

# E&I Connect (A Java Application with Database Connectivity)

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**Abstract:** Recent Status: This project provides an interface to break the gaps between: 1. Student – Teacher 2. Student – Alumni 3. Teacher-Parent 4. Student-Student. Among many other reasons, the main reason for creating the project is to reduce the communication gap and information gap between student and teacher. Mostly, it is seen that the students are unable to communicate with the teachers and hence there is a communication gap that creates disability in creating a bond between the student and the teacher, which is very much essential. There is no common interface for student-teacher communication and in case if any student is unable to communicate face to face like for any problem to sort out. There are many students who want to share their views regarding their self-development or mutual development. It consists of an area where the students can share their point of view and also provides an area called “Grievance Cell”, where the HOD (head Of Department), and teachers can give their suggestion and advise for students for improving or polishing their skills. Here, the students will be benefited as they get an option for a path to choose, what they are going to do further. Most of the student is unable to go through the notice board. It consists of an area where the users (student and teachers) get each and every details like:

1. Result
2. Attendance
3. Noticeboard
4. Notes
5. Grievance cell
6. Fun time
7. Ask me please
8. Update account
9. Chat
10. Support

**Keywords:** Software Interface; attendance, result and notice; Queries; Proctor.

## 1. INTRODUCTION

The ‘E & I CONNECT’ is the web based application system which ensures the students that they are connected to the system and the academic activity throughout its academic career. The interface of this application is completely designed using the programming language Java and is designed on Net Beans which provides the toolkit for java applications. The specialty of this application is that the student can reach the administrator and the fellows in a single interface and can hold the data into it. We provide social interference inside the application which is called discussion box where the students can mingle with each other just like a social media. In the meanwhile we provide one “ANSWER ME PLEASE” page where, students can put their questions and get their answer and replies for it from a brilliant person and other members of the application.

A grievance cell is used to make the system and more amicable so that the prospective members and students cannot pass through the same difficulties as it is directly handled by the top administrators of the college.

The interface of the application is quite very simple and attractive so that anyone can easily stick to it and can spend more time as it has one notice section which always

strikes out the student with recent updates about the college and the department.

A secured system has been designed for the student so that they can hold their important documents like mark sheets, relevant certificates into it.

**Uniqueness:** The application is made after detailed study of the students facing problems and which are not in the market to help them.

Result, Chat, Share Items and attendance are some other features on a single platform which make this application unique from rest and which are not available in the market.

## 2. SOFTWARES USED

### a. Net Beans IDE:

Net Beans is an environment that is integrated developed feature, where an individual can design and develop java applications. Net Beans is an open source with cross platform (i.e., it can run on Windows, Linus, etc. operating systems) development environment that allows application to be developed from a set of modular components called modules.

The Net Beans is developed in a primary intention for java applications but it also supports other programming languages like PHP, C/C++, FORTAN, and HTML.

We have used Net Beans IDE to design our software project E&I CONNECT, as we are from the department Electronics and Instrumentation and we face the problems like each and every notice to be notified to every student. The teachers also get less time interacting with the students except the class hours, due to their hectic schedule. So with the better use of our knowledge we have used the integrated software to create a web based software interface.

Along with the result, attendance, notice, etc. options the software application also have a "Fun Time" option where the students and teachers can have a fun moment with our application to refresh their mind.

**b. Oracle Database:**

Like Net Beans, My SQL is also an open source relational database management system and is owned by ORACLE Corporation. The student database created in the application is designed by using My SQL.

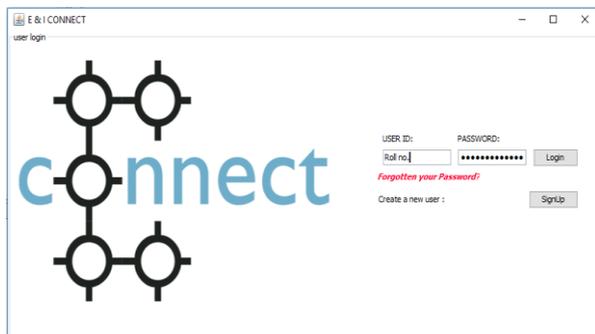
To notify every student and teacher with the required details like the attendance, result, etc. and notices, a database is must to be created. The database consists of the student details like name, section, roll no., university regd. no., personal phone no., and parent's phone no., present and permanent address.

Each and every teacher and student have a personal login id and password that is his/her name as username and university registration no. as password later the respective student can change the password accordingly.

The database is maintained by the administrator, which will be any one person authorized from our department. The database updates like updating the attendance, results, notice, etc. will be maintained by the administrator.

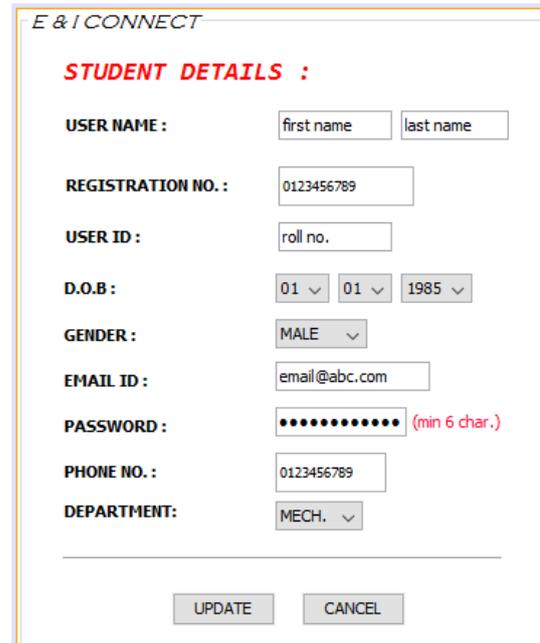
To create a new user id or to sign up for a new account option is also available so that student can create their account to add themselves to the database.

**3. PROJECT DESCRIPTION:**



This is our main page which appear when somebody clicks to our application. It require the user id which will be the Roll No provided by the organization and password. And in case if the user forgot their password then Forgot password will help user to reconnect if they forgot their password.

And for the new user there will be a SIGN UP button to join the group by filling the simple information of one's which includes the Student Name, Roll no, Registration no, and other important things.



After being a member the user page i.e. the main page or home page will appear which includes different buttons Here you can see there are several options like:



**3.1. Attendance-** It is very important to keep the record of attendance of each and every student because in this way every other person who is directly connected to the student but is not present with him in the college could access his/her attendance online. Attendance is an important tool in many cases in judging a student's academic performance. And very importantly every student has to secure a minimum percentage of attendance to make him/herself eligible for the university exams.

**3.2. Result-** The exam result is the outcome of a student's hard work and academic capability. So it is very important that the result of every student should be made available over the net or college server. By showing the individual

semester marks, a person could easily calculate his SGPA and CGPA at anytime and anywhere because it is available in the application.

**3.3. Notes-** Today's generation is totally e-oriented and who doesn't like to maintain notes on pen and paper. So, by availing notes in the application every student could download the notes and prepare for exams. If a student is absent for a particular class, then he/she will not miss any chapter because everything is available over the application. In case a person is absent throughout the session maybe because of any accidents then also a person will not suffer because this application would help him a lot.

**3.4. Grievance cell-**Every student is important of the development of the organization and so if they are in problem then the organization is in problem. By looking to this The Grievance Cell is designed so that If any student is in problem other than academic issues then they can discuss with high level administration, this will allow high to low level communication and replied by Teachers, HOD, Dean of the college.

**3.5. Notice-**All the important notices are to be read and followed by the students and the concerned faculty members. So, by this application every notice could be accessed online and if the notice is important then it will directly pop once the application is opened. By this student is always updated with the surrounding of their organization actually what is happening in their college. And for last year students all notices will be their related to Companies visit and the recruited students etc.

**3.6. Ask me please-**This is an open space discussion box and open for all where you can put your question and queries and get reply from your organization members. And in this unit all students and teachers can participate in discussions related to any subject and technology.

**3.7. About-**In this unit the details related to the developers of the application is mentioned. The details such as contact numbers and email-ids of the software application developers. And if you have some ideas which helps us to grow better and add some more features then you can directly contact to the developers and discuss with them.

**3.8. Fun time-** In this unit many brain storming games and puzzles are present so that user can twist their mind increase their IQ and spend some time and enjoy the game and entertain themselves rather to kill the time in social sites.

**3.9. Update account-**In this unit a person is allowed to access his/her personal data and change his/her personal as well. Where he/she can change their password, address, contact no. and email id and other relevant things.

**3.10. Share-** This one also make our application unique from others as if anyone wants to donate their book then the person simply put it into share column with their

contact details and other relative information and other user wants then simply get to the person. This would help to explore the knowledge on large platform and student Notes and Books shared to juniors very easily as this is seniors responsibility that the difficulties faces by them should not be repeated by their juniors so with this they can share and recommend some useful stuffs to their juniors and proudly say that they have done something for their juniors for which the coming batch can proud of it.

**3.11. Chat-** It is just like a social app where a person can chat with every other person who is a part of that institution. There will be a server and a client's page and student can simply logged into chat as a server. When they became the server then all the user logged in at that time can be seen and the server user can chat with the client and the platform is completely java based so the speed of the sending and receiving is more efficient. This will bind the user to connect with the students within their organization and create more friendly and sincere environment which will help user to explore and flourish day by day.

#### 4. CONCLUSION

1. Students will get all the required information in a single interface.
2. Reduction in communication gap and information gap between students and the department
3. Building a better student-teacher relationship.
4. Seniors get opportunities to do something for their juniors so that they will not face the same problems as their seniors gone through.

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