**Objective of the project:**

We wish to create a management system for university like IIT where there will be different access privileges for different users like students will have their own dashboard with their level of access, faculty will have the privileges to access the information of the students in his class and at the same time view the performance of the said student and comment him about the same. We are also including the graphs for the faculty to view the performance graphically. This is like blackboard but with a new approach towards the design of the access levels and the content that can be accessed by the different users.

**Major Components: -**

Login Panels: Student, Faculty; Notification panel, Student Dashboard.

**Technologies used: -**

**Front end:** HTML, CSS, JAVAScript, possibly Python.

**Back end:** JAVA, MySQL, Python, Ruby on rails(Optional).

**Expected Outcomes & Challenges:**

* In the very first page the users will be presented with a view where he must select the role he is logging in with. There will be three roles available the student, faculty and admin.
* After he selects the role he will be directed to the login page where he must login per his role. Like the faculty will login with his id [i.e. @iit.edu](mailto:i.e%20.@iit.edu) or student will login with his credentials [i.e. @hawk.iit.edu](mailto:i.e.@hawk.iit.edu) and the admin will log in with his relevant credentials.
* All this data will be verified through the database which contains the information about the required fields. The different pages will hence validate the data according to the role selected like if the role is selected as admin then he will be validated with the admin table.
* After Logging in the student will be presented with a view where he has the available classes he has registered to, the class rooster, grades etc. which will be obtained through querying the database which contains all this relevant data. The Student will strictly be restricted to viewing the relevant information of his fields and to gain the contact information about his classmates and faculty.
* After the faculty, has logged into his portal he will gain access to the classes he must teach which will be provided to him by the admin. After this by selecting the class he is going to be teaching he will have access to the class rooster the performance of the students, an option for him to comment about the student on his performance in the class. This is done by passing on the queries and linking them to the web design whereby the faculty can access the resources of the database to view all the relevant information.
* For admin after he has logged into his independent portal he will be able to add the information about the classes that are to be taught by the faculties and add or delete the same by gaining the access to pass the insert queries to the data tables in the database through the GUI. At the same time, he can edit the information about the faculties and students add or delete them and at the same time manage the system.
* A rough ERD is attached with this proposal. Please have a look at it.

**Limitations and Future work:**

we can improve the student dashboard to match university administrative level which can show the holds and finance panel too. Also, we can include a new development administration panel in which administrator will be able to manage the whole system for the university. Hence different university can have different panel design. Different functionalities to change and view the information can be added as the project progresses.

**Tentative schedule of Project:**

1st week after Proposal approval: Backend Database design & front end design.

2nd week after Proposal approval: Connections and relations of the database with front end design.

3rd week after Proposal approval: Testing, Bug fixing and final project submission by 28th Nov.