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STUDERE SYSTEM

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ABSTRACT:-

As we all have come across the earlier situation of how the management of student information example: records of students , results of students etc. took a lot of time and energy. People used to spend days in order to manage the records and maintain the files properly. Lots of chaos used to happen. Students and teachers were required to meet again and again to know and ask anything.

In such a severe condition it has become very important to do things online so that the lives of teachers and students do not get infected by this hazardous pandemic disease and also the work that one was unable to do due to this pandemic can easily sit at home without any fear of becoming corona positive and do the work in a more safe and easy manner.

So the solution to this problem in this COVID time period is the newly designed Studere system (SS) which is a simple interface that provides the option to manage student information in a proper way. Due to its development nowadays , it can be used by many educational institutions or colleges or even in schools to easily manage the records of students.

Studere System(SS) is able to deal with the activities information from the proposal application stage until the end which includes tracking of attendance , student academic reports, student information, student college details, student course details, student curriculum activities, student batch details, student score management, generating reports for administrative purposes and many such things.

Overall the studere system is the system which is used to manage all the details of the student online. It is very easy for the teachers and students to view necessary details without any intervention . As we all know, in this busy world today time is very important for everyone. Earlier when things were not online it was just a waste of time for the teachers and the students to reach out regularly to ask or to know anything, but now the earlier problems are solved and lot of time is saved as it has become an easy task for both the teachers and the students to ask and know things online only because of the help of studere system .

The way this system is designed is quite appreciable because with help of SS teachers students can know everything whatever they are in need to know from them very easily.
This is easy to understand and use. The integrated database application is developed in such a superb way that it reduces the lot of precious time that is spent on administrative tasks. This system is also error free and very efficient in its work and less time consuming. These facilities that one can enjoy on this system are all because of the extra care and hard work taken to build it .

Keywords: Studere System, student, online, automation, forms.

INTRODUCTION:-

In this advanced world today many things are being developed and designed to resolve the earlier problems faced. With technology and time advancement, it is essential for rapid information dissemination [8]. But as we all are aware that the latest Coronavirus disease (COVID-19) outbreak also has altered the higher education landscape on the learning delivery and the students' co-curricular activities. Such students' activities are targeted at strengthening the students' comprehension, developing the students' coping skills, helping them cope with stress, and offering extra opportunities to improve their employability [7].

In Today's scenario we all know that things are going online and very little paperwork is done in the schools and in the universities. So we need something that manages all our daily basis paperwork online where we do everything as we are doing on the paper [11]. That something includes either an Application or else a website where we are able to do the things online. So, my team and I created a STUDERE SYSTEM to manage the student data in an effective and efficient manner. In this an authorized user is logged via registered mail id and password, it may be a student or the authorities of the University.

Under these circumstances , the implementation of SS and the design of SS is only to replace or to reduce the current problems and the paper-based scenario [12]. With the help of SS the college faculties are directly able to access the details of students like their academic progress, attendance details, and report cards, and many more things.
All the information or data of the student is reviewed and updated in the database of the server before the data gets changed. All the information is uploaded on the server and accessed and managed by the college administrator and there is no read-option available for the students. Administrators can alter the data, validate the data, remove the data or insert the data as it has all the permissions. And on the other hand, the student has an option to raise his query in front of the subject teachers as well as in front of higher authorities [4]. This SS system provides a simple user interface for the use case of students as well as for the authorities.

The SS system has a very simple interface to maintain the data of the student. We cannot achieve this objective by pen and paper as the data might be scattered and can be written to many places and most of all it is very time-consuming to do paperwork [13]
.
All the above issues are resolved by using the Studere System (SS) which provides the online interface for the faculty, students, etc. If we increase the efficiency of college data management automatically, it decreases the time taken to access the student data or to deliver the student data. To make the system more secure, reduce the time spent on non-value-added tasks [6].

This data or information basically includes all student's background information, courses taken by the student, student attendance, grades of student, student performance record, and much other student information needed by the college or university. Studere System deals with all kinds of student details, student academics related reports cards, student college details, courses taken by students, student curriculum activities, student batch details and many other related details too. It have all the details of a student from the day one to the end of his college journey which can be used for reporting purposes, for attendance [5],

student progress in the course taken, completion of semesters or years, upcoming semester year curriculum details of the students, students exam details, students project or assignment details, students final exams results, and all of these information will be available for future too [9].

As we all know that the Information plays a very vital role in the development and growth of any college, institution or university . As we see currently, the different departments manage student data independently according to their own ways. There are no same standard processes or programs for capturing and processing or to store student's information in the database [15].

The system was fully developed by using the following languages like Laravel, HTML, CSS, BOOTSTRAP, JS, and for the database we are using POSTGRES.
All the steps of the application development cycle are employed successfully. It updates the PostgreSQL database on a day to day basis.

Review Of Related Literature:-

The problem in management of student data on the paper is very huge. As it is very hard to manage the data of thousands of students on paper on a daily basis. By reading the earliest published paper we came to know that a huge amount of data is impossible to manage on paper so we need a database management system that is why we are creating a Studere System which is basically used to manage the data of schools , colleges or universities online[1,2].

All the data of schools , colleges or universities are stored in the database which is only accessed by the authorized user whether it is a student or it is an authority person. In our case we are using the PostgreSQL database for our project named as Studere System [2,3,8,10].

As we also came to know that the data was altered in the previous created student database management system but in our case it is safe as only authorized person is allowed to login and perform operation read and write in the database and also the login and logout history is automatically get printed or in the other words we can say that automatically saved in the log history [4,11,12].

The Studere System is highly efficient and effective to use rather than using paper for managing the student data as we are using HTML, CSS, BOOTSTRAP, JAVASCRIPT for the Front-end and LARAVEL and MVC for the Front-end and Back-end and PHP, POSTGRESQL for the Back-end [5,7].

PostgreSQL is a powerful, open source object-relational database system with over 30 years of active development that has earned it a strong reputation for reliability, feature robustness, and performance. It is very easy to understand, learn and to fetch the data from the database according to our need from the specific table without altering the other tables in the database [2,3].

METHODOLOGY & IMPLEMENTATION:-

Studere System is a unique, user-friendly, and quite effective project for the management of students. And to make this happen we have used various technologies for different elements in unique methods. What's working in the background is listed down below:

Front-end:

1. HTML:- Firstly, the structure of the website is designed by HTML. HTML stands for Hypertext Markup Language. It is the basic building block of the website. Everything which is assigned at its place is done by the use of HTML.

2. CSS:- Secondly, we have used CSS for the styling of our website. CSS stands for Cascading Style Sheets. By using it creatively one can provide an attractive look to any website.

3. Bootstrap:- Then we have used Bootstrap which is a framework that makes the user interface of the website user-friendly and attractive. It is lightweight, customizable, and also contains a responsive structure and style.

4. JavaScript:- Apart from the above we have also used JavaScript here, which is a scripting language that allows us to implement complex features on a webpage like displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc.

Both Front-end & Back-end :

1. Laravel:- Here firstly we have used Laravel which is a web framework that is used for building customized web applications using PHP. Laravel is the most important component of our project as it makes our project unique and different from the already existing student management systems.

2. MVC:- We also used MVC in Laravel. It is also a framework. MVC stands for Model-View-Controller. It is an architectural pattern that separates an application into three main logical components Model, View, and Controller.

    a. Model:- The model component stores data and its related logic. It represents data that is being transferred between controller components or any other related business logic. It responds to the request from the views and also responds to instructions from the controller to update itself. It is also the lowest level of the pattern which is responsible for maintaining data.

    b. View:- A View is that part of the application that represents the presentation of data. Views are created by the data collected from the model data. A view requests the model to give information so that it resents the output presentation to the user.

    c. Controller:- The Controller is that part of the application that handles the user interaction. The controller interprets the mouse and keyboard inputs from the user, informing the model and the view to change as appropriate. A Controller sends commands to the model to update its state. The controller also sends commands to its associated view to change the view's presentation.

Back-end:

1. PHP(Hypertext Preprocessor):- Here in the Back-end we have used PHP. Which is a server-side scripting language. It sends the output to the client which is processing on the same server. Here when a request is filed the PHP sends the resources back to HTML for sake of processing. It helps in managing dynamic content, databases, session tracking, and even for building an entire e-commerce site. It consists of several popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

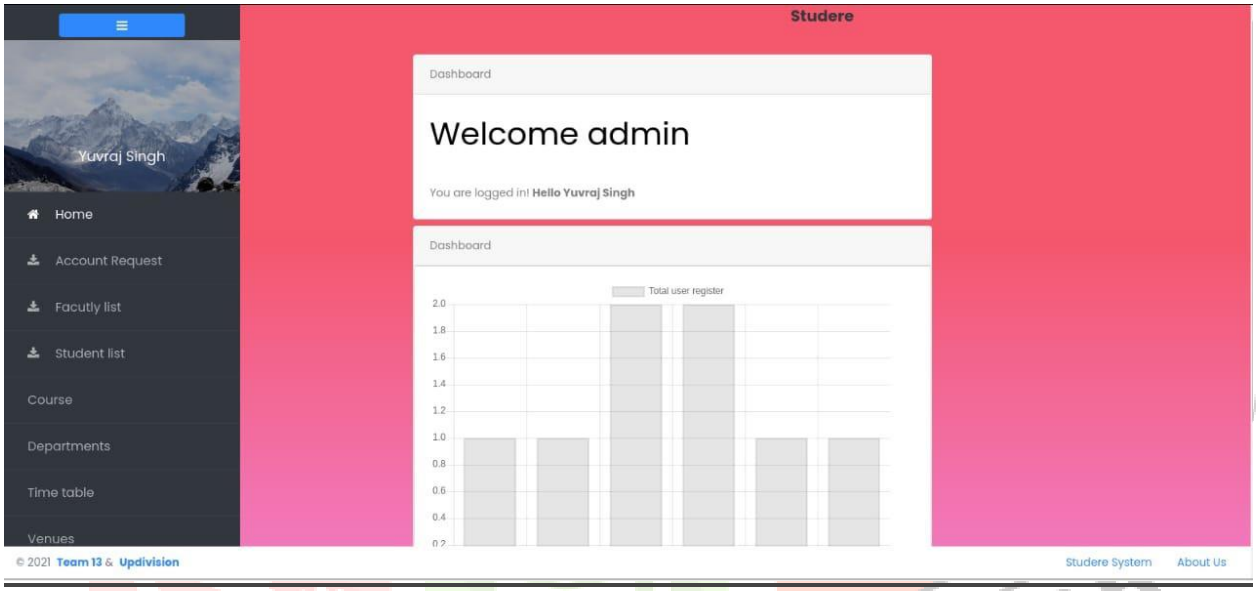
2. PostgreSQL:- Last but not least the most important part of any database management system is the database itself which in our project is PostgreSQL. We have used PostgreSQL because

it is an advanced and enterprise-class open-source relational database that supports both SQL (relational) and JSON (non-relational) querying. PostgreSQL's write-ahead logging makes it a highly fault tolerant database. It is ACID compliant, and has full support for foreign keys, joins, views, triggers, and stored procedures, in many different languages.

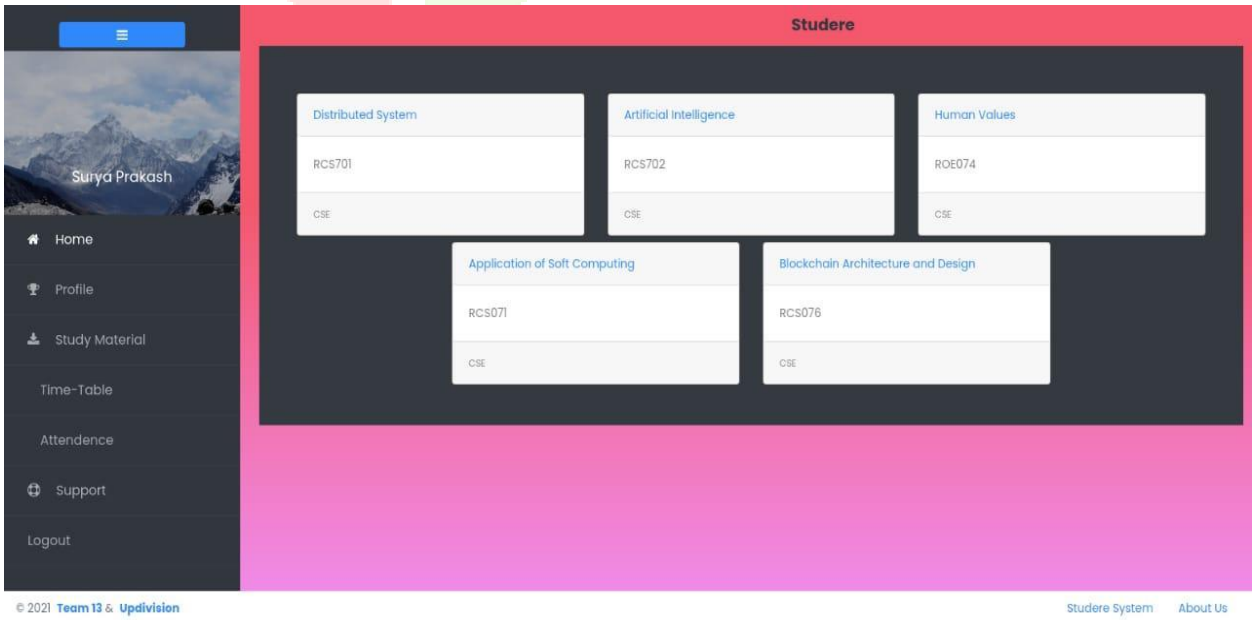
RESULTS:-

Following are the some result of our project :-

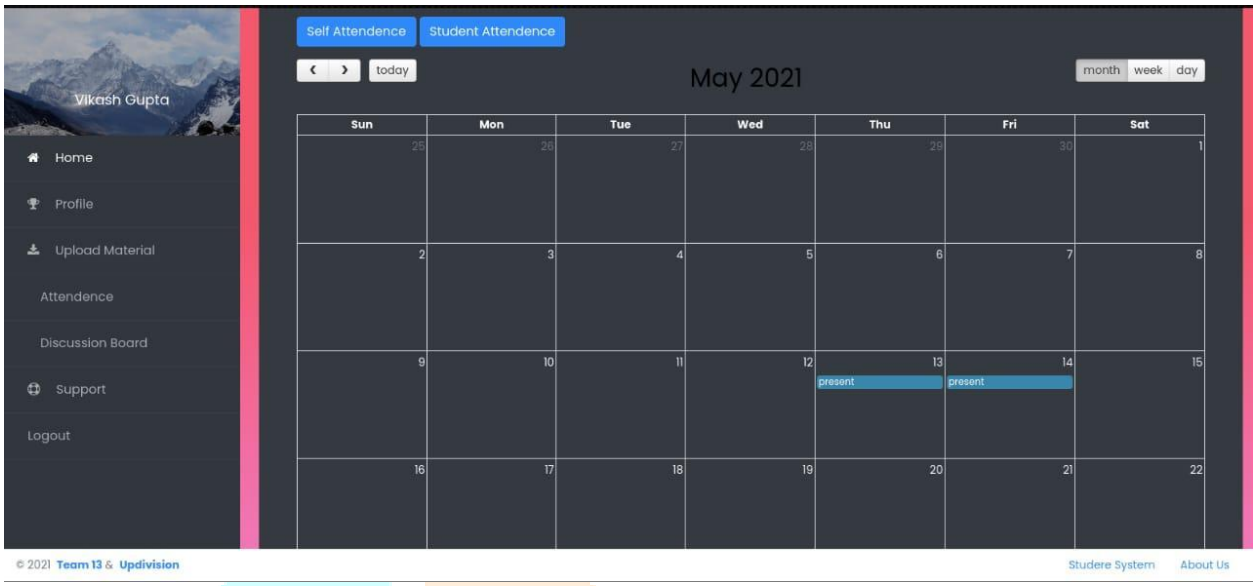
1. Admin Page :



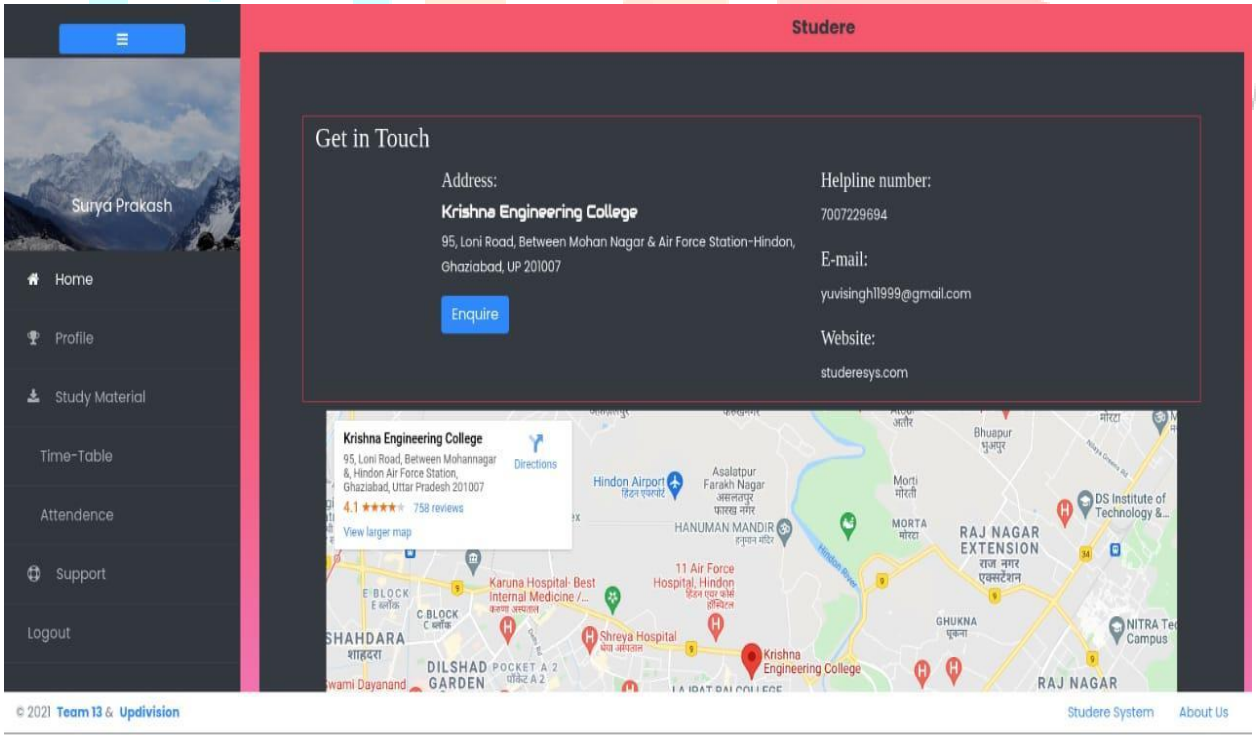
2. Study Material Page:



3. FACULTY SELF ATTENDANCE:



4. SUPPORT AND ENQUIRY:



CONCLUSION:-

Studere System is not just a student database management system, it is way more than that. As managing anything is quite difficult for many and hence the work starts to pile up, this system will help to get rid of such problems because this system is fast, hassle-free, and easy to use. Not only storing is easy here but getting information about a particular student is also way easier. Apart from all such features this system also manages to maintain the data in a sorted manner which makes it handy for both teachers as well as students. This system makes a profile for each and every student which makes it unique and different from the already existing student database management systems. The profile can only be accessed by the student himself, the administrator, and the faculty members. Every profile contains all the information about the student that is his name, course details, and contact details. Apart from the profile this system also contains a timetable generator and attendance marking system. Timetable generator is managed by the faculty members so that it can be easily accessed by the students.
Only the faculty members will be able to mark the attendance in the attendance marking system but the students can also view their attendance. It also consists of a calendar generator which further helps in keeping a track of the upcoming events.

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