



UNIVERSITY PARTNER



# Object-Oriented Design and Programming (5CS019)

## Course Management System

Submitted By: -

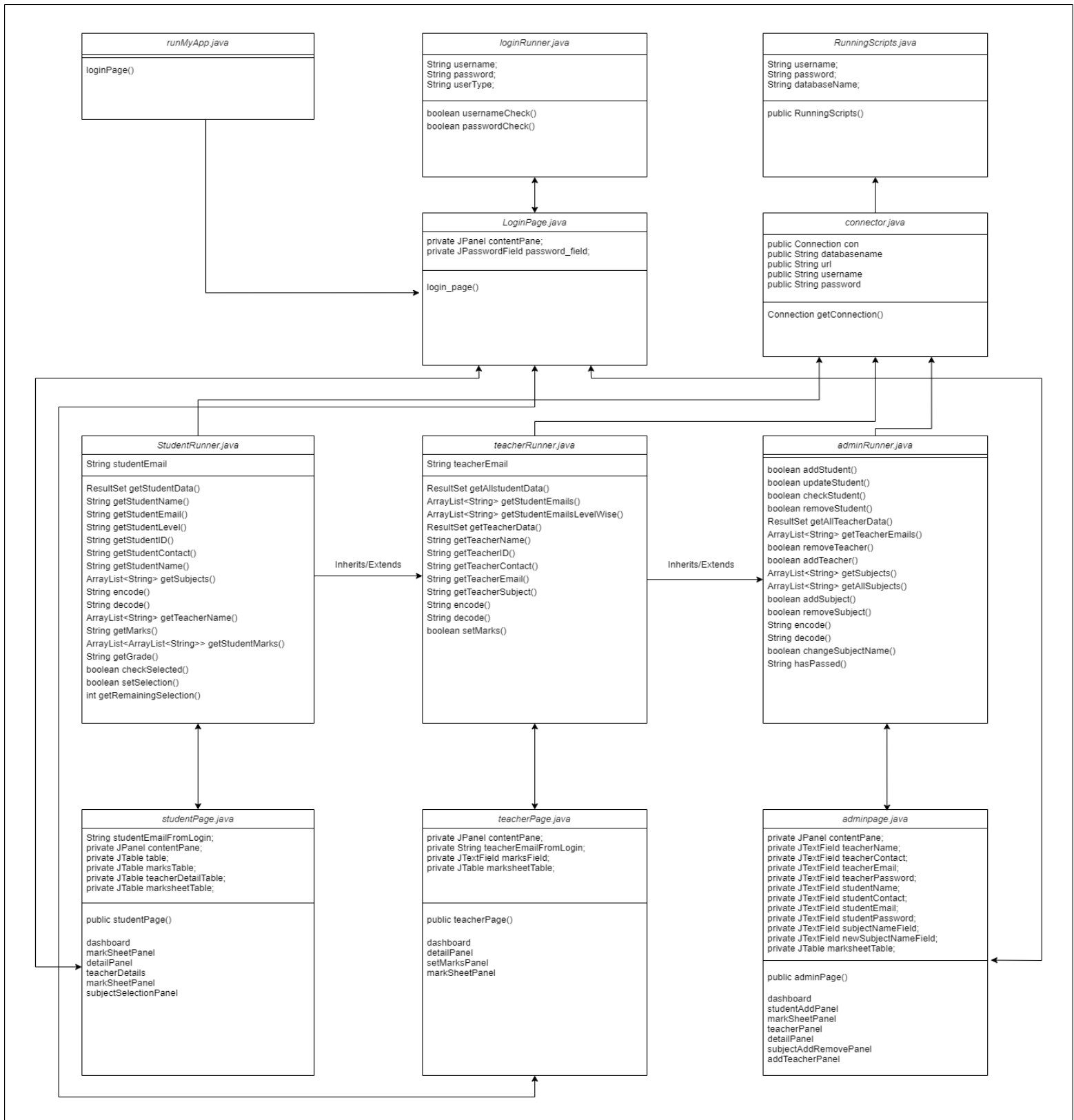
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# UML Diagram



## Course Management System

Course management system was a great opportunity to learn to make UI based application and helped me learn about java, swing, SQL. This course work was very interesting to work on as it helped me learn new thing. While starting this course I didn't have any knowledge on the swing class or SQL class. As I was doing my work and researched on UI in java, SQL in java, I got to learn these things.

During the working time of this course, I learned to connect java files to SQL and also learned to fetch data and set data in SQL using java. This assignment also helped me improve my knowledge on OOPs concept, Inheritance, Encapsulation, Polymorphism. I also learned to use JButton class, JPanel class, JTable class and many other swing classes.

I have made this program very simple adminRunner.java, teacherRunner.java, studentRunner.java and loginRunner.java have different methods inside of them. They have different methods that return Boolean, ArrayList, name, email and other data required in the UI. studentRunner has one Encapsulated data, and teacherRunner has one. The studentRunner class is extended but teacherRunner and teacherRunner class is extended by adminRunner. While running this code first runMyApp.java is started, it calls loginPage and sets login page to visible. After user inputs email, password and selects usertype. Login page calls loginRunner and uses its checking methods, while login runner uses connection.java class to get connection to java. Connection class checks for the database and if the data base is not found it created a new database using RunningScripts class. If connector class returns connection. It checks user and directs the user according to their type. If the user is student studentPage is opened and the logged in email is sent to the page. And if teacher is logged in teacher page is opened and his email is sent to the page. According to the level of student the page is show. If the student is of level 6, he gets addition buttons to chose subject. If admin is logged in, he gets a different page.

## Features of my Course Management System:

- Login Page
  - Check User and login Option
- Student Page
  - View logged in student's detail
  - Views teacher's detail in his level
  - View his previous level marksheet and current marksheet
  - If student is level 6 give him option to choose option subjects
- Teacher Page
  - View all students' details
  - View all students' marksheet
  - Set marks of the student he teaches on his subject
- Admin Page
  - View all students' details
  - Add students / Remove student
  - View all teachers' details
  - Add Teacher / Assign subject to teacher / Remove teacher
  - Add / Edit / Remove subjects
  - View Marksheet of all students
  - Update the level of student if the student has passed.

## Missing features of my system

- Option to edit student / teacher detail
- Assign new subject to teacher

So, these are the features of my course management system. I have learned a lot from this assignment and I by doing this assignment I have come up with many other software ideas. Doing this assignment sure helped me a lot. This was a great experience.