

Visvesvaraya Technological University Belagavi, Karnataka-590018



A MINI PROJECT REPORT On STUDENTS CORNER

Submitted

in partial fulfilment requirements for the award of the Degree
of

**BACHELOR OF ENGINEERING
IN**

COMPUTER SCIENCE AND ENGINEERING

by

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2019-2020**

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CERTIFICATE

This is to certify that Nagaraj Arun Ankola (4CB18CS051) and Madana R Naik(4CB18CS042) have successfully completed the project work on '**Students Corner**' and submitted in partial fulfillment of the requirements of 5th Semester B.E., Computer Science and Engineering, prescribed by the VISVESVARAYA TECHNOLOGICAL UNIVERSITY during the academic year 2020-2021. It is verified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of mini project work prescribed by Bachelor of Engineering Degree.

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- 1.
- 2.

ACKNOWLEDGEMENT

We are indebted to our **Principal, Dr. Ganesh V. Bhat** and management of Canara Engineering College for providing an environment with all facilities that helped us in completing our mini project.

We are extremely grateful to **Dr. Demian Antony D' Mello, Head of Computer Science & Engineering Department** for his moral support and encouragement.

We wish to express our sincere gratitude to our **project guide Mr. Santosh H**, from the Computer Science & Engineering Department, for their guidance and suggestions.

We thank all the teaching and non-teaching staff of the Department of Computer Science & Engineering for their kind help.

Last but not the least; we would like to add some personal notes. If there is a driving force that keeps us going, and what has not changed it is the constant support and blessing of our parents, family and friends. There is no doubt, in spite of my strenuous efforts, errors might remain in the mini project. Naturally, we alone take full responsibility for any lack of clarity, occasional erratum or inexactness that may occur.

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ABSTRACT

When going gets tough, the tough goes online. One of the most effective strategies for academic success is effective note-taking. The teaching is of course important, but what's equally important is the smooth communication between teachers and students. So to enable smooth communication between teachers and students we are coming up with a project "**STUDENTS CORNER**".

The site enables students to access notes, to be updated with the announcement and to stay updated with the community. This site can be used by a particular institution and students of the particular college can easily access the site. The site is more beneficial to both students as it involves no cost. It enables effective communication and sharing becomes easy as it is less time consuming. It also benefits teachers to communicate the information easily.

It is user friendly to both teachers and students, as is easy to understand and use. It is paperless, teachers and students might won't have excessive amounts of paper shuffle since the classroom is completely paperless. When the teacher uploads the notes or materials to the site, they can be accessed anytime by anyone. This will save a lot of time for students if they are searching for notes or other resources for studies. No matter how much of a good listener a student might be, there will be some things forgotten. Because no one can memorize the whole lecture. This site helps with documentation, as all the notes needed will be safely stored in an online database.

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CHAPTER 1

INTRODUCTION

1.1 PURPOSE

Students Corner greatly complements your blackboard teaching skills: you can assign homework, check tutorials, create quizzes, make announcements and share important links.

Students Corner is a great strategy to introduce students to methods for accessing information and communicating/collaborating online in a self-contained environment that is safe and easily accessible. Students Corner is a web service that aims to simplify creating, distributing, and sharing knowledge through online mode. Students Corner helps to keep your digital classroom organized. Teachers can upload notes and share some other important resources through a single interface.

Initially both teacher as well as student have to register/signup to the Students Corner community by providing the valid details. And by using those credentials they need to login and enjoy their virtual community and stay updated. This site also helps students to post their projects or articles and to showcase their skills that will be visible to all the students using the site. It therefore helps other students to get some ideas about topics or it can act as a source of reference

The website involves:

- Landing Page, where the basic information regarding the site is being displayed from where Students/Teachers can directly login.
- Announcements Section, where faculty can post the announcements also the students will be having the filter option to check the announcements made for different section
- Blog/Project Section, where students can share the projects made by them where they can also write the articles or blogs and showcase their skills
- Lecture Profile, where all the info regarding the college faculty will be displayed and from where students can directly contact.
- User Profile, in this section all the details regarding the user will be displayed and from here the user can also delete the contents which they have uploaded.

1.2 SCOPE

To enable the smooth communication between the faculty and students. Also to make the learning process easy and accessible for students.

CHAPTER 2

REQUIREMENT SPECIFICATION

2.1 Functional Requirements

- Every user needs to register to the website by providing a unique email, username, password and other basic information
- After signing up, the user can access the website by logging in whenever required.
- If the user is not logged in, he will not be able to view the blogs or access notes and will also be unable to use any features.

2.2 Non-Functional Requirements

- Performance - The website must be interactive and the delays involved must be less. So in every action-response of the webpage, there are no immediate delays.
- Safety - Information transmission should be securely transmitted to server without any changes in information
- Reliability - As the website provides the right tools for discussion, problem solving it must be made sure that the website is reliable in its operations and for securing the sensitive details.
- Availability - If the internet service gets disrupted while sending information to the server, the information can be sent again through resubmission.
- Efficiency – The extent to which the website handles the capacity, throughput and response time.

2.3 Hardware Requirements

- Processor: x86 compatible processor with 1.7 GHz Clock Speed
- RAM: 512 MB or greater
- Hard Disk: 20 GB or greater
- Monitor: VGA/SVGA
- Keyboard: 104 keys standard
- Mouse: 2/3 button. Optical/Mechanical.

2.4 Software Tools Used

- Operating System: Windows 7/8/10
- Front End: Html, CSS, JS
- Rear End: MySql

2.4.1 Database Management System (DBMS)

Following the technology progress in the areas of processors, computer memory, computer storage, and computer networks, the sizes, capabilities, and performance of databases and their respective DBMSs have grown in orders of magnitude. The development of database technology can be divided into three eras based on data model or structure: navigational, SQL/relational, and post-relational. The two main early navigational data models were the hierarchical model, epitomized by IBM's IMS system, and the CODASYL model (network model), implemented in a number of products such as IDMS.

The relational model employs sets of ledger-style tables, each used for a different type of entity. Only in the mid-1980s did computing hardware become powerful enough to allow the wide deployment of relational systems (DBMSs plus applications). By the early 1990s, however, relational systems dominated in all large-scale data processing applications, and as of 2015 they remain dominant: IBM DB2, Oracle, MySQL, and Microsoft SQL Server are the top DBMS. The dominant database language, standardized SQL for the relational model, has influenced database languages for other data models.

2.4.2 HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

2.4.3 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.[1] CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.[3] This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

2.4.4 JAVA SCRIPT

JavaScript often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it for client-side page behavior, and all major web browsers have a dedicated JavaScript engine to execute it. JavaScript engines were originally used only in web browsers, but they are now embedded in some servers, usually via Node.js. They are also embedded in a variety of applications created with frameworks such as Electron and Cordova.

Although there are similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.

2.4.5 BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is a HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents.

2.4.6 VISUAL STUDIO CODE

Visual Studio Code is a free source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.

2.4.7 phpMyadmin

phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.

Features provided by the program include:

- Web interface
- MySQL and MariaDB database management
- Import data from CSV and SQL
- Export data to various formats: CSV, SQL, XML, PDF (via the TCPDF library), ISO/IEC 26300 - OpenDocument Text and Spreadsheet, Word, Excel, LaTeX and others
- Administering multiple servers
- Creating PDF graphics of the database layout
- Creating complex queries using query-by-example (QBE)
- Searching globally in a database or a subset of it
- Transforming stored data into any format using a set of predefined functions, like displaying BLOB-data as image or download-link
- Live charts to monitor MySQL server activity like connections, processes, CPU/memory usage, etc.
- Working with different operating systems.
- Make complex SQL queries easier.

CHAPTER 3

DATABASE DESIGN

3.1 Entity Relationship Diagram:

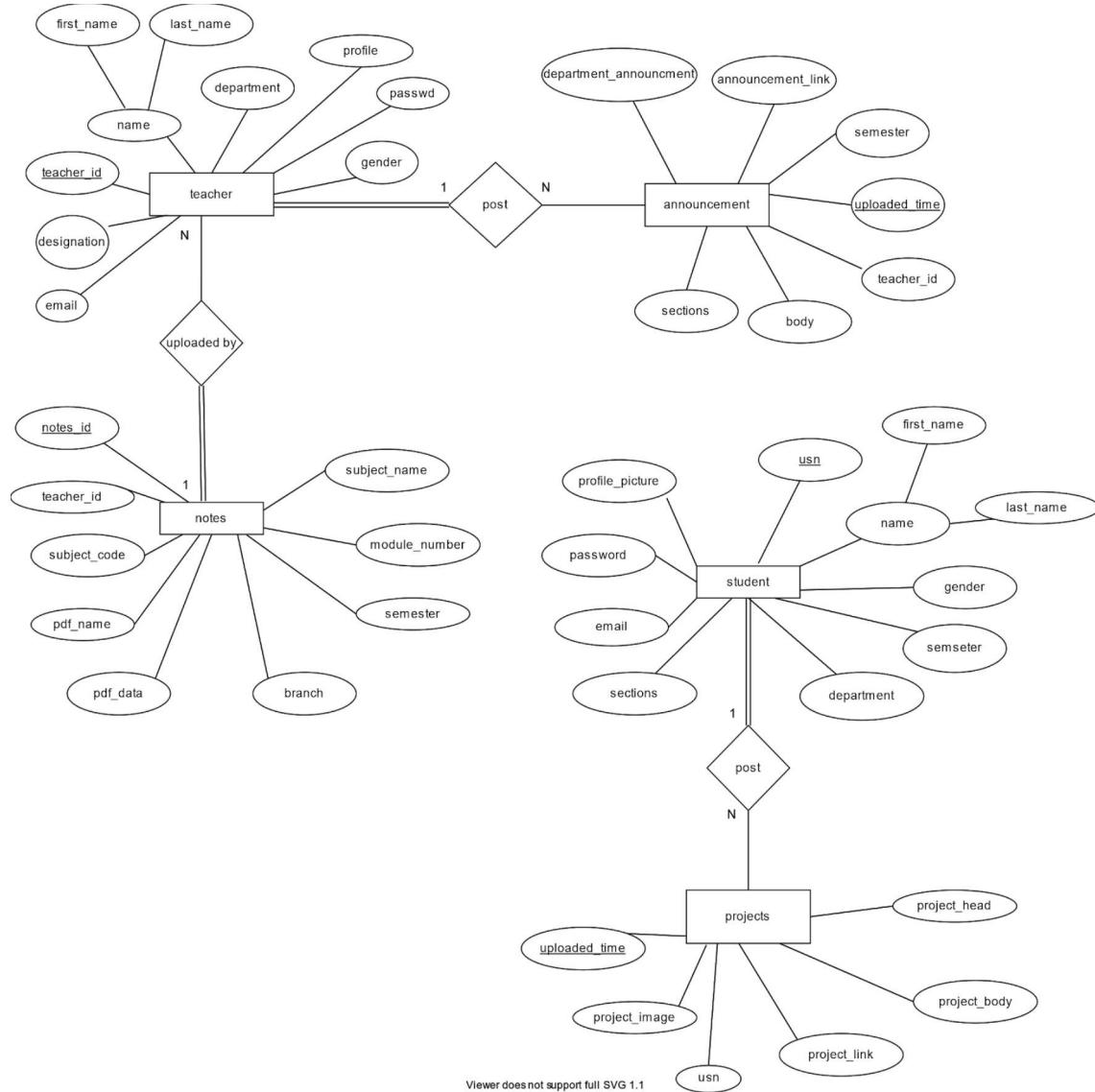


Figure 3.1: ER DIAGRAM FOR STUDENTSCORNER

An **Entity Relationship (ER) Diagram** is a type of flowchart that illustrates how “entities” such as people, objects or concepts relate to each other within a system. In software engineering, an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes.

3.2 Relational Schema:

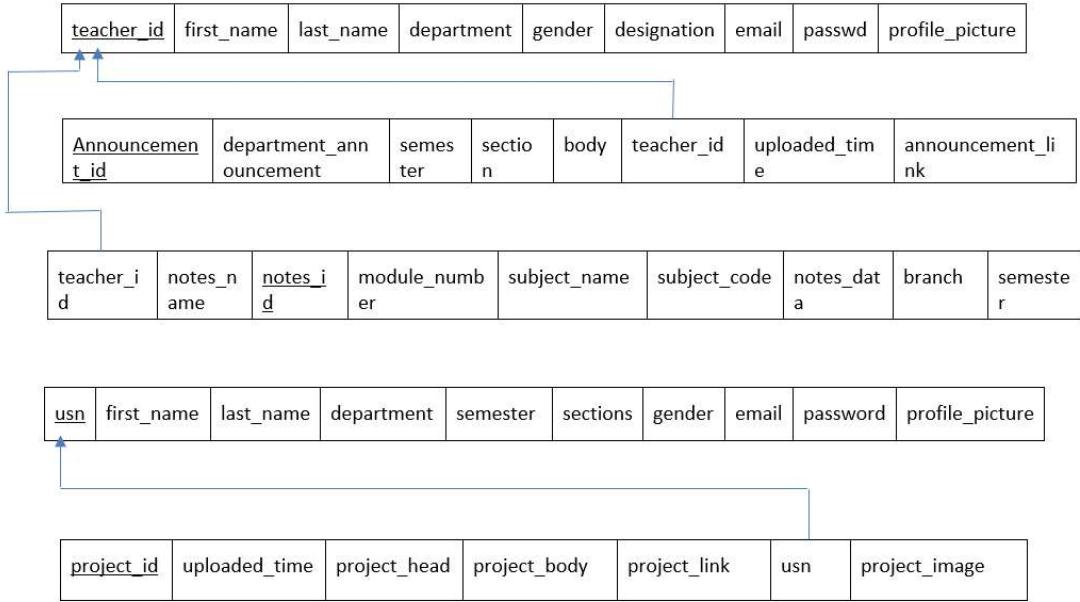


Figure 3.2: RELATIONAL SCHEMA FOR STUDENTSCORNER

Relational schema refers to the meta-data that describes the structure of data within a certain domain. It is the blueprint of a database that outlines the way its structure organizes data into tables.

CHAPTER 4

IMPLEMENTATION

4.1 TABLE DESIGN

The project requires many relations to store data and retrieve it. These relations are defined as tables in SQL using CREATE TABLE statements. The following are the tables defined in our project.

- Teacher Table:

```
CREATE TABLE teacher (
    teacher_id varchar(15),
    first_name varchar(40),
    last_name varchar(40),
    department varchar(50),
    gender varchar(7),
    designation varchar(50),
    email varchar(100),
    passwd varchar(100),
    profile_picture text,
    PRIMARY KEY (teacher_id)
);
```

- Announcement Table:

```
CREATE TABLE announcement (
    announcement_id INTEGER(255),
    department_announcement varchar(255),
    semester varchar(20),
    sections varchar(20),
    body text,
    teacher_id varchar(255),
    uploaded_time timestamp current_timestamp(),
    announcement_link text,
```

```
PRIMARY KEY (announcement_id),  
FOREIGN KEY (teacher_id) REFERENCES teacher(teacher_id) );
```

- Student Table:

```
CREATE TABLE student (  
    usn` varchar(255),  
    first_name varchar(255),  
    last_name varchar(255),  
    department varchar(255),  
    semester varchar(255),  
    sections varchar(255),  
    gender varchar(7),  
    email varchar(25),  
    password varchar(255),  
    profile_picture text ,  
    PRIMARY KEY (usn),  
)
```

- Projects Table:

```
CREATE TABLE `projects` (  
    project_id INTEGER(255),  
    uploaded_time timestamp DEFAULT current_timestamp(),  
    project_head text,  
    project_body text,  
    project_link text,  
    usn varchar(255),  
    project_image text,  
    PRIMARY KEY (proect_id),  
    FOREIGN KEY (usn) REFERENCES student(usn)  
)
```

- Notes:

```
CREATE TABLE pdf (  
    teacher_id varchar(15),  
    notes_name text,
```

```
notes_id int(11),  
module_number varchar(5),  
subject_name varchar(50),  
subject_code varchar(50),  
notes_data longblob,  
branch varchar(50),  
semester varchar(50) ,  
PRIMARY KEY (notes_id),  
FOREIGN KEY (teacher_id) REFERENCES teacher(teacher_id)  
);
```

4.2 DATABASE CONNECTIVITY

We have used mysqli_connect function to connect with the database.

CHAPTER 5

USER MANUAL

- Open any browser and open the site.
- If you are new to the website, then register to the site as a teacher or a student.
- If you have already registered then login to the website using the registered email and password.
- Once you are logged in you will be landed on the announcements tab, where all the important announcements will be posted by the faculty.
- If you are a teacher you can post the announcement, or if you are a student , the announcement related to your class will be shown or also you can filter out the announcement using a filter button to view a particular announcement.
- In the next tab it is the projects/blogs posted by the students, you can post in this particular tab.
-
- The next tab is of the lecture profile where the list of all the faculty of the particular institution will be displayed from there you can also directly contact them.
- The next is the user profile section from where you can view the info from which you have registered.
- In user profile section you can also view all the announcement/blogs posted by you and you can also delete them if you wish to
- There is also a logout button, clicking on it you can safely log out from the site.

CHAPTER 6

SNAP SHOTS

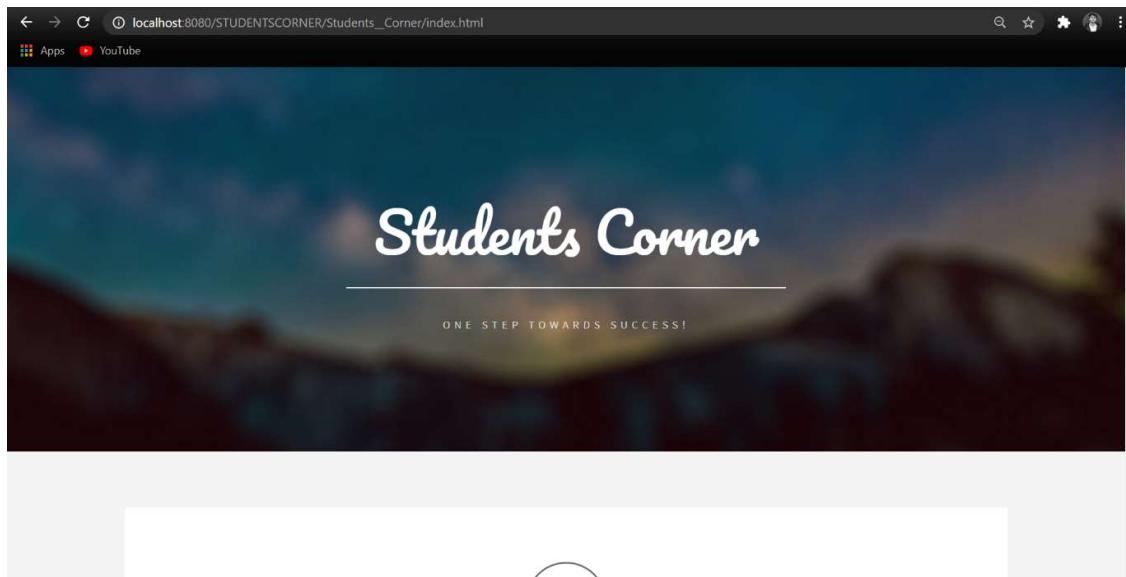


Figure 6.1 : Landing page which gives the basic info of the site and the college.

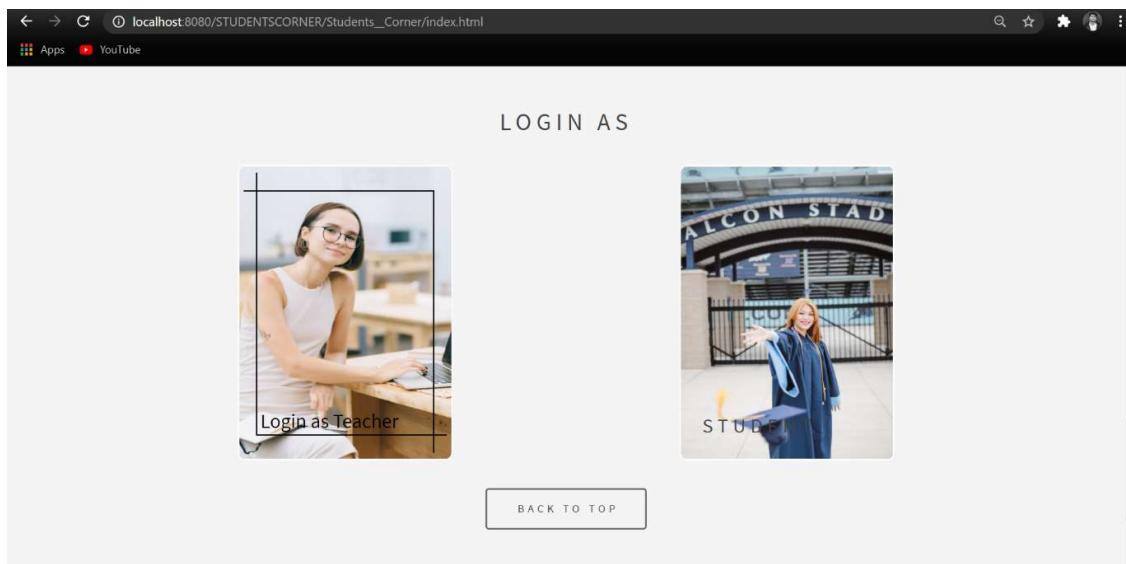


Figure 6.2 : To login or sign up into the site.

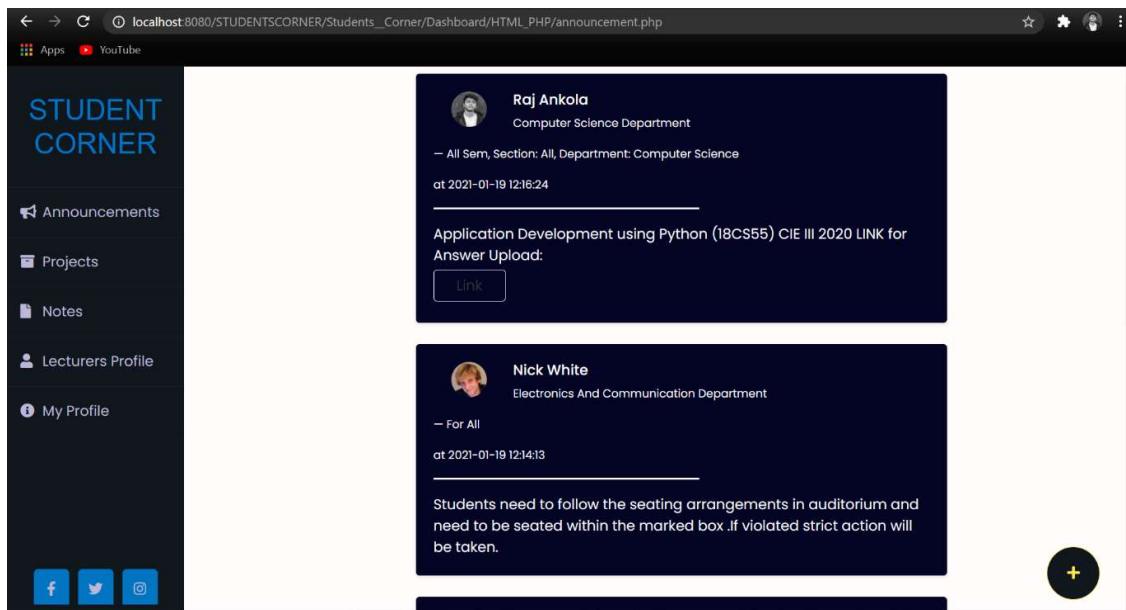


Figure 6.3 : Announcement page where all the announcements will be displayed.

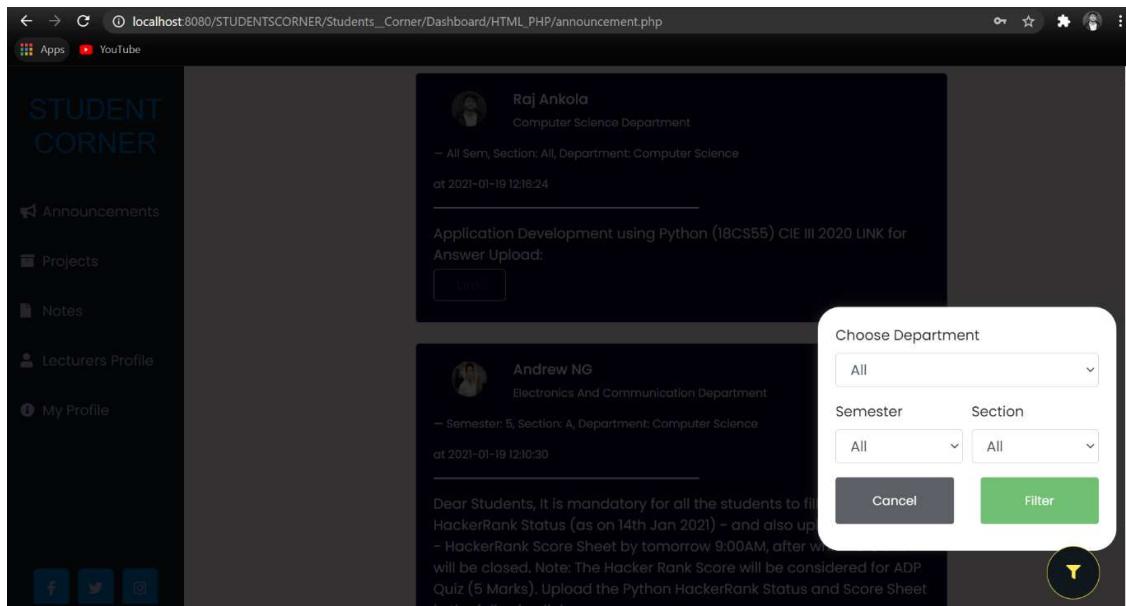


Figure 6.4: Filter button for students to filter out the announcement to view only particular announcements.

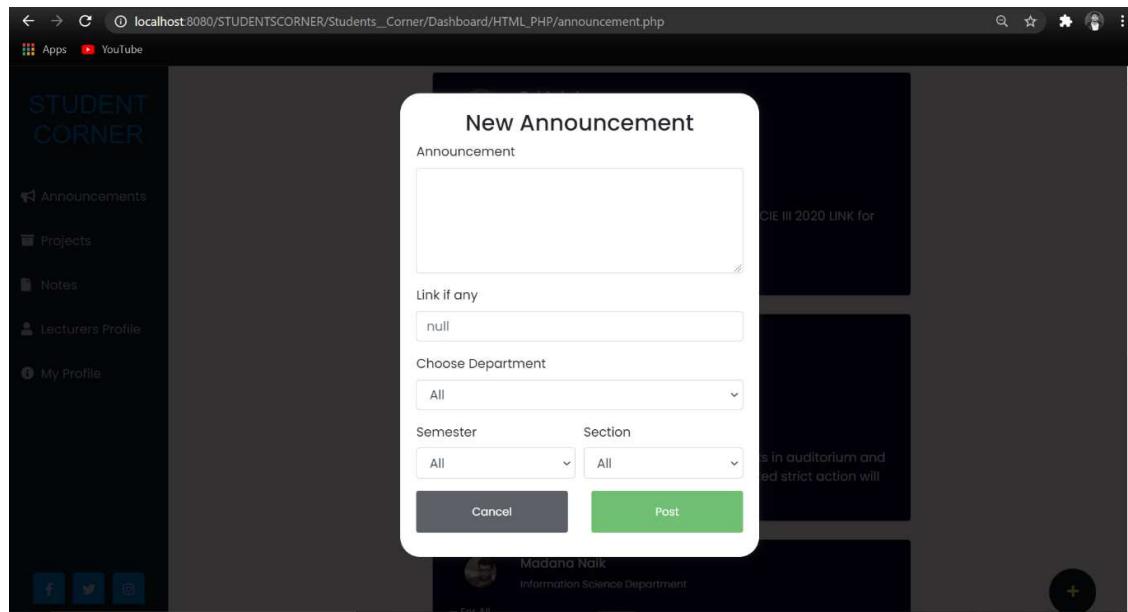


Figure 6.5 : New announcements pop up, only for teachers to make new announcements.

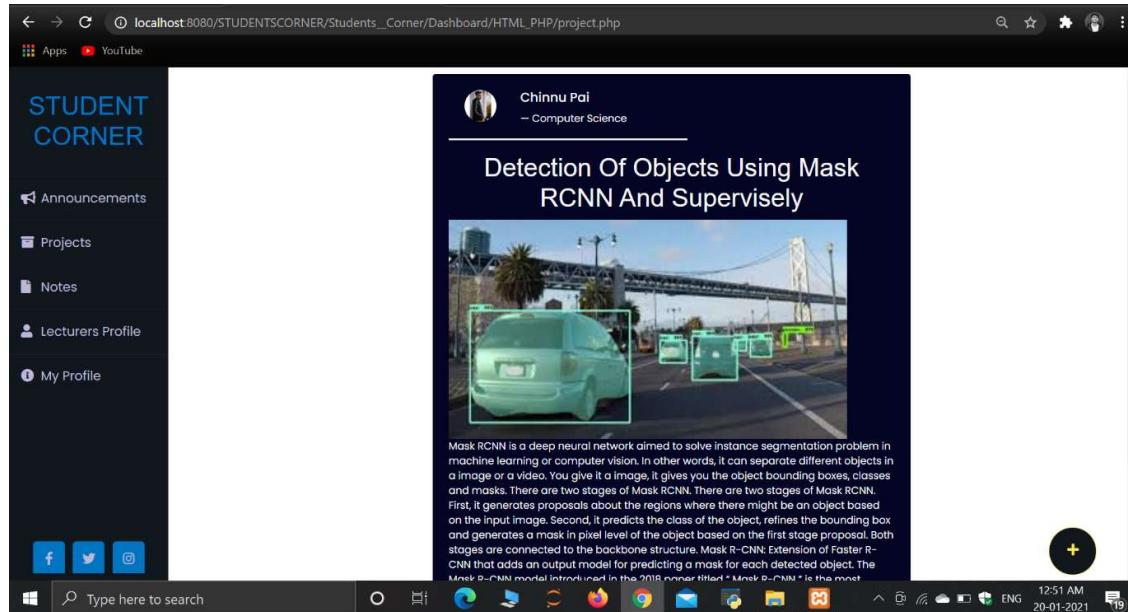
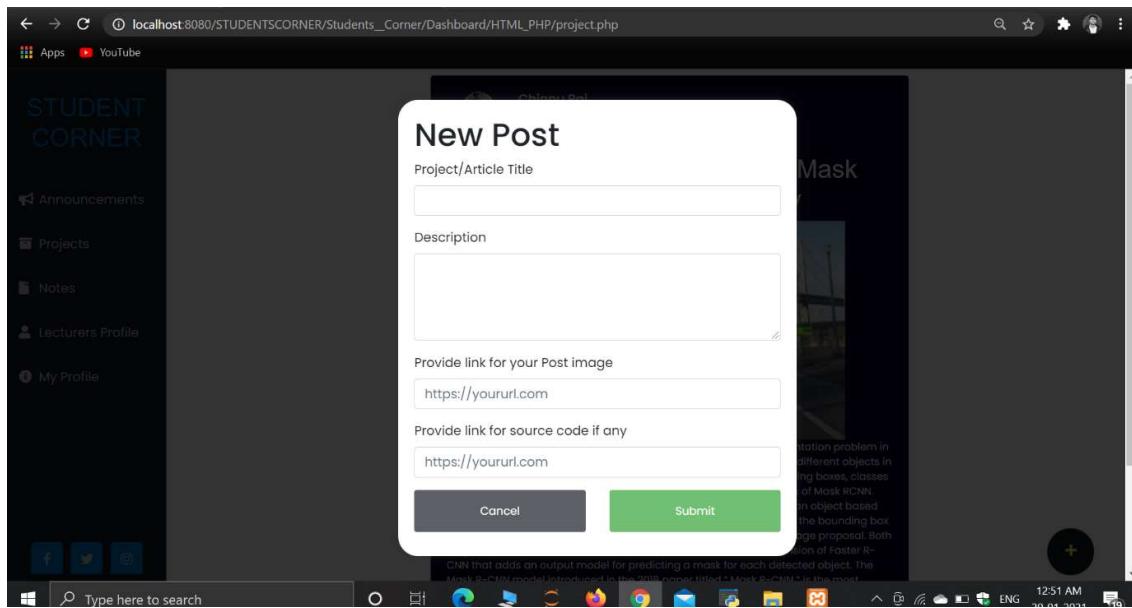
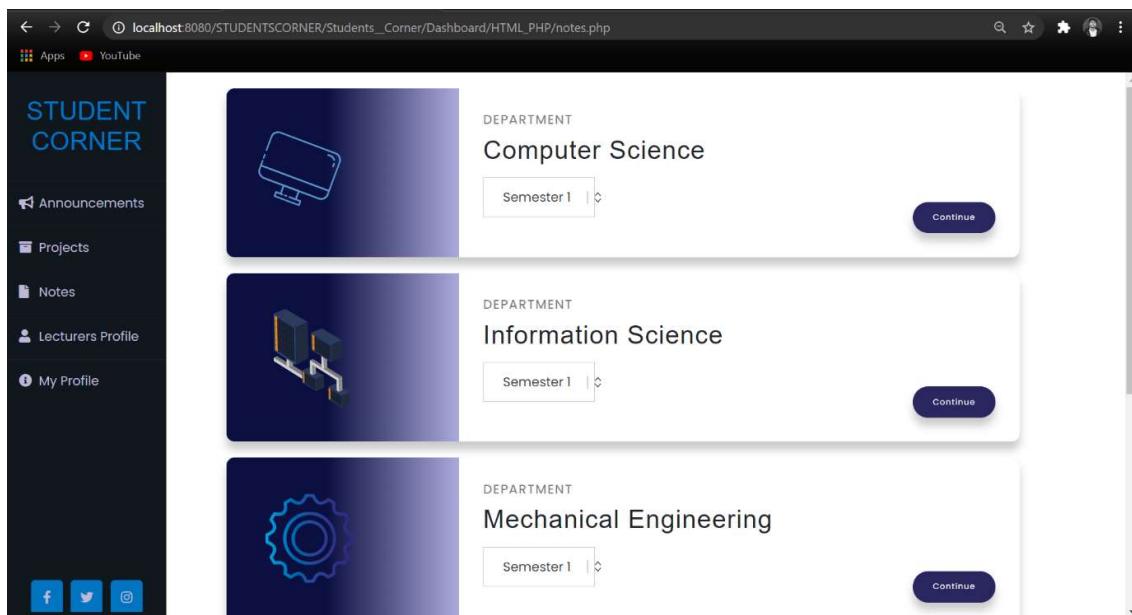


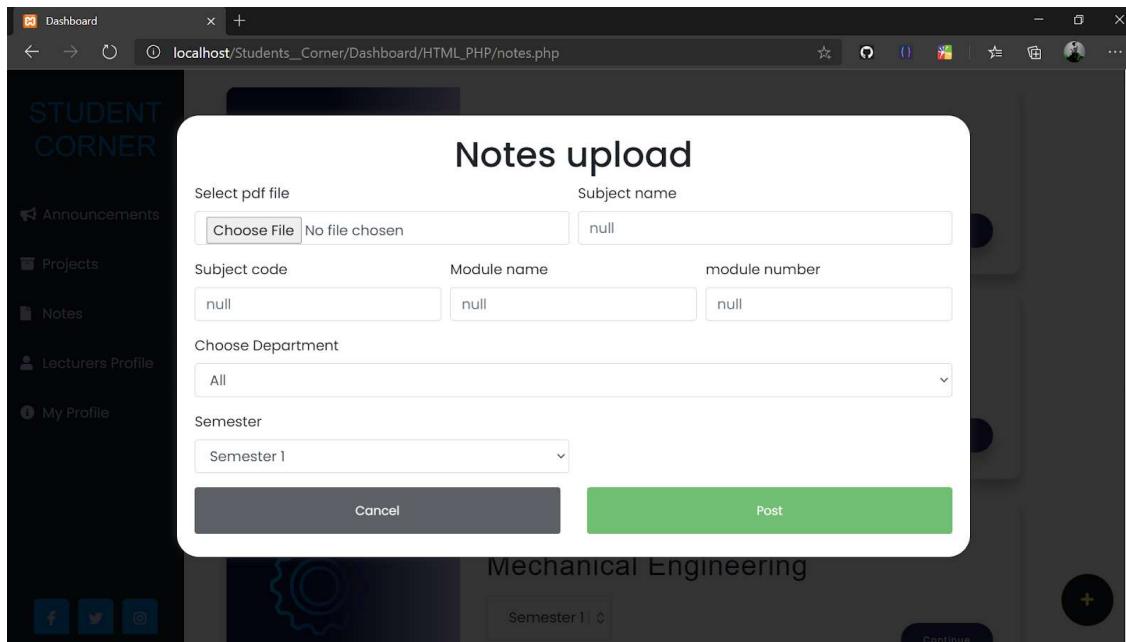
Figure 6.6 : Projects section where students can post the projects/blog articles.



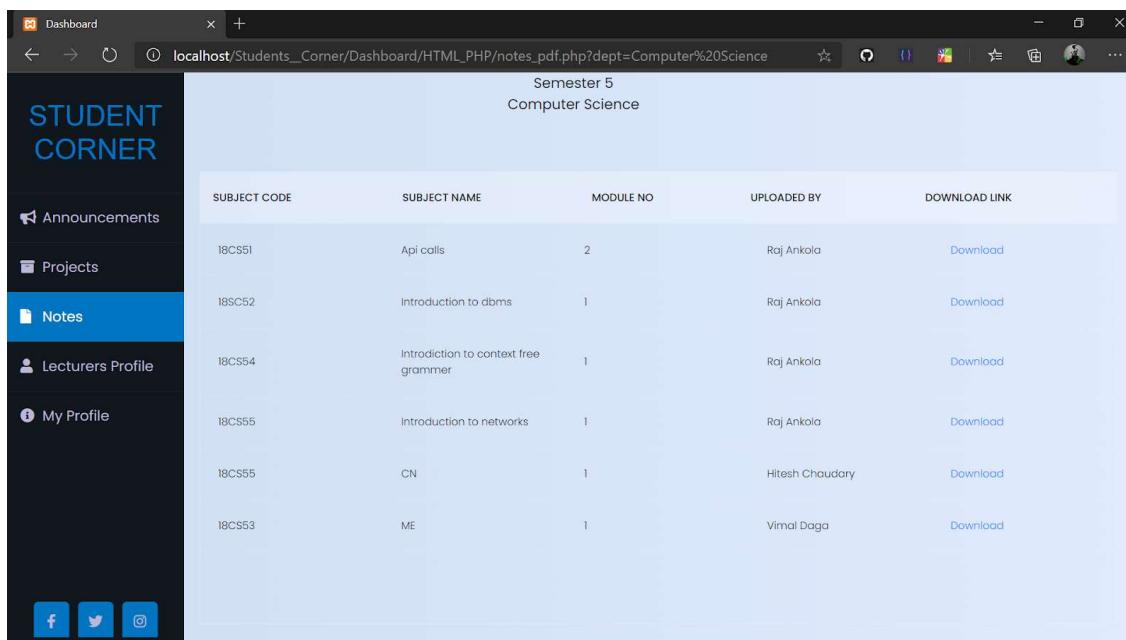
6.7 : Pop up form for students to Post their projects or articles.



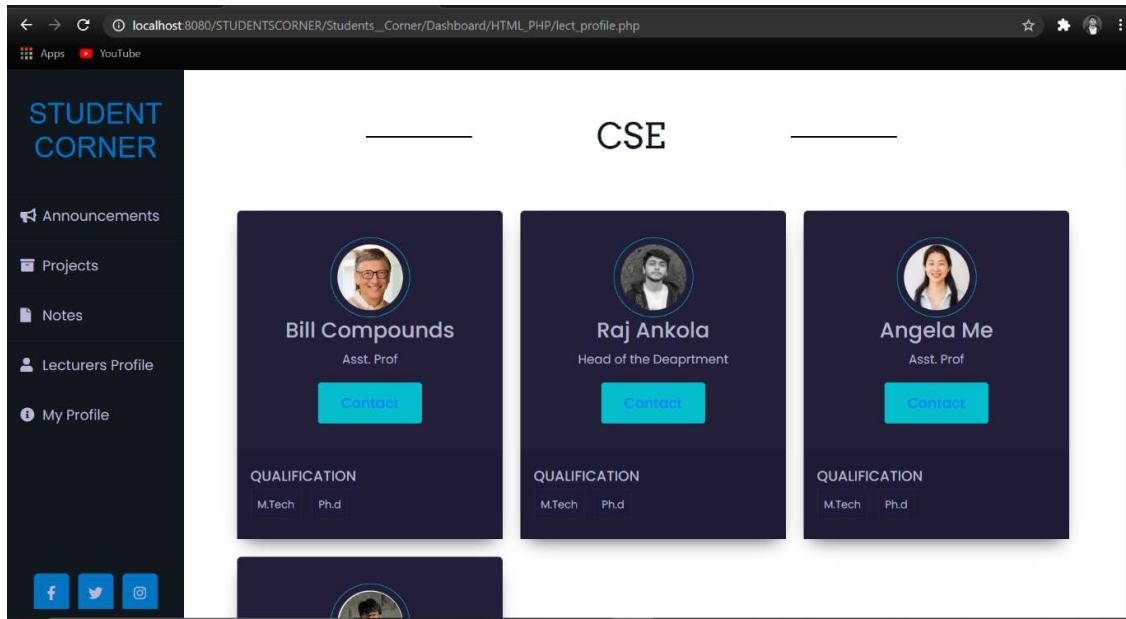
6.8 : Notes section where you can choose whichever notes you want to view.



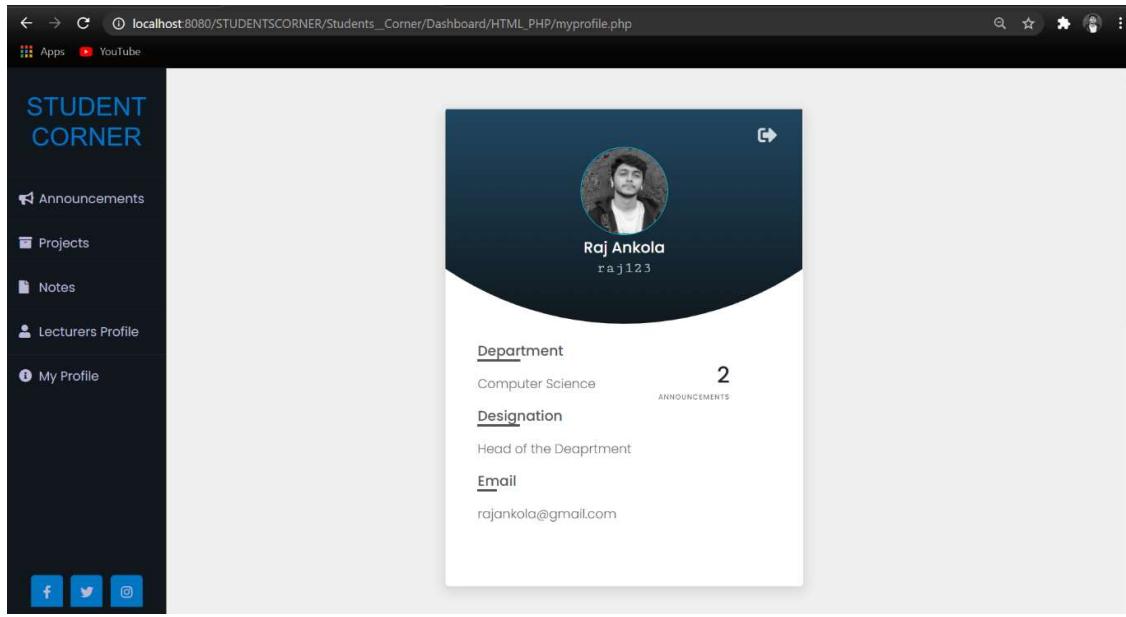
6.9 : Pop up only for teachers to upload the notes.



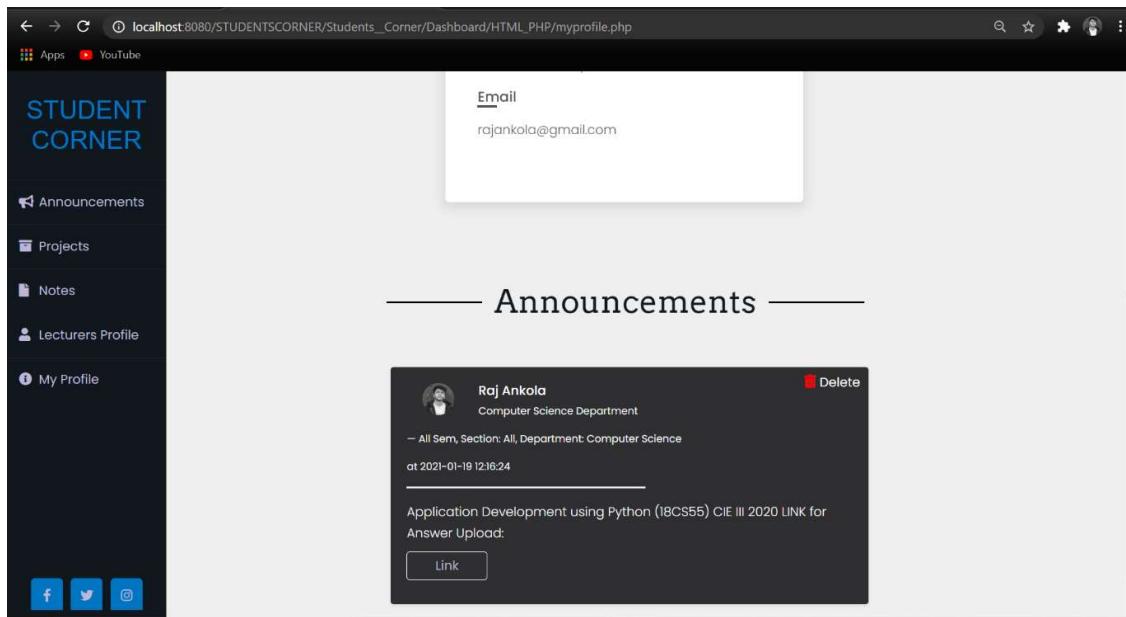
6.10 : Here you can find all the notes uploaded,



6.11 : In this section you can view all the details of the faculty



6.12 :User profile section to view your own profile.



6.13 : You can also view all the posts or announcements made by you and can delete them if you wish to.

CHAPTER 7

CONCLUSION AND SCOPE FOR FUTURE WORK

Students Corner is probably best described as a good start. It's intuitive, with plenty of genuinely useful features for teachers and students, and could actually help to cut down on paper used in schools. But it's also not a robust tool to replace a full-featured learning management system. It doesn't have automated quizzes or tests, can't automatically add students, and supports much more of a blended learning model than an asynchronous/completely online one. In terms of the future, there are many scope and benefits in the field of online teaching, so we can make this as an Official Application with some extra additional features.

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