

OSAP: Online Student Access Portal

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ABSTRACT

In present scenario, there lack of communication between parents and teachers. Many parents are not aware of the child's growth in school or any important notice is missed out by the parents. There are also chances of miscommunication between the teachers and parents as the students are the mediator between them. Also, in schools problems arise with the use of manual system such as lack of update, hard to search records, incomplete information. To avoid such situations the system "OSAP: Online Student Access Portal" is designed.

The main objective of the proposed system is to have good communication between parents and teachers, automate the student management system. Different modules will be provided in the system to ease the student management and for an efficient communication between the parents and the teachers. Through this system parents will be able to track the progress of their ward and can get updated regarding the events and activities held in their ward's school.

Keywords - Software, enhancement, management, Web Application.

I. INTRODUCTION

There are many applications, which provides student information to the parents but the main problem in this systems is lack of communication between parents and teacher

Parents cannot directly communicate with teacher through this system. The propose system is designed with the objective of efficient parent teacher communication, through this system the parents can directly communicate with teachers and can be updated with the progress of their ward.

A. Problem Statement

The current scenarios, problems arise with the use of manual system such as lack of update, hard to search records, incomplete information and lack of communication between teachers and parents. The main objective of the proposed system is to have good communication between parents and teachers automate the student management system. The system provides different modules to overcome the problems of the previous manual system.

B. Literature Survey

The author "Amey Tiwari, Rahul Talekar, Prof.S.M.Patil" have proposed system in [1] Chat bots typically provide a text-based user interface, allowing the user to type commands and receive text as well as text to speech response. Chat bots are usually a stateful services, remembering previous commands (and perhaps even conversation) in order to provide functionality. When chat bot technology is integrated with popular web services it can be utilized securely by an even larger audience.

The author "Sirisilp Kongsilp, Matthew N. Dailey" have proposed system in [2] Human-to-human communication is extremely important in everyday life. Video conferencing brings humans closer together over vast distances. Communication portals will enhance communication experience, bringing closer to one another. System present an overview of technology for communication portals that is possible today. This system present a prototype of a communication portal system based on fish tank virtual reality (FTVR) as initial step toward the concept. Finally, the challenges and limitations arising from the prototype experience and outline future work.

The author "Han Cuiping" has proposed system in [3] The universities educational management System is a typical information management system, including the establishment and maintenance of backstage database and the development of front stage application program.

This system mainly introduces the design and implementation of student educational management system. After research and analysis, the system uses the C # and SQL Server 2000 to develop, with a three-tier, including the system development environment and technical support, the design of system, the implementation of system and concluded. The main function is for all students, providing them with a teaching management platform to facilitate the management of personal information and co-operate a variety of the teaching mission of schools.

The author “Zhi-gang YUE, You-wei JIN” have proposed the system in[4] This system discusses the method of the management informationization in higher education. This establish the models of the college students' management informationization by adopting the advanced information technology, and construct the student management informationization platform. Moreover analyze the characteristics of the informationization management in higher education, and elaborate the methods to solve the difficulties confronting in the students management of the higher education. Finally, the key method and technology to carry out the informationization management platform are presented.

II. Methodology

The system consists of three modules viz. Admin, Parent and Teacher. The user of system can login with any of the login mode according to his role with appropriate login credentials.

Admin Module:

The admin module will be able to add, remove teacher and student data. The admin will provide the login details to the same.

Teacher Module:

The teachers will be able to mark attendance of students, update homework, forward important notice to the parents. Also they will be able to upload the photos and videos of the events held at the school. Will be able to communicate with every parent effectively.

Parent Module:

The parents will be able to view the attendance of the students and their progress cards online. They will be

updated with the events held at the school and will be able to upload the leave notice of their wards. Efficient communication between parents and teachers will be maintained.

A. System Architecture

The system architecture diagram of the conceptual system is shown in below figure.

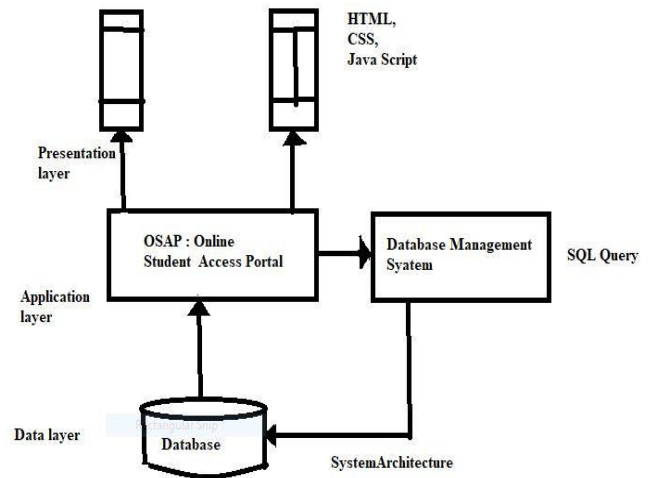


Fig.1. System Block Diagram

B. Mathematical Model

$S = \text{“ERP System for School”}$.

$S = \{I, O, F, C, DV, CS\}$.

Where,

$F = \text{Function}$.

$C = \text{Constraint}$.

$DV = \text{Decision Vector}$.

$CS = \text{Constraint Satisfy}$.

Using discrete mathematics we can define a system in that convert input respected output functions which are required to produce output constraints decision vectors and how the constraints are satisfied. We can easily register add student we don't need to do it manually. Creates roll no n details automatically everything is handled by admin and stored in centralized database. In this way we generate mathematical model for our system.

Use of set theory:-

Here,

Input= {I1, I2, I3, I4}

I1= Name of Student.

I2=Address of student.

I3=

Contact Details.

I4=Category of student.

OUTPUT = {O1, O2}

O1=Report generate on student registration.

O2=Roll call List.

FUNCTIONS = {P1, P2, P3, P4}

P1=Student Registration.

P2= View Student Record.

P3=Roll call List.

P4=Create Division.

Description about Functions:

When admin do the registration of any student then our system automatically update the data base of respective class and generate the roll call list or assign the roll no to that particular student.

Our system also creates the division if the capacity of one division is full. This capacity of class is decided by Collage Administration. Here Admin maintain records of all year students and staff also. All manual working will be removing through this system and also the clerical mistakes are also decreasing. All student records are view by Admin, HOD, management and staff. Using all this records staff can maintain the further records of the students i.e. Attendance, marks, detention list etc. In our system there is one more function is available for School for their purpose or their further analysis.

Constraints{X1, X2}:

X1:- administrator or head of department must be login in our system

X2:- Detail Information about student.

Decision vector {Q1}:

Q1=RN (Registration Number)

Constraint satisfy {R1, R2, R3}

R1: using system,

R2: Using database

R3: Using results

Actual set of system is,

$S = \{I1, I2, I3, I4, O1, O2, P1, P2, P3, P4, x1, x2, Q1, R1, R2, R3\}$

C. Working

The application has three modules:

1. Admin
2. Parent
3. Teacher

When the application is started into the browser, the login window is available; the user can login using any of the above login modes with his valid input credentials. The application provides different operations such as the teacher can upload assignments and important notices, parent can communicate the leave notice of their ward can have an efficient communication with teacher.

1. Admin module
The admin once logged in can update the student information, teacher information, add new student, add new teacher, delete student or delete teacher information.
2. Teacher module
In this module when teacher is logged in he or she can up lode assignments, mark students attendance, communicate important notice through mails, up lode the images or videos of the activities and events held in the school
3. Parent module
The notices will be received by the parents through mail and once the parent is logged in he or she can view the progress of the ward also will be able to see the activities held such as any competition in the school. The parents can communicate the leave applications to the teachers through mails

III. Advantages

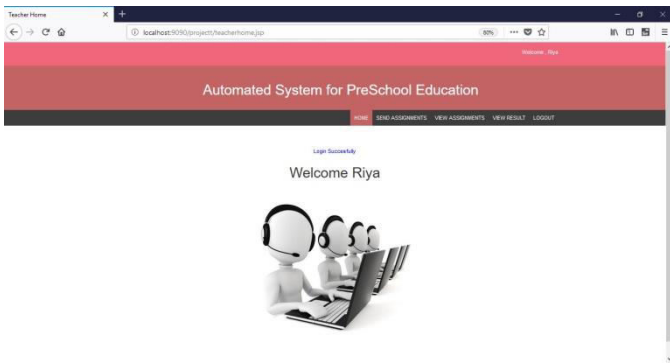
- Centralized School management
- Effective communication between teachers and parents. Creation of school's tech savvy image.
- Complete automation of all operations.
- Centrally stored information with zero redundancy.
- Best possible resource optimization.

IV. Application

- Updates parents with progress of their child
- The application is useful for student management in schools and universities.
- Parents get updates regarding the activities held in the school.

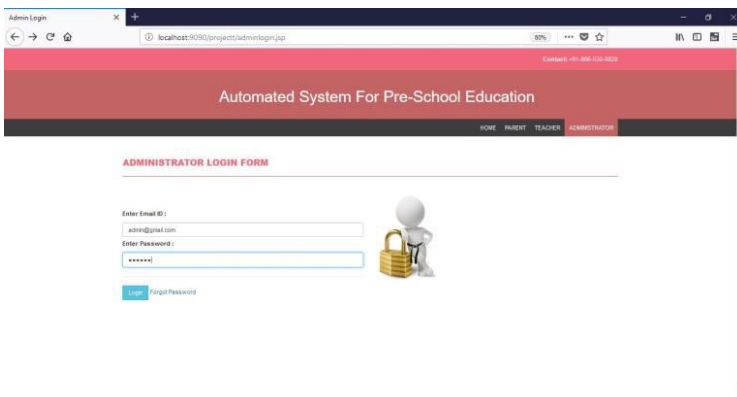
V. Results

Home Page:

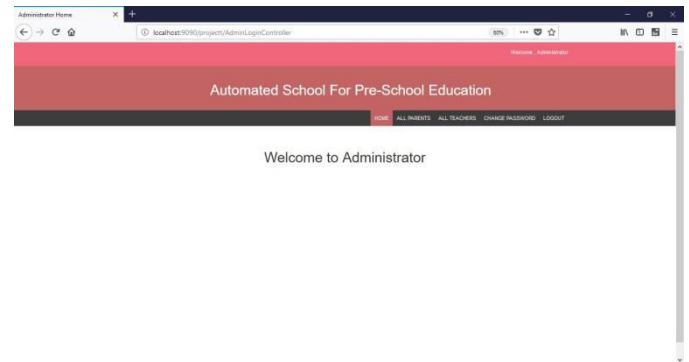


Admin Module:

1. Admin Login:

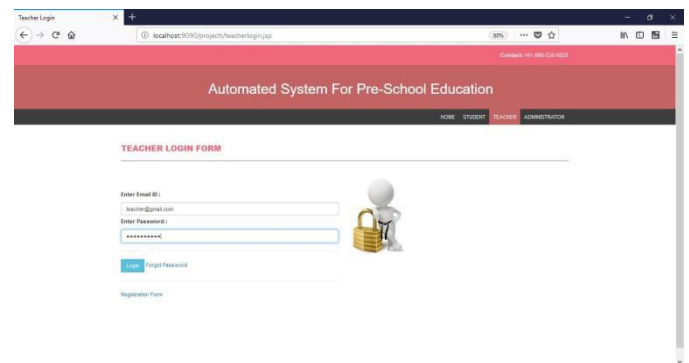


2. Admin Home:

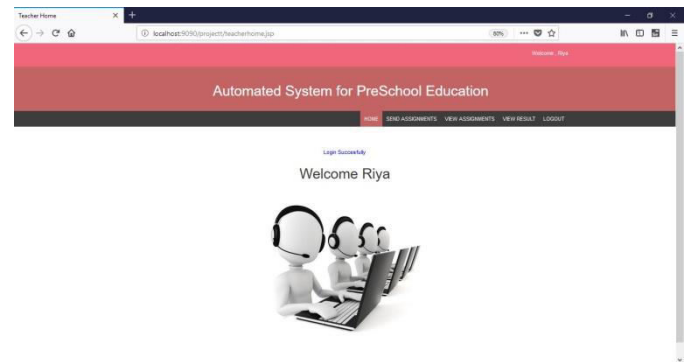


Teacher Module:

1. Teacher Login:

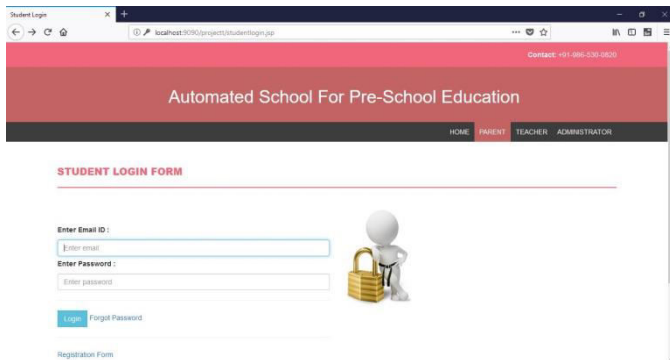


2. Teacher Home:

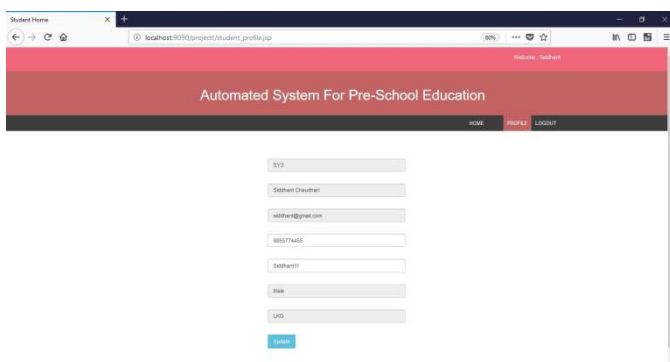


Parent Module:

1. Parent Login:



2. Parent Home:



VI. CONCLUSION

The proposed design will help with an efficient communication between the parents and teachers. The parents will be updates with their ward's progress and other activities held in their school. Teachers can communicate important notice and other information with the parents. The application can be used by different schools and universities.

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