

INTRODUCTION

- E-access is a web application designed to assist the faculty members of NIT srinagar to manage student data in a better way. Student details, results all can be managed in this single application and not only this, faculty members, semester co-ordinators and the overall administrator can manage their works.
- This web application is kind of digitisation of the whole process related to student data and removes the manual chaotic and painstaking paperwork done by the faculty members .It provides a central database where all the student data, their results are stored. So that any information regarding a particular student can be accessed at any point of time and each faculty member don't have to maintain separate records for themselves.

Developers:

Under the guidance of **Er.Adil Bashir** (Faculty, IT), NIT srinagar

- Rhythm Chopra (IT/33/13)
- Dinesh Raj (IT/14/13)
- Arvind Kumar (IT/12/13)

What follows is a brief explanation of all the aspects of this web application.

What are the user(s) requirements?

No outsider/ third individual can register on the website .To register for the system the administrator must specify the individual first (in case of semester coordinator) and semester coordinator must specify in case of subject teachers.

1. **The administrator** of the application will have only the authority to allot/ set semester co-ordinators for various semester/ branch combination.

2. **Semester co-ordinators** needs to register students during registration, that is, add students to the central database with all necessary details like enrolment no., roll no., contact no etc. He/she will also set the subjects for the semester and authorize/ allot faculty members for the subjects.
3. **Each faculty member** must have a separate account and he/she should be able to view info regarding the students belonging to the class and be able to add/edit results for his subject belonging to a particular semester.

NOTE : If an individual is semester coordinator for a semester as well as a subject teacher for the same/other semester/branch , he/ she will not have to maintain more than one account for each. Thus, all the rights are available to the account holders in the same account.

What approach is adopted?

A simple approach has been adopted.

- Front end of the website has been developed using **HTML5, CSS, javascript.**
- The server side/ logic of the website (logging users in and deciding which user will have access to which data and operations depending on the type of user logged in) work is done using **PHP.**
- The database used to store whole data is **MySQL.**
- Web app consists of a basic login system where the authorized users(having a valid username and password) can login and have access to their account.
- The semester co-ordinators have special privileges.
- Admin will be the person to set semester co-ordinators.
- **DATABASE:**
 1. Two databases has been maintained----e-access and results.
 2. e-access contains following tables:
 - a) **users** : It contains the credentials of all the members of the website.

- b) **Subject details:** It contains the information regarding the subjects for each semester/ branch.
 - c) Few other tables for various semesters(III to VIII) that contain the information of all the registered students.
3. Results database contains tables that contain marks for each student belonging to each semester.

- ***Technologies used:***

The whole website has developed using a simple text editor, a web browser and XAMPP.

XAMPP is a free and open source cross platform web server solution stack package developed by Apache friends, consisting mainly of the Apache HTTP server, MySQL database, and interpreters for scripts written in the PHP and Perl programming languages.

<apachefriends.org>

- ***Testing of the web app***

1. E-access has been developed using an iterative model which is a popular software process model.
2. Each time certain features are added and others are enhanced and are being evaluated and tested by the instructor.
3. After testing by the developers themselves and instructor, the changes to bring about are being discussed and implemented.
4. The whole project has been completed in one semester which is typically three months long.
5. All the testing has been performed offline on windows 8.1 and the website layout has been tested on browsers like chrome, mozilla firefox, internet explorer.