ICampusX 2.0

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Abstract - This ICampusX 2.0 is a project developed using PHP programming language. The main aim of this project is to develop an online website/App/Software which covers all the details of college i.e., Student attendance details, Event details, Student fees transaction details, Marks details, Documents, records, etc in one place. All the record stores in MySQL Database. ICampusX 2.0 will also reduce the cumbersome paperwork, manual Labor cost as well as communication cost. The main purpose is to design a college website/Android Application which contains upto-date information of the college that should improve the efficiency of college record management and decrease the space between student and Faculty/Campus.

Index Terms - Database, Windows, Android Technology, administration, maintain records, PHP, SQL Server, HTML, JavaScript, Browser, YouTube, college management, information system, document management system, ICampusX 2.0.

1.INTRODUCTION

The ICampusX 2.0 is the Intelligent Campus experience Framework. It is usually situated on the Concept of a College Data Management System. The main intent behind developing the ICampusX 2.0 system is to provide a facile way to access the whole information about the college, staff, students, faculties, college places, etc. It can hold all details about a student, the details include college details, subject details, student personal details, academic details, exam details, Notice Board, etc. The system can be accessed by every student and faculty/super admins of the institution over internet-connected computers or mobile devices with his/her unique username and password but with limitations of data access. It tracks all the details of a student which can be used for all coverage purposes, tracking of attendance, progress in the course, completed semesters, exam details, project, final exam result and so on, also Teachers can. Upload their educational videos for extra curriculum using ICampusX 2.0 video server and many more. ICampusX 2.0 also provides a facility to students for creating imperative documents such as Bonafede Certificate, Exam forms, and all the other required documents digitally. And for Examination, it has Online MCQ tests with immediate results and Theory Exam Test with one Day Result (Depends on the auditor). For any help or assistance, ICampusX 2.0 has a smart chatting tool called Chatbot which can answer your queries at any time 24/7.

ICampusX 2.0 is very simple to use also faster due to optimized searching and sorting algorithms and new (ERA) User-friendly Design. The project is also available on three different platforms that are WEB, Windows, and Android.

2.MAIN MODULES OF THE SYSTEM

- 1. Student database
- 2. Teachers /Admins database
- 3. Online exams and results
- 4. Bonafide, exam Form etc Documents Auto Creation
- Online notes / And Files Sharing
- 6. (FT)
- 7. Searching sorting
- 8. CSV File Creator
- 9. Attendance
- 10. Extra Curriculum Videos by faculties
- 11. Notice Board
- 12. Chatbot and WC
- 13. Places Inside Campus

3.TECHNOLOGY USED

- 1. PHP
- 2. HTML/CSS.
- 3. JS/Node js/React
- 4. Bootstrap

- 5. Android
- 6. MySQL database
- 7. AI/ML

4.PURPOSE

The purpose is to decrease the space between students and the Faculty/Campus.

5. OBJECTIVES

- Providing the online system for students, faculty, and Admins (Principle/Dins/HODs).
- Increasing the efficiency of college record management With All Detailed Information.
- Deliver notices and Files Instantly.
- To make the system more secure Login security added
- Decrease time spent on non-value-added tasks like Bonafede/Exam Form/etc.
- Gives immediate results by taking online exams.
- Chatbot for any queries 24/7 For any Help.

6.LITERATURE SURVEY

All researchers have aimed to develop and provide a generalized solution to monitor the various works that are carried out by a College for automation of various tasks. They provided up-to-date information on the system which improved the efficiency of college record management and decrease the space between students and college. The major contributions to this topic are summarized below:

S. Shivasubramanian, S. Sivasankaran, and S. Thiru Nirai Senthi [1] proposed one of the first computational schemes An Android Based Mobile Application to Monitor Works at Remote Sites. This application provided a generalized solution to monitor the various works that were carried out by construction companies at different geological points. By using a Web Service, the data was stored in the remote database. This mobile application requires General Packet Radio Service (GPRS) or Wi-Fi technology to reach the remote database. Using data in the remote database various reports were generated and projected as an MIS [Management Information System] web application.

Srikant Patnaik, Khushboo Kumari Singh, Rashmi Ranjan, Niki Kumari [2] worked on college management system. This project is based on the COLLEGE MANAGEMENT SYSTEM. It manages the college information, student information, placement information, different types of events going on in our college. It also keeps track records of all the information regarding students those who are placed in the various organization. It has a notice board which contains information about various cultural or technical or any sports which are supposed to be held soon. With the help of this project, you can view the previous videos with the help of an internet connection.

V. Thusyanthy, K. Thiruthanigesan, W.M.P.P. Wanninayake, and N. Thiruchchelvan [3] proposed the Automated Certificate Issuing and Students' Management System for College of Technology, The Jaffna, College of Technology examination and the student enrolments were conducted in the handwritten method. An investigation was conducted to computerize their administration and the examination division. Thus, a designed maintains system named College of Technology Management System (COTMS) for entire details of the institute with an objective; to formulate a computer software application for Jaffna College of Technology. COTMS was developed by using C#.Net programming language and Relational database management system in design the secured database with some particular rights to access the system, it also facilitated us in maintaining the entire students' records effectively and print the final certificate without much effort.

Namrata Shahade, Priya Kawade, and Satish Thombare [4] proposed Student Information Tracking System an Android application to manage student attendance on mobile. In many colleges teachers used to take attendance manually. The main objective of this project is to add mobility and automation to the existing attendance process. This system helps teachers to take attendance through mobile and also keep in touch with the student in some aspect.

7.PROPOSED WORK

The purpose of "ICampusX 2.0" is An Android/Windows/Website and Web-Based Application that Manages College Database System and is also designed to provide an easier way for the Faculty/Admins to add and retrieve information quickly using an optimized Searching Sorting

Algorithm. Once the user opens this Android/Windows/Website and web application, at the front end all the Dashboard is available to everyone in a precise manner. There are mainly three types of users. They are students, Teachers, Higher Authorities/Administrators of the college. The administrator is the master user; he gets the greatest number of priorities over Faculty only not on Students due to security reasons. The different functions involved in the case of an administrator are adding new faculty and updating Faculty information like educational salary, post, and details, Enabling/Disabled Access to Faculty logins while they leave the college or they were suspended for some time, etc. The administrator can view various records but of Faculties only they had separated login for viewing student information. Students can also use the Website/windows App/Android application with his/her Login IDs. Students can only view information about their profile like personal information, attendance, previous test results, and much more. And about other students but on a limited amount of information about other Students/Faculties. while Faculty can view All information about Student but not about Other Faculties personal Information around the clock and from any location. Students cannot edit their Profile Due to Data Modification Security Reasons but update their passwords constantly for more Security. Students can very flexibly search for other student and view College Notices and details, also they can view Places inside College like where is Campus canteen/Playground/Classroom, etc in a manner with accurate location and information this is Especially useful for New Students/faculty's and Students can interact with other students. They can also send feedback to higher authorities in Anonymous and Real Identity Manner. Registration of Student is done by the Class Teacher. The student will be kept in touch by an automated notification They will have access to Chatbot, with which they can write queries, And Chatbot Will reply Instantly. This will help the student as there will be sharing of ideas by the wall. Students on the notification will also use the system to read important announcements, to obtain performance information, to see the results of assessments recorded in the system. The teacher can also use the Android application with his/her Login ID. The teacher cannot edit their Profile but update their passwords constantly. The teacher can

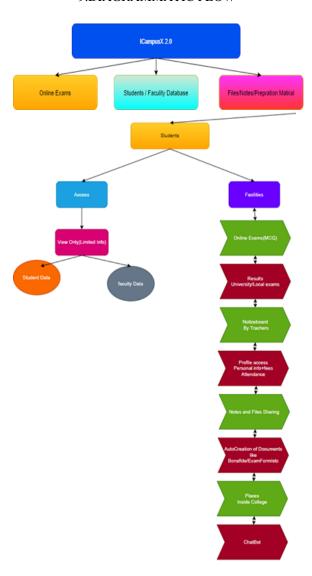
view the College schedule, events, and details on the notice Board Provided by Super Admis and Also by other Teachers. They can take Attendance using the application / MCO Exams with Immediate Results and update the performance of the student. Teachers have the authority to provide authentication to the student, also interact with students via messaging. The teacher has access to Noticeboard, with which they can post Notices Only for Students. This will help the student to get in Touch with Faculty. The higher authority also use Website/Windows/Androidweb the application and can assign specific Notices only for the teacher. The higher authority can set the events also send the Notices on the notice board and the very important thing is that they can read the feedback which is sent by students. They can send the Notices to the student, teacher. An administrator is connected with this system using the Website/Windows/Android web application. He has centralized control of this system. He will have the authority to add/update the higher authorities to various departments. He can check the department-wise performance and interact with others via Personal Noticeboard. He arranges the events, sets the notices using this system. The guideline is approved by an administrator which follows by Faculty. Using this system, the faculty could easily inform or interact with the parents using the contact information on student's data. They can view student performance easily using this system. Faculty and Super Admins Can also use Chatbot for Instant Replies.

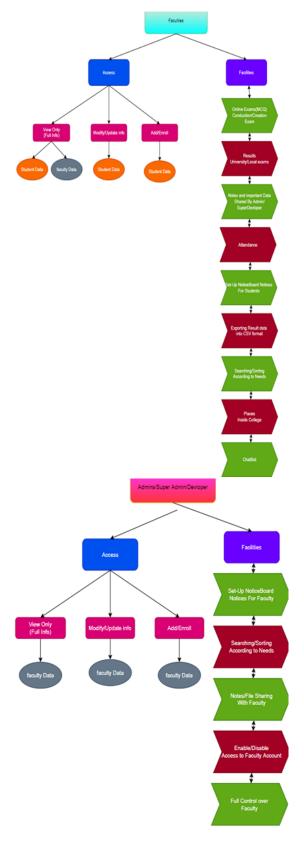
8.PREVIOUS SYSTEM

Previously, the college needs to maintain heavily on paper records. And at the time of making changes to the papers, it takes very long paper paperwork's signatures authentication procedure, etc. i.e., very long procedure. While paper records are a traditional way of managing student data, there are several hitches to this method. First, to bring information to the students it should be displayed on the notice board and the student must visit the notice board to check that information. It takes a very long time to bring the information to the student. Paper records are difficult to maintain and track. The physical action required to retrieve, alter, and re-file the paper records are all nonvalue-added activities.

ICampusX 2.0 system provides a straightforward interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. To accomplish this objective is difficult using a manual system as the information is scattered can be redundant and collecting relevant information may be very time-consuming. All these problems are solved using ICampusX 2.0. The paper focuses on presenting information in an easy and intelligible manner which provides facilities such as profile creation of student, professor, principal, and higher authority thus reducing paperwork and automating the record generation process in an educational institute.

9.DIAGRAMMATIC FLOW





10.HARDWARE/SOFTWARE REQUIREMENT

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- 1. Any Editor (Notepad, Notepad++, NetBeans, etc)
- 2. XAMPP
- 3. MySQL DB.
- 4. Android Studio
- 5. Windows 7 or later
- 6. Android 7.0 or later
- 7. Internet Connection Above 500 KB/s

11. ADVANTAGES

- 1. Fast and Secure.
- 2. Data Privacy.
- 3. Minimizes Paperwork.
- 4. Online Exams Save the Time of Manually Checking and Marking/Scoring students, it's Send the Results Quickly.
- also, it creates Marksheet by own No need to make Marksheets manually and posts to students automatically.
- 6. Platform Independent use Anywhere you want Android /Windows/Website.
- 7. Online that means we can use from anywhere/ with using any device as Above.

12. DISADVANTAGES

- 1. Due to Network Traffic it maybe a Crash.
- 2. Personal Data might be stolen by Admins.
- 3. Not Works on Low Configurations Devices.
- 4. Without an Internet connection it is useless.
- 5. Does not check handwritten papers of exams.

13 FUTURE SCOPE

- ICampusX meeting Platform (like Skype/Zoom/Google Meet).
- Hostel Management System.
- iOS Application.

14. CONCLUSION

This ICampusX 2.0 is automating the existing manual system. This is paperless work. It can be monitored and controlled remotely using Web Apps and its platform independent. It reduces the manpower required. It provides accurate information always. Malpractice can be reduced. All gathered information can be saved and can be work into at any time. The

data which is stored in the ICampusX 2.0 helps in taking intelligent decisions by the management. So, it is better to have a Web and Android Based College Management system which is platform independent. All the administrators, authorities, faculty, students can get the required information without any delay. This system is essential in Schools and colleges.

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