Intelligent Campus SystemX

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Abstract - This Intelligent Campus System is a project established using PHP. The key aim of thisproject is to develop an online website/App/Softwarewhich 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. Intelligent Campus System will also reduce the bulky paperwork, manual Staff cost as well as communication cost. The core resolution is to design a college website/Android Application which contains up- to-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, Intelligent Campus System.

1. INTRODUCTION

The Intelligent Campus System is the Intelligent Campus experience Agenda. It is usually situated on the Concept of a College Data Management System. The main intent behind developing the Intelligent Campus System is to provide a superficial 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 gain access to by every student and faculty/super admins of the institution over internet-connected computers or mobile devices with his/her exceptional 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 prospectus using Intelligent Campus System video server i.e. ICX Tutor and many more. Intelligent Campus System also provides a facility to students for creating authoritative documentssuch as Bonafede Certificate, Exam forms, and all theother required documents digitally. And for Examination, it has Online MCQ tests with instant results and Theory Exam Test with one Day Result (Depends on the examiner). For any help or assistance, Intelligent Campus System has a smart chatting tool called Chatbotwhich can answer your queries at any time 24/7.

Intelligent Campus System is very pretentious 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. Bonafede, exam Form etc. Documents AutoCreation.
5. Online notes / And Files Sharing.
6. Searching sorting
7. CSV File Creator
8. Attendance

9. Extra Curriculum Videos by faculties
10. Notice Board
11. Chatbot and WC
12. Places Inside Campus

3.TECHNOLOGY USED

1. PHP.
2. HTML/CSS.
3. JS/Node js/React js.
4. Bootstrap.
5. Android.
6. MySQL database.
7. AI/ML.

4.PURPOSE

The persistence is to decrease the space between studentsand the Faculty/Campus.

5.OBJECTIVES

- Offering the online system for students, faculty,and Admins (Principle/Dins/HODs).
- Growing the efficiency of college recordmanagement With All Detailed Information.
- Bring notices and Files Instantly.
- To brand the system more secure Login securityadded.
- Diminution time spent on non-value-added taskslike 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 thatare carried out by a College for automation of varioustasks. 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 main contributions to this topic are summarized below:

S. Sivasubramanian, S. Siva Sankaran, and S. Thira Niraj Senthil proposed one of the firstcomputational schemes An Android Based MobileApplication to Monitor Works at Remote Sites. This application provided a generalized solution to monitorthe various works that were carried out by construction companies at different geological points. By by means of a Web Service, the data was stored in the remote database. This mobile application requires GeneralPacket Radio Service (GPRS) or Wi-Fi technology toreach the remote database. Using data in the remote database various reports were generated and projectedas an MIS [Management Information System] web application.

Srikant Patnaik, Khushboo Kumari Singh, RashmiRanjan, Niki Kumari worked on college management system. This project is based on theCOLLEGE MANAGEMENT SYSTEM. It manages the college information, student information, placement information, different types of events goingon in our college. It also retains track records of all theinformation regarding students those who are placed in the various organization. It has a notice board whichcontains 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. Thousandth, K. Thousandth, W.M.P.P.Ramanayake, and N. Ramanayake proposedthe Automated Certificate Issuing and Students'Management System for College of Technology, TheJaffna, College of Technology examination and the student enrolments were conducted in the handwrittenmethod.

An investigation was conducted tocomputerize their administration and the examinationdivision. Thus, a designed maintains system namedCollege of Technology Management System(COTMS) for entire details of the institute

with anobjective to   formulate a computer softwareapplication for Jaffna College of Technology. COTMSwas developed by using C#.Net programminglanguage and Relational database management systemtrendy design the secured database with some particularrights to access the system, it also facilitated us inmaintaining the entire students' records effectivelyand print the final certificate without much effort. Namrata Shahada, Priya Kawase, and SatishThom bare proposed Student Information TrackingSystem an Android application to manage studentattendance on mobile. In many colleges' teachers usedto take attendance manually. The main objective ofthis project is to add mobility and automation to theexisting attendance process. This system helpsteachers to take attendance through mobile and alsokeep in touch with the student in some aspect.
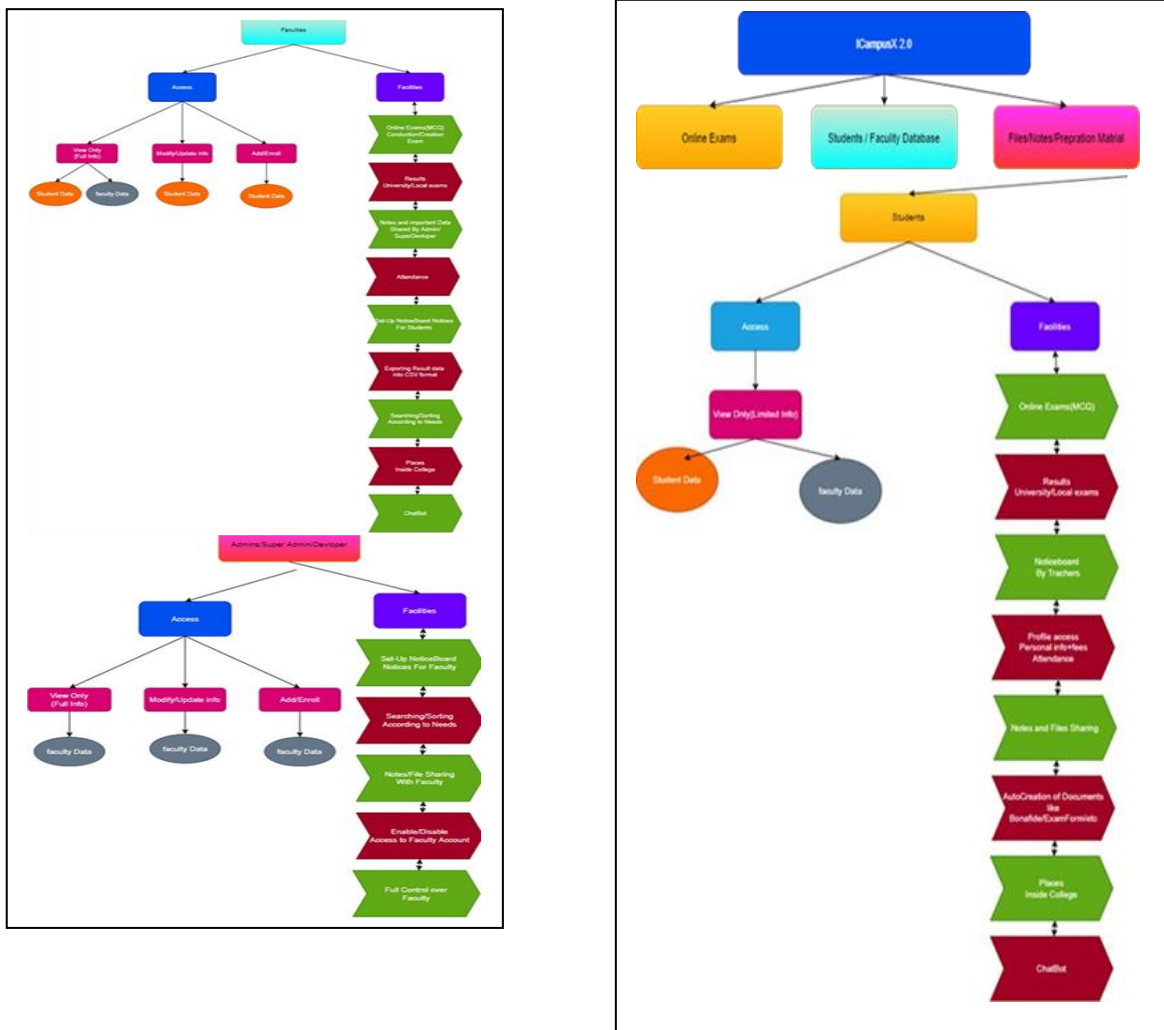
7.PROPOSED WORK

The persistence of "Intelligent Campus System" is AnAndroid/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 repossess information quickly using an optimized Searching Sorting Algorithm. Once the user opens this Android/Windows/Website and web application, atthe 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. Theadministrator 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 likesalary, post, and educational 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 theWebsite/windows App/Android application with his/her Login IDs. Students can only view informationabout their profile like personal information,attendance, previous test results, and much more. Andabout 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 aroundthe clock and from any location. Students cannot edit their Profile Due to Data Modification Security Reasons but update their passwords constantly formore Security. Students can very flexibly search for other student and view College Notices and details, also they can view Places inside College like where isCampus canteen/Playground/Classroom, etc. in adetailed manner with accurate location and information this is Especially useful for New Students/faculty's and Students can interact with otherstudents. They can also send feedback to higher authorities in Anonymous and Real Identity Manner. Record-keeping 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 replyInstantly. 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 importantannouncements, to obtain performance information, tosee the results of assessments recorded in the system. The teacher can also use the Android application withhis/her Login ID. The teacher cannot edit their Profilebut 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 theapplication / MCQ Exams with Immediate Results andupdate the performance of the student. Teachers havethe authority to provide authentication to the student, also interact with students via messaging. The teacherhas 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 alsocan use the Website/Windows/Android web 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 veryimportant 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/Androidweb 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 theevents, 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 assessment student performance easily using this system. Faculty and Super Admins Can also use Chatbot for Instant Replies.
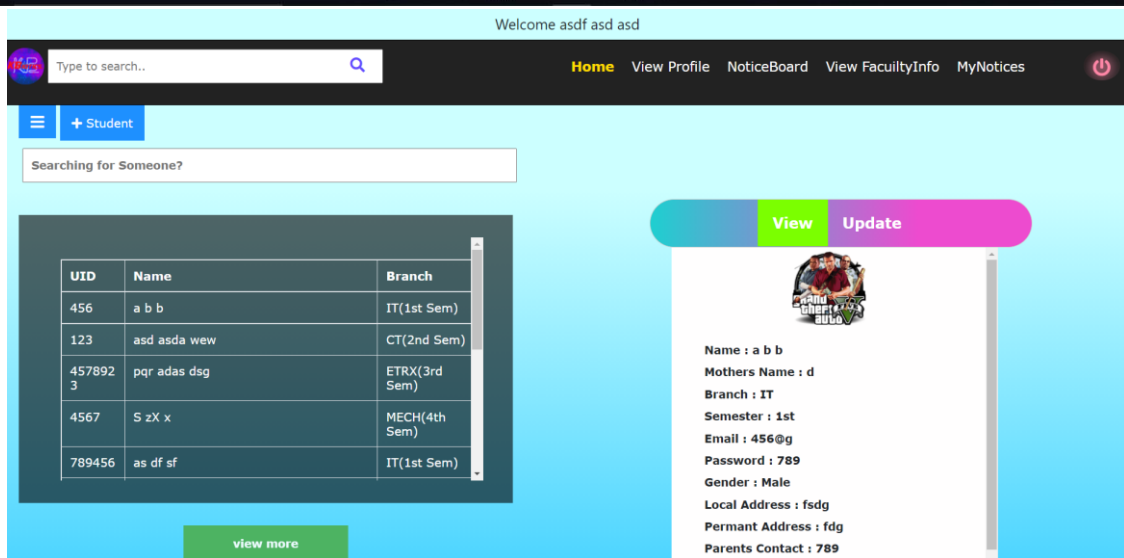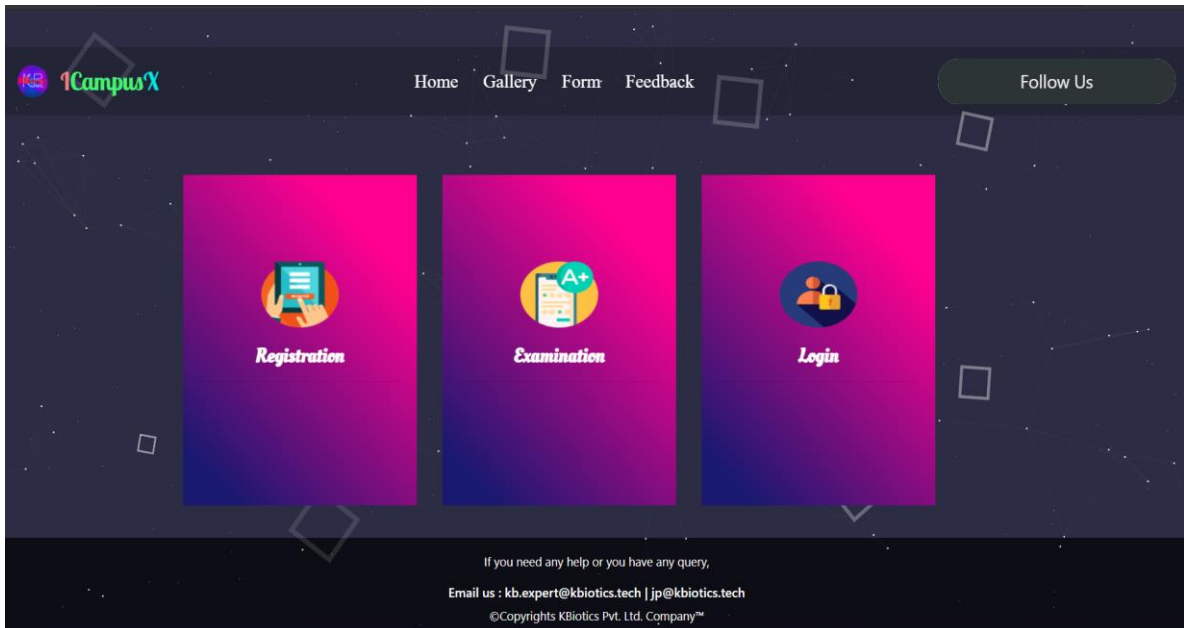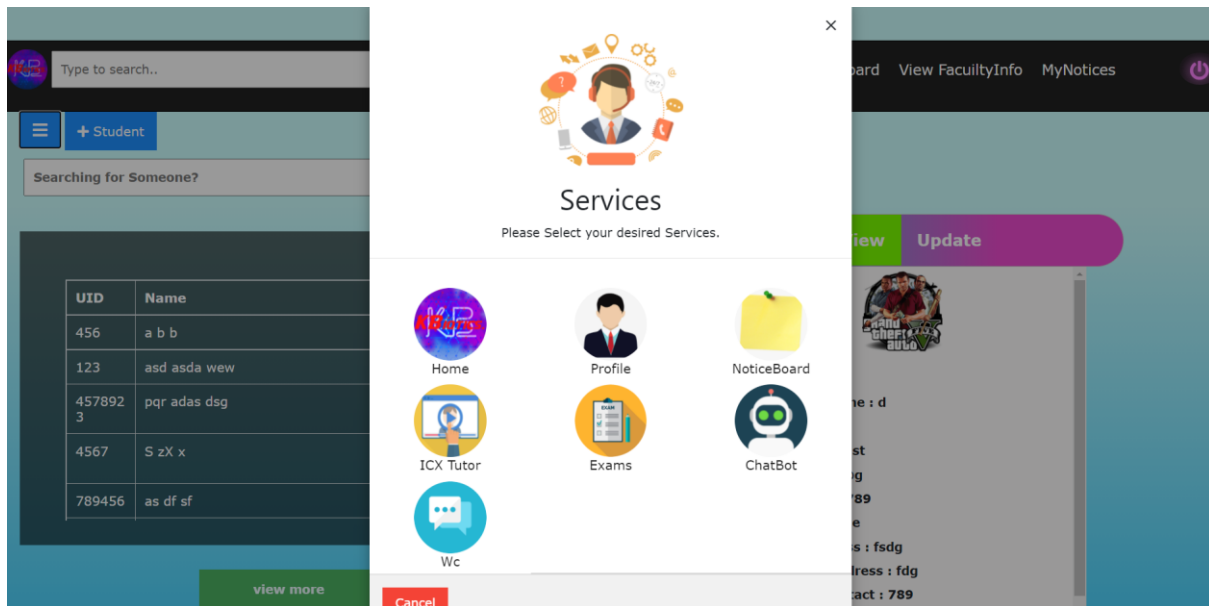
8.PREVIOUS SYSTEM

Formerly, 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 longprocedure. While paper records are a traditional way of managing student data, there are several hitches to this method. First, to bring information to the studentsit 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 toretrieve, alter, and re-file the paper records are all non-value-added activities. It provides an up-front interface for the maintenance of student information. It can be used by educational organizations or colleges to maintain the records of students easily. To accomplishthis objective is difficult using a manual system as theinformation is distributed can be redundant and collecting relevant information may be very time-consuming. All these problems are solved using Intelligent Campus System. 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 powering the record generation process in an educational institute.

9.DIAGRAMMATIC FLOW

10.Implementation Screenshots

11.HARDWARE/SOFTWARE REQUIREMENT

1. Any Editor (Notepad, Notepad++, NetBeans Code, Atom etc.)
2. XAMPP.
3. MySQL.
4. Android Studio.
5. Windows 7 or later.
6. Android 6.0 or later.
7. Internet Connection Above 300 KB/s.

12. ADVANTAGES

1. Fast and Protected.
2. Data Confidentiality.
3. Reduces Paperwork.
4. Online Exams Save the Time of Manually Checking and Marking/Scoring students, it's Sendthe Results Quickly.
5. 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.

13. DISADVANTAGES

1. Due to Network Traffic it possibly Crash.
2. Personal Data might be pilfered by Admins.
3. Not Works on Truncated Configurations Devices.
4. Without an Internet connection it is inoperable.
5. Does not check handwritten papers of exams.

14. FUTURE SCOPE

*   Intelligent Campus System   Meeting   Platform   (likeSkype/Google Meet).
*   Hostel Management System.
*   iOS Application.

15. CONCLUSION

This Intelligent Campus System is powering the existing manualsystem. This is paperless work. It can be supervised and controlled remotely using Web Apps and its platform independent. It reduces the manpowerrequired. It provides accurate information always. Misconduct can be reduced. All gathered informationcan be saved and can be work into at any time. The data which is stored in the Intelligent Campus System helps in taking intelligent decisions by the management. So, itis 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.

REFERENCES

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