses following hierarchy:

1.class User

2.Class login

3.Class course_registertion

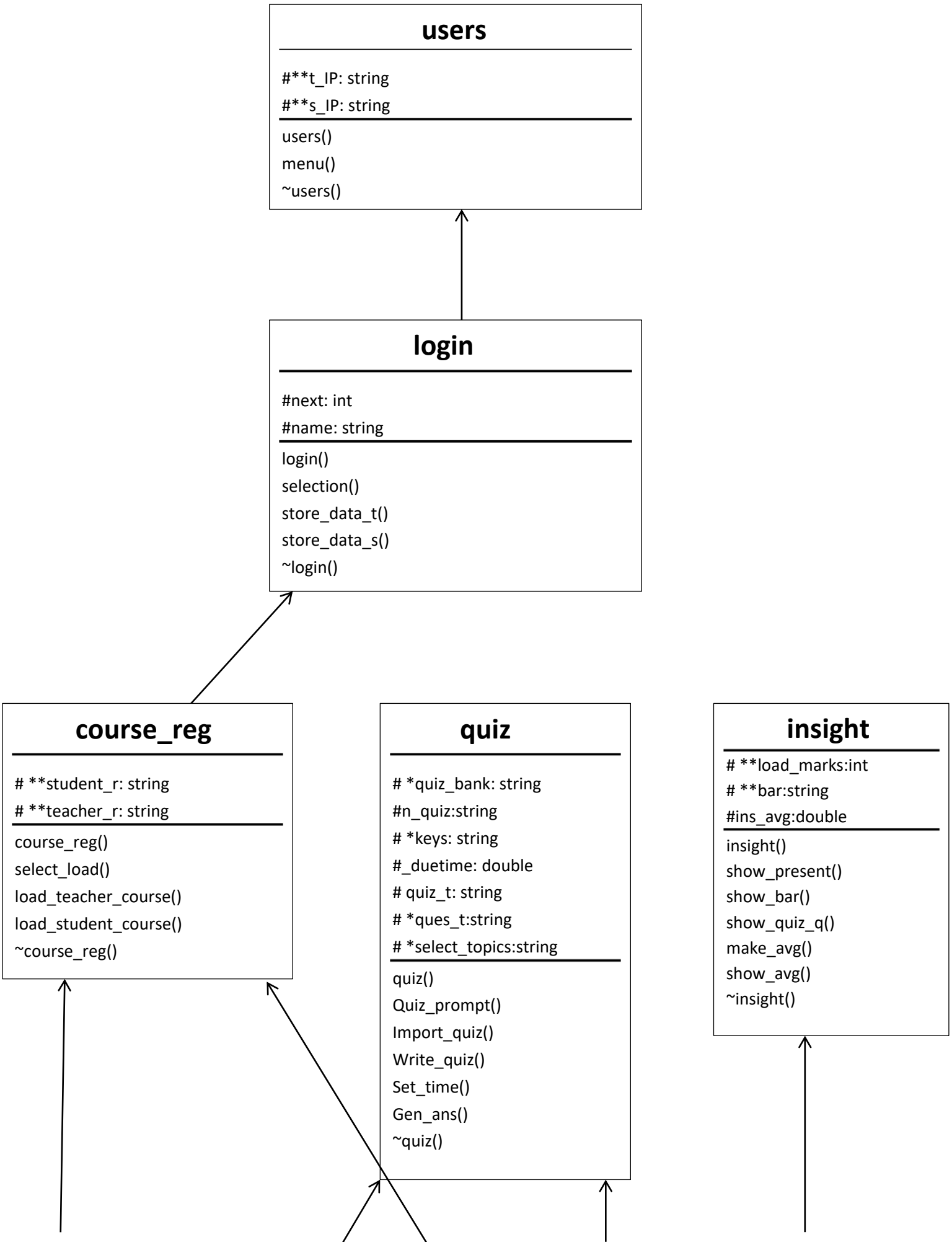
4.Class student

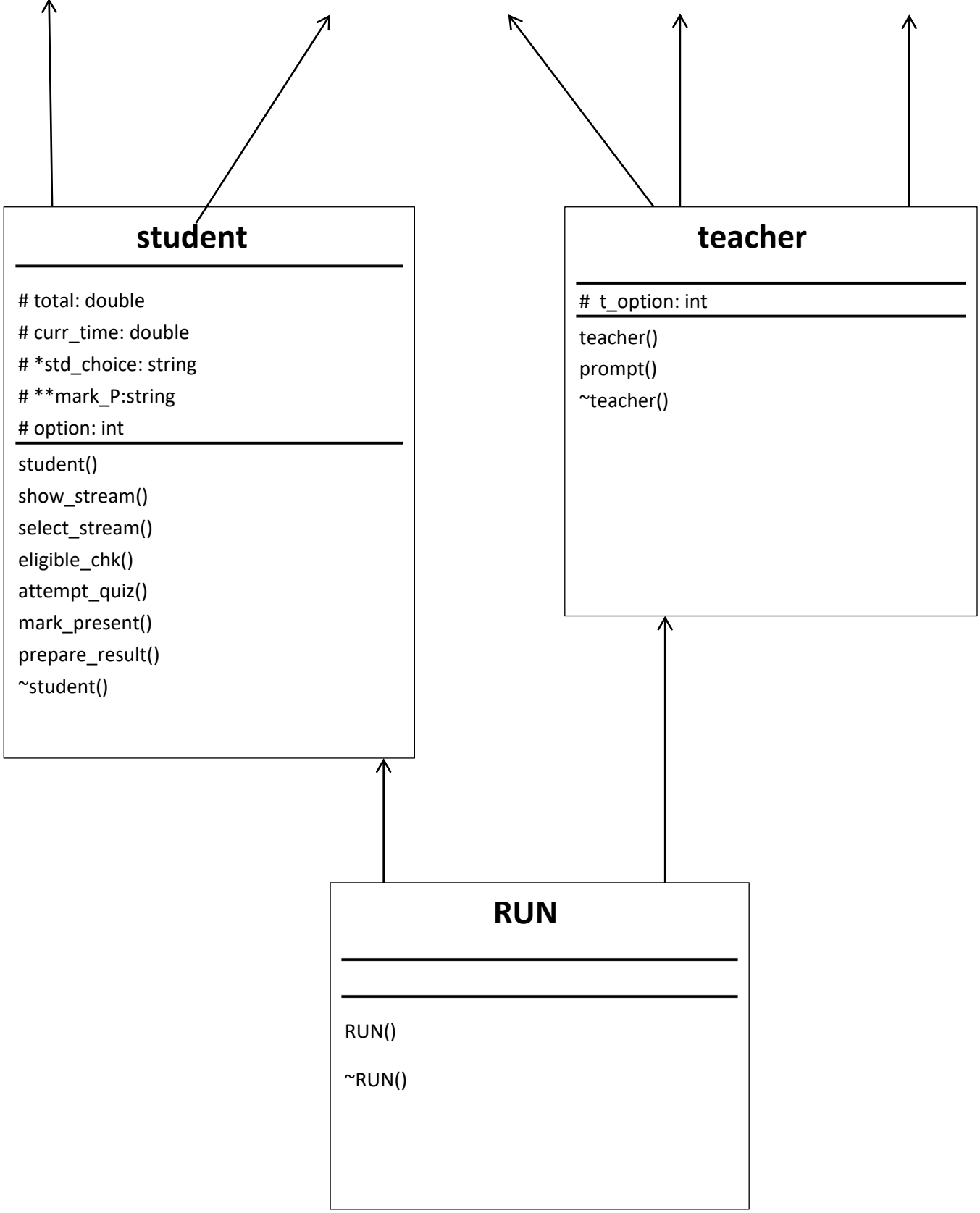
5.Class Quiz

6. Class teacher

7. class Insight

8. Class Run


users
#**t_IP: string
#**s_IP: string
users()
menu()
~users()
login
#next: int
#name: string
login()
selection()
store_data_t()
store_data_s()
~login()
course_reg
# **student_r: string
# **teacher_r: string
course_reg()
select_load()
load_teacher_course()
load_student_course()
~course_reg()
quiz
*quiz_bank: string
#n_quiz:string
*keys: string
#_duetime: double
# quiz_t: string
# *ques_t:string
# *select_topics:string
quiz()
Quiz_prompt()
Import_quiz()
Write_quiz()
Set_time()
Gen_ans()
~quiz()
insight
**load_marks:int
**bar:string
#ins_avg:double
insight()
show_present()
show_bar()
show_quiz_q()
make_avg()
show_avg()
~insight()

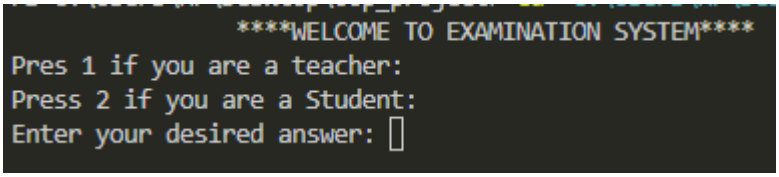

student
# total: double
# curr_time: double
# *std_choice: string
# **mark_P:string
# option: int
student()
show_stream()
select_stream()
eligible_chk()
attempt_quiz()
mark_present()
prepare_result()
~student()
teacher
# t_option: int
teacher()
prompt()
~teacher()
RUN
RUN()
~RUN()

Explanation:

The **"class user"** possess a prompt to let user decide what is his role **(teacher/student),** it prompts that:

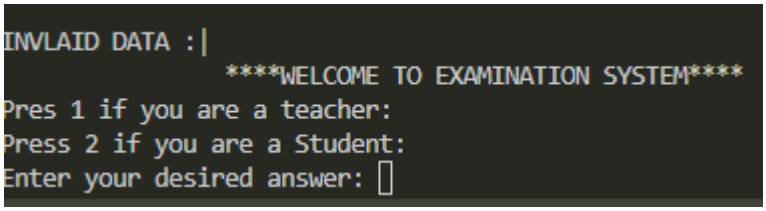
1.Press 1 if teacher

2.Press 2 if student



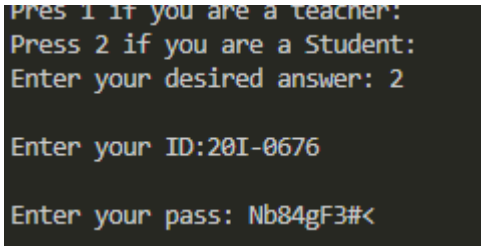
After this if user enters 1 it runs for teacher functionalities and if 2 is entered it runs for student.

IF user enters a wrong input then program shows an INVALID prompt and reloads the prompt.



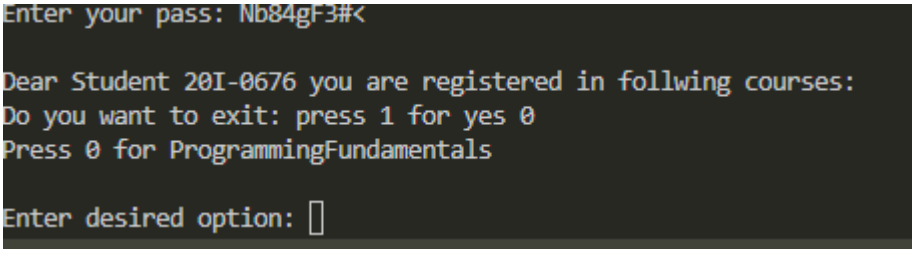
After selection by the user the program asks name and password, if user is teacher then it prompts to select his name and enter his password and then it authenticates if it is true or not.

ALL OF THIS works in inherited "class login" which takes selection and drives the code further.

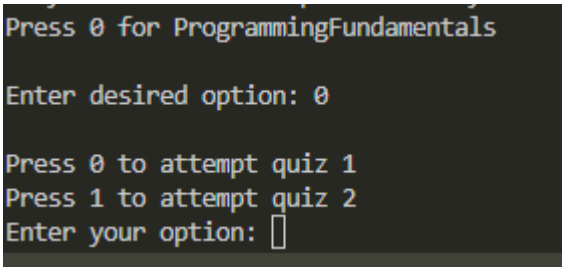


Along with this it also loads data to teacher and student to verify that person enters correct data

After successful login, the program assigns courses for teacher and student, this happens in inherited class course_registeration

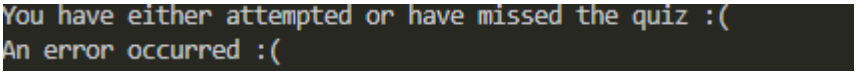


If a user is registered in multiple course it will show all courses and will let user decide that what stream he wants to open.



After this the control goes to inherited class teacher_student which virtually inherit class course_registertaion, which has multiple type of data and functionalities, user can exit navigate and do multiple stuff, if user is student it will all quizzes setted by the user and then give a prompt to let user decide which he wants to attempt,

NOTE: It also checks that is user has already attempted the quiz or has exceeded time limit then it will show an error message displaying a message.



And then goes to message to let user navigate.

After this user can attempt quiz and his marks will be saved in file, along with attendance.

FOR TEACHER

similar happens for teacher, the teaches have the ability to make a quiz, add questions and see insights,

after successful storage of data, the program ask user to decide if he wants to add questions or make quiz or see insights.

If user user add question, then program asks to tell number of questions of each type along with topic name and save it in question bank.

And then allow teacher to set a quiz after this, teacher can see insights of differernt quizind through appropriate menus,

Use of inheritance is made to develop this system along with other concepts like const data etc.

Thank You.

Hasnian Raza.