

Table of Contents

<i>Login screen</i>	2
<i>Dashboard screen</i>	3
<i>Summary screen</i>	4
<i>Details screen</i>	5
<i>Explanation</i>	6

Login screen

Any user must create an account to log in to the portal. User must enter full name and must set username, password, and role (student, faculty, or others). User will enter the login credentials on the login screen. Admin will have read and write access to entire portal and other users viz. students and admin will have read only access to the portal.

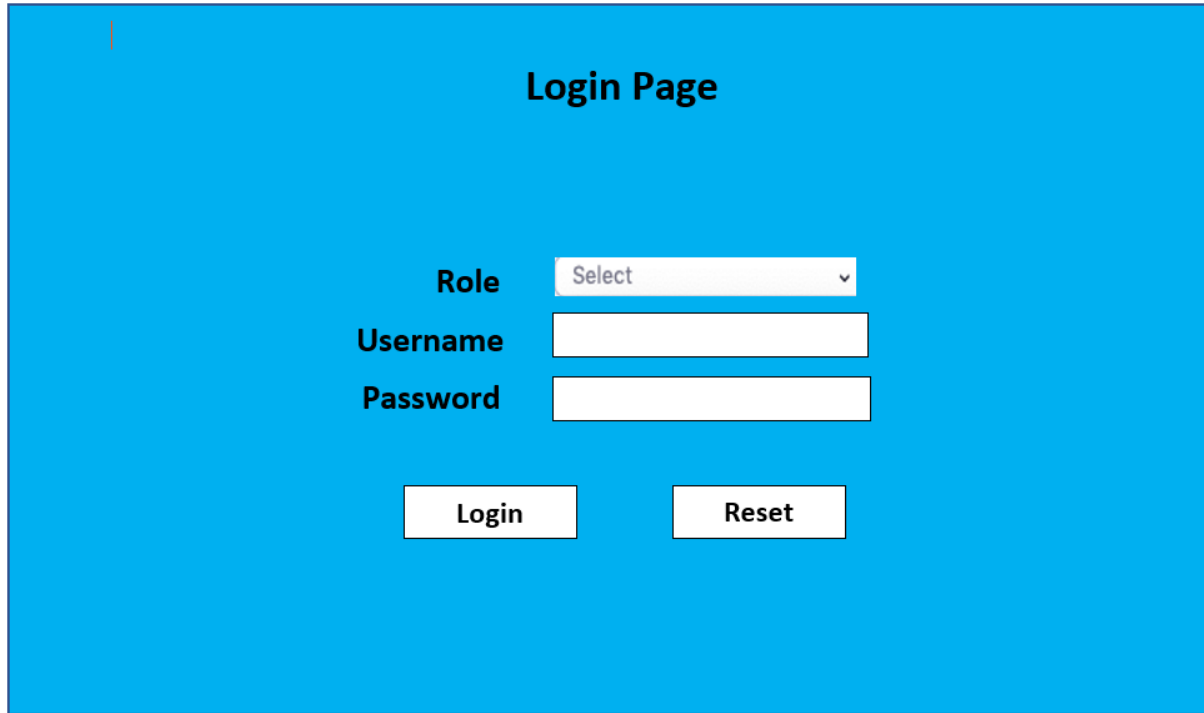
The image shows a login page with a blue background. At the top center, the text "Login Page" is displayed in bold black font. Below this, there are three input fields stacked vertically. The first field is labeled "Role" and has a dropdown menu with the text "Select" and a downward arrow. The second field is labeled "Username" and the third is labeled "Password". Both the Username and Password fields are empty text boxes. Below these fields, there are two buttons: "Login" on the left and "Reset" on the right, both in white boxes with black text.

Figure 1: Login screen

Dashboard screen

On the click of login button after successful login the user is navigated to the dashboard screen. The dashboard screen displays performance metrics on a university scale. It will display statistics in the form of data table. User can click on the hyperlink to view summary of performance on a desired department level. On the click of hyperlink, the user is navigated to the summary.html screen. Additionally, the dashboard will display heat map showing number of students from each department with their pay scale.



Figure 2: Dashboard screen

Summary screen

Upon landing on the summary screen, user can view summary based on the faculty perspective on a department level. Performance metrics are displayed against the faculty name. Hyperlink is displayed on the number of students. Moreover, summary will display a bar graph of the selected criteria with the department faculty and number of students under them who have secured a job or have gone ahead into research work.

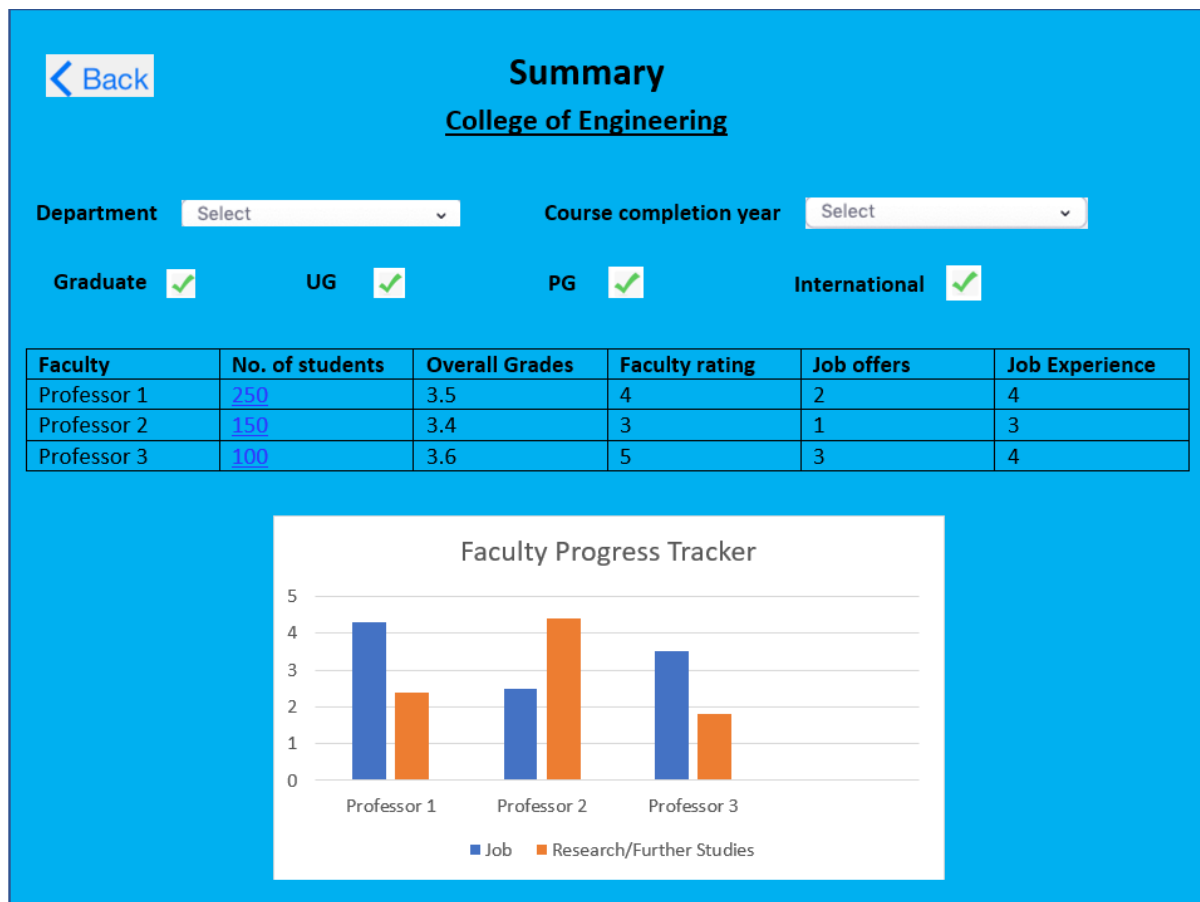


Figure 3: Summary screen

Details screen

When user clicks on the hyperlink, performance metrics of individual students studying under the respective professor are displayed. It will also display a surface graph depicting yearly student progress. For instance, it will display number of students working in Amazon or Google or Facebook in the year 2019, 2020 and 2021 respectively.

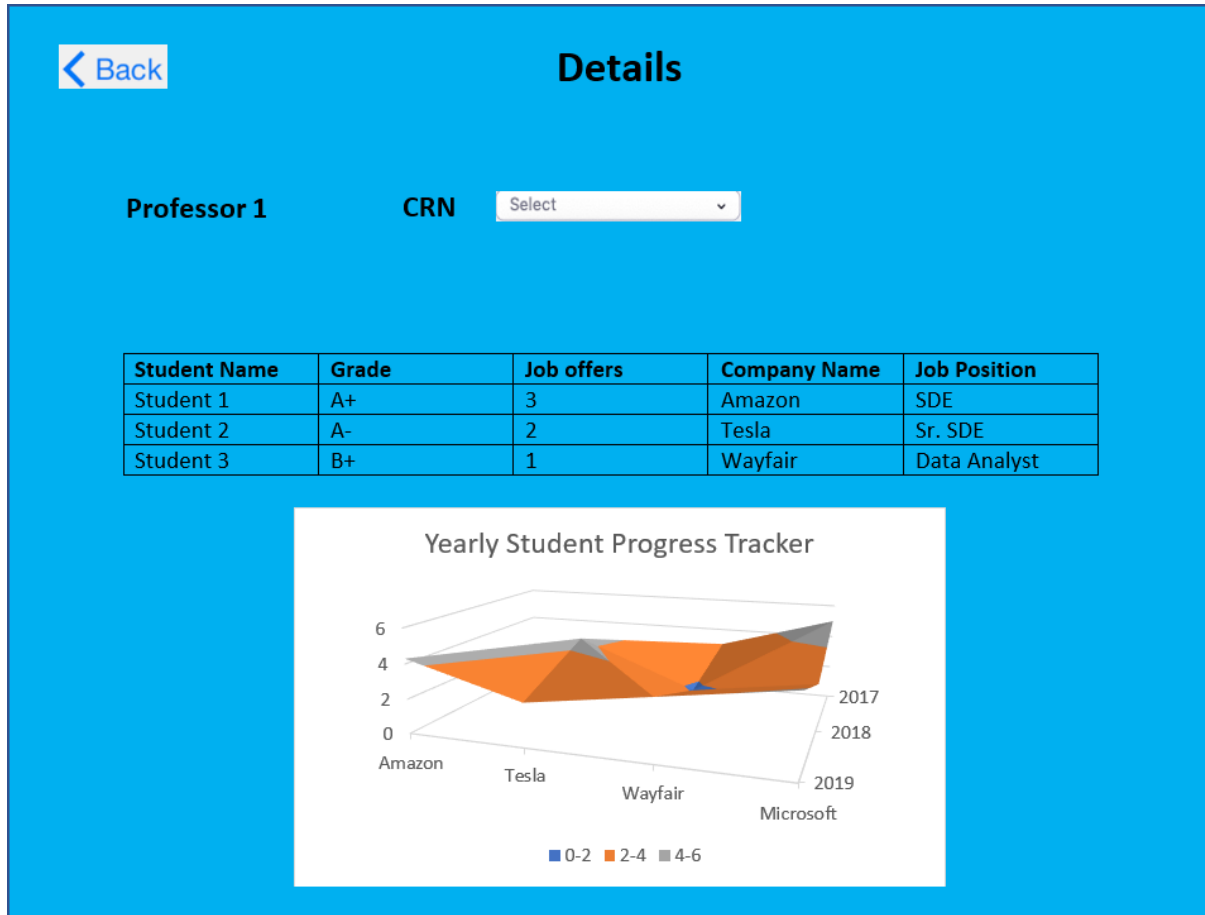


Figure 4: Details screen

Explanation

As per the sequence diagram we have considered Login, University, Summary, Details, Engine, Data preprocessor, Performance Matrix, Information collector as objects. Engine will call Data preprocessor with the method `preProcessData()` and this will internally call the methods `getInformationData()` and `PrepareData()` of Information Collector object. This Information Collector object will collect information from faculty directory, student directory and courses class and will pass this data as Information collector object to Data preprocessor class. This Data preprocessor will perform data preprocessing actions like data cleansing, removing outliers or removing incomplete data and pass it as Data preprocessor object back to the Engine. Engine will pass this processed data to the performance matrix class and within it the results, graphs and conclusion is prepared which is passed to the Engine. Consequently, Engine will pass this resultant data as an engine object of the detail screen that will display the data to the user.

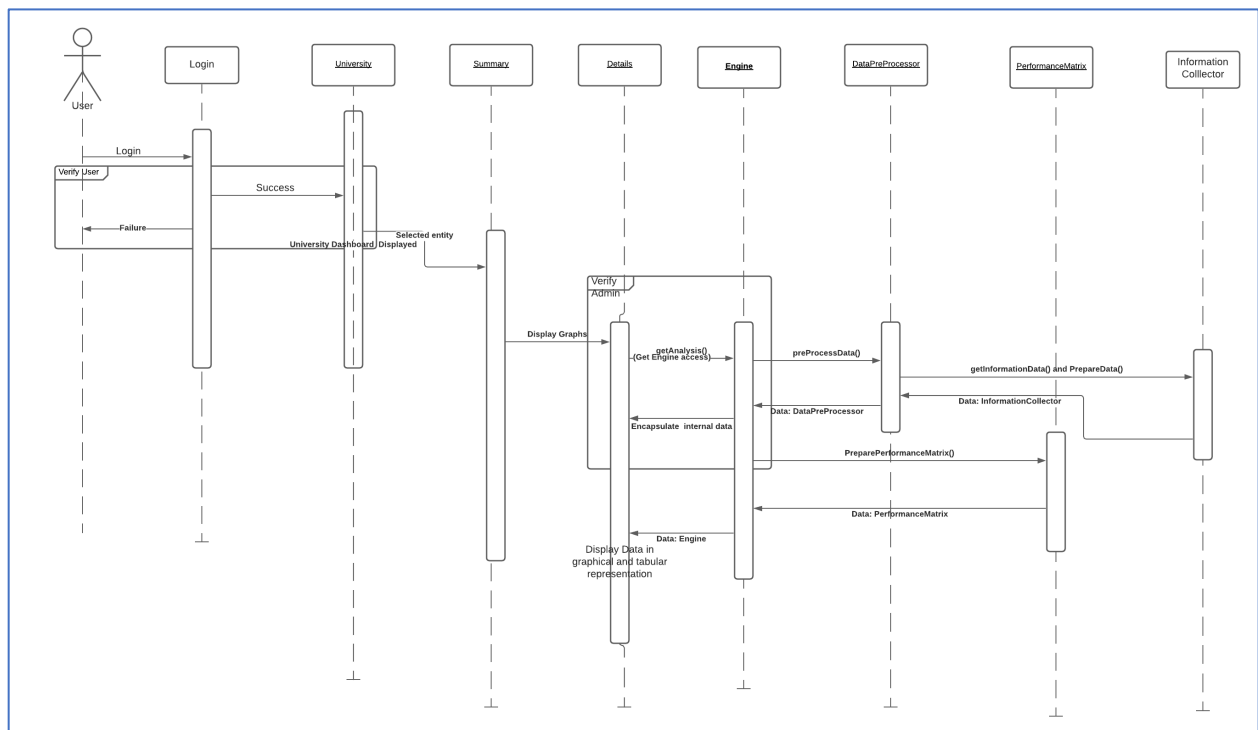


Figure 5: Sequence Diagram

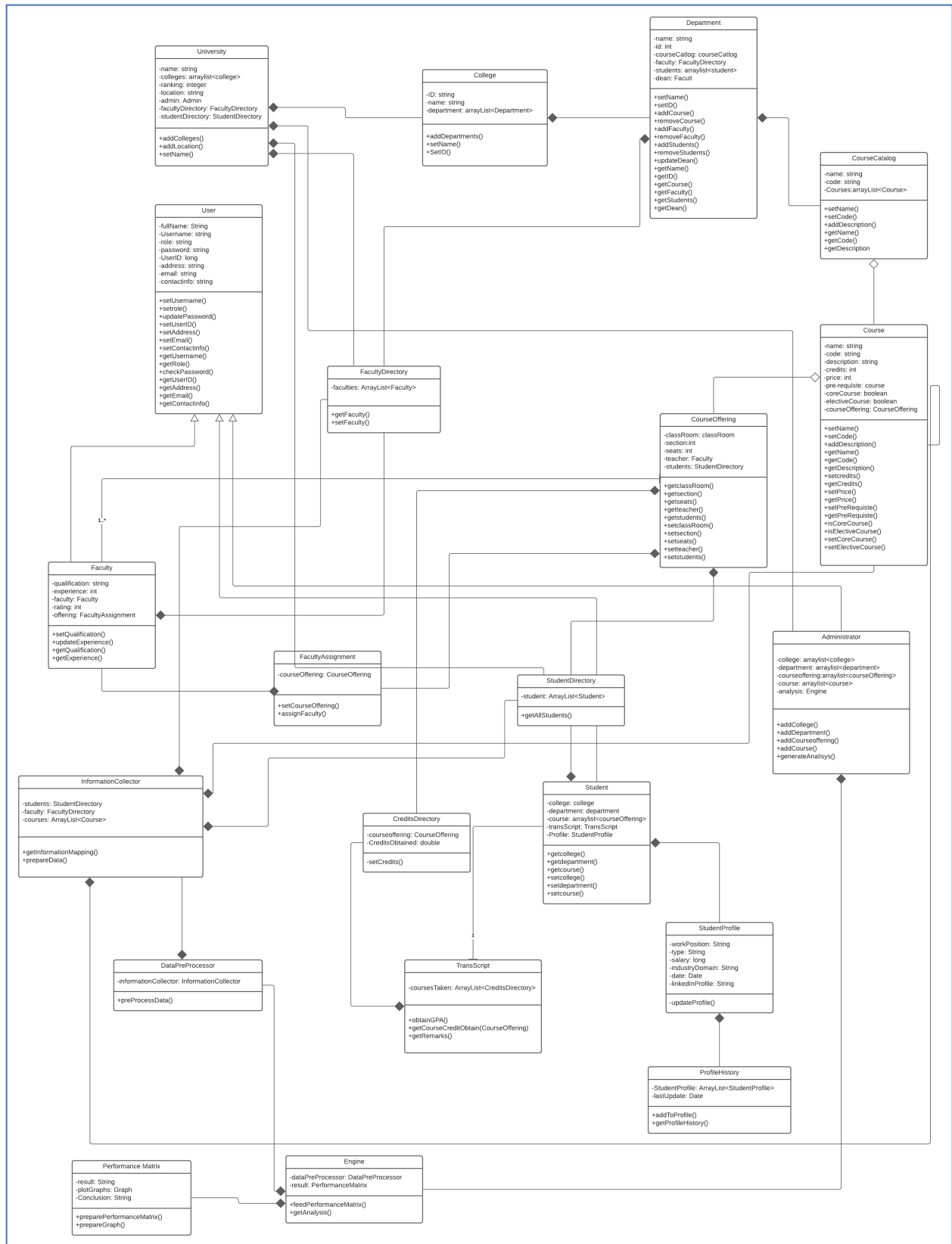


Figure 6: UML class diagram