

ACADEME ADMINISTRATION SYSTEM

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Abstract – At present in colleges we are using only frontend means it contains only information about college, branches, courses and so on. In nowadays it is most necessary to maintain the records digitally like student information and employee information. The main goal of the application is to maintain the records of college, this software is helpful to the colleges to maintain the student and employee management. This project is based on **Managing Student Information Via Website**. It manages the SMS, student information, staff information, attendance information, assessment information, library information, placement information, internal results and students promotion information of our college. It also maintain the records of all the information regarding students those who are placed in the various companies and organization. With the help of this project, you can easily get the student and staff details.

Key Words: JavaScript, PHP, SQL Server, HTML, Browser, college management, student information system, staff information system, transport facility information etc.

1. INTRODUCTION

This Academe Administration System project developed using JavaScript and PHP programming languages. The main goal of this project is to create an online website which provides all the details of college i.e., Student details, Staff details, Students transport details, Staff transport details, Internal and Class time-table details, Internal Marks details, Library details, etc. This project includes two type of users one is Admin and other is Branch. In admin login there are information's like branch details, student details, staff details, placement details and so on. In branch login, here the staff has authority to login in this site, it includes attendance information, assessment information, internal marks information, student promotion information and so on. All the record stores in MySQL Database. The proposed software will also reduce the paperwork, more man-power as well as communication cost.

1.1 Fundamental Modules

This project includes two types of login one is Admin Login and other is Branch Login. Admin Login has only one user, only he/she can login who has the login credentials. But in Branch Login all branch staff can login, here we give unique credentials to each staff by using that they can login to site and see through the information what they want and also they can insert the information in website only that data will be stored in MySQL database.

1.2 Main Modules in Admin Login:

In this we have the following Modules.

1.2.1: STAFF MODULE: This module used to accumulate staff records. It includes the following information like Staff's personal and professional details. Personal details includes name, date of birth, contact number, email, address and so on. Professional details includes qualifications, previous work information, designation, salary and so on. The Admin can search the staffs from the database according to different criteria such as Name, Branch etc.

1.2.2: STUDENT MODULE: This module used to accumulate student records. It includes the following information like Students official, residential and personal details. Official details includes name, date of birth, USN, Branch, Semester, Year of Joining, Academic Year, Photo and so on. Residential details includes Address, City, Pin code, State and so on. Personal details includes Parents name, Parents qualification, Parents contact number, Student gender and Age. The Admin and Staffs can search the student from the database according to different criteria such as Name, Branch, Semester, USN etc.

1.2.3: TRANSPORT MODULE: This module is to give the information about student and staff transport facility. It includes two sub-modules like transport details information and transport facility information. Transport details contains the information's like Route Name, Vehicle Number etc. Transport facility user-type in that admin has to choose who's information he/she want like student or staff. Then it also includes information about name of the particular user like staff/student, branch, route name, route price and so on.

1.2.4: PLACEMENT MODULE: This module contains sub-modules like Company details and Placed Student details. In company details we can get the information about company like company name, HR name, HR contact details etc. In placed student details we can get and also insert the information's like placed student name, to which company he/she placed, designation, salary and so on.

1.2.5: SMS MODULE: This module is combination of four modules namely Student SMS, Staff SMS, Transport SMS and Placement SMS.

- ☐ **Student SMS:-** In this we have the contact number of all the students present in the college using that number we can send SMS to particular student and also for their parents about attendance status, holiday notification, college reopen information and so on.
- ☐ **Staff SMS:-** In this we have the contact number of all the staffs who are working in the college includes both teaching and non-teaching staff, using that admin can send the any notification regarding holiday or any events through SMS.
- ☐ **Transport SMS:-** In this module admin will send the SMS regarding status of fee for the bus route assigned to students and staff like the particular student or staff paid the route price or not.
- ☐ **Placement SMS:-** In this admin/staff can send SMS to the students about the placements like which company is arriving for recruitment, what are eligibility criteria to attend interview, date and timings of interview and so on.

1.3: Main Modules in Branch Login:

This login includes the modules present in the Admin Login such as Student Module, Staff Module, Placement Module, SMS Module.

Along with these there are some more modules are present in Branch Login such as,

1.3.1: ATTENDANCE MODULE: This module contains the student data with branch, semester and subject. By selecting the particular branch, semester and subject the students are sorted for those students attendance status should be marked using checkbox. The data is stored in database by taking presents as 1 and absents as 0.

1.3.2: ASSESSMENT MODULE: This module includes the sub-modules like Time-Table, Student Assessment and Student Average.

- ☐ **Time-Table:-** In this module we give the time-table for the assessment(internals). It includes Internal Name, Date and Timings of Internal.
- ☐ **Student Assessment:-** In this module Staff can sort the students by selecting branch, semester and also they select the particular subject on which they are conducted internal, finally there is option to enter the marks obtained by the students. All these data's are stored in database.
- ☐ **Student Average:-** In this module there is an information about the average marks scored by each student. This data is automatically entered while we are entering the internal marks details.

1.3.3: RESULT MODULE: This module includes the result of internal. Particular student as to enter the USN then he/she will get their internal results.

1.3.4: LIBRARY MODULE: In nowadays colleges has separate library for each branch for this reason we include this module. It contains two sub-modules like book details and book for use.

- ☐ **Book Details:-** In this module it contains the information about the book present in the library. It includes the book name, author name, book ISBN, shelf number, cost of book, status of book and so on.
- ☐ **Book for Use:-** This module contains the user type by this we can get the information that the book in library used by student/staff. It also includes the information about book issue date, renewal date, return date and fine amount.

1.3.5: PROMOTION MODULE: This module includes the list of students with their branch, semester and section. User has to sort the student by selecting previous branch, semester and section by this the student list is sorted and then user as to enter the current branch, semester and section. By this the student's new information is stored in student list and previous details detail's will be stored in the student history table in database.

2. INDISPENSABLE

A programming language is vocabulary and set of grammatical rule for instructing a computer or computing device to perform specific tasks. The term programming language usually refers to high-level languages, such as Angular JS, HTML, PHP, CSS.

And also we use MySQL database, XAMPP, notepad++.

2.1 Angular JS:

AngularJS version 1.0 was released in 2012. Misko Hevery, a Google employee, started to work with AngularJS in 2009. The idea turned out very well, and the project is now officially supported by Google.

AngularJS is a very powerful JavaScript Framework. It is used in Single Page Application (SPA) projects. It extends HTML DOM with additional attributes and makes it more responsive to user actions. AngularJS is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

2.1.1 Core Features

Following diagram depicts some important parts of AngularJS.

- ☐ AngularJS is a powerful JavaScript based development framework to create RICH Internet Application(RIA).
- ☐ AngularJS provides developers options to write client side application (using JavaScript) in a clean MVC(Model View Controller) way.

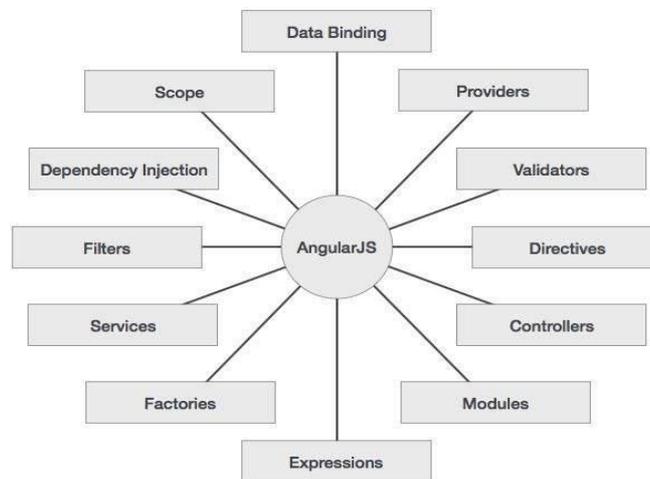


Fig 2.1: Parts of AngularJS

- ☐ **Data-binding:-** It is the automatic synchronization of data between model and view components.
- ☐ **Scope:-** These are objects that refer to the model. They act as a glue between controller and view.
- ☐ **Controller:-** These are JavaScript functions that are bound to a particular scope.
- ☐ **Services:-** AngularJS come with several built-in services for example \$https: to make a XMLHttpRequests. These are singleton objects which are instantiated only once in app.
- ☐ **Filters:-** These select a subset a of items form an array and returns a new array.

- ❑ **Directives:-** Directives are markers on DOM elements (such as elements, attributes, css and more). These can be used to create custom HTML tags that serve as new, custom widgets. AngularJS has built-in directives(ngBind, ngModel...)
- ❑ **Template:-** These are the rendered view with information from the controller and model. These can be a single file (like index.html) or multiple views in one page using “partials”.
- ❑ **Routing:-** It is concept of switching views.
- ❑ **Model View Whatever:-** MVC is a design pattern for dividing an application into different parts (called Model, View and Controller), each with distinct responsibilities. AngularJS does not implement MVC in the traditional sense, but rather something closer to MVVM (Model-View-ViewModel).
- ❑ **Deep Linking:-** Deep linking allows you to encode the state of application in the URL so that it can be bookmarked. The application can then be restored from the URL to the same state.
- ❑ **Dependency Injection:-** AngularJS has a built-in dependency injection subsystem that helps the developer by making the application easier to develop, understand and test.

2.2: HTML:

HTML stands for **H**ypertext **M**arkup **L**anguage, and it is the most widely used language to write Web Pages. Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus the link available on a webpage is called Hypertext.

As its name suggests, HTML is a Markup Language which means you use HTML to simply “mark-up” a text document with tags that tell a Web browser how to structure it to display. Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

2.2.1: HTML Tags:

Language HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces **<Tag Name>**. Except few tags, most of the tags have their corresponding closing tags.

- ❑ **<!DOCTYPE...>**: This tag defines the document type and HTML version.
- ❑ **Document<html>** : This tag encloses HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by<body>...</body> tags.
- ❑ **<head>**: This tag represents the documents header which can keep other HTML tags like <title>, <link> etc.
- ❑ **<title>**: The <title> tag is used inside the <head> tag to mention the document title.
- ❑ **<body>**: This tag represents the documents body which keeps other HTML tags like <h1>, <div>, <p> etc.
- ❑ **<h1>**: This tag represents the heading.
- ❑ **<p>**: This tag represents a paragraph.

2.3: CSS:

CSS in PHP Stands for (Cascading Style Sheet). Cascading style sheets are used to format the layout of Web pages. They can be used to define way of writing or style, size of various tables, and other aspects of Web pages that previously could only be defined in a static page's HTML. The main work of CSS is to separate content of a web document (written in any markup language) that is using Cascading Style Sheets. There are lots of benefits that one can extract through this like improved content accessibility, better flexibility and more over, and hence gives a level of control over various presentation characteristics of the document. It also helps in reducing the problems and helps in saving access time. It gives the option of selecting various style schemes and rules according to the necessity.

2.4: MySQL Database:

To MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various web-based software applications. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company.

2.5: XAMPP:

Company XAMPP is a free and open-source cross- platform web server solution stack package developed by Apache Friends, consisting of the Apache HTTP Server, MariaDB database and interpreters for scripts written in PHP and Perl Programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

2.6: NOTEPAD++:

To create localhost and local test server we use notepad++. In this we create virtual host and local test server. Here we give the test server name with .com/.in. By doing this we can get error at earlier stage and debug it. After all completion of project over the project codes will be pushed to main server.

To create localhost we need XAMPP, apache, conf, extra, httpd vhosts.conf files and folders.

To create test server in C-drive we need Windows, System32, drivers, etc, hosts files and folders.

3. SCOPE OF THE PROJECT

The main scope of this project are as follows,

- Two sites are present in this project one for Admin(Admin Login) and other for Staff(Branch Login).
- If admin/staff forget their password they can reset it at login page only.
- Admin/Staff both can view/edit the information present in modules.
- Searching of student details, staff details and any other information become very easy by adopting our project.
- Documents are maintained very neatly and securely.
- Reduces the man-power and paper works.

4. RESULTS

The website will start through login page particular user as to enter their credentials and have to login.

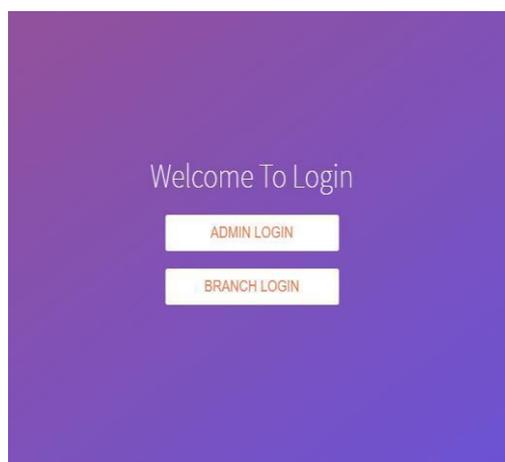


Fig 4.1: Login Page

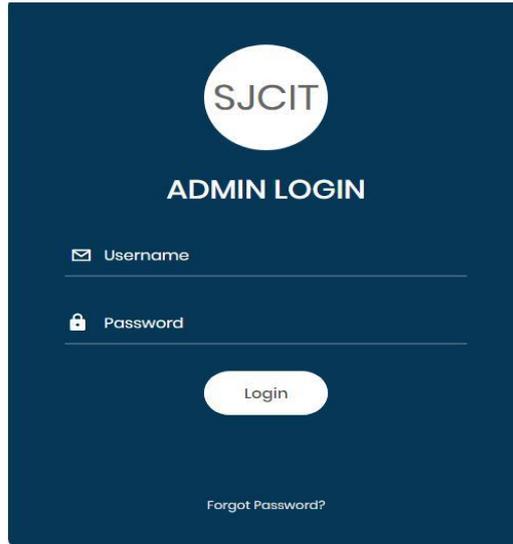


Fig 4.2: Admin Login

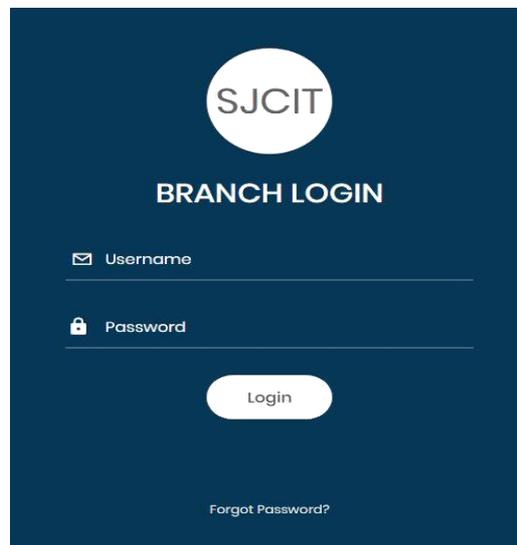


Fig 4.3: Branch Login

Student details:

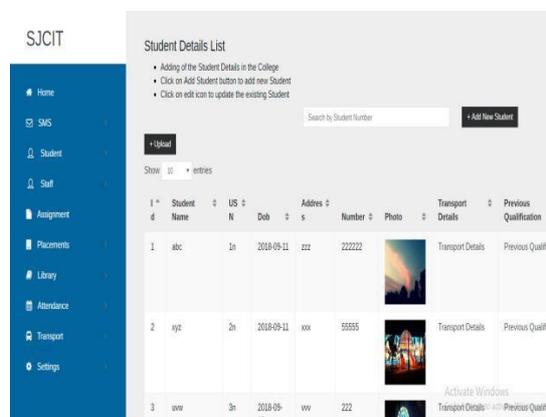


Fig 4.4: Student Details

Staff details:

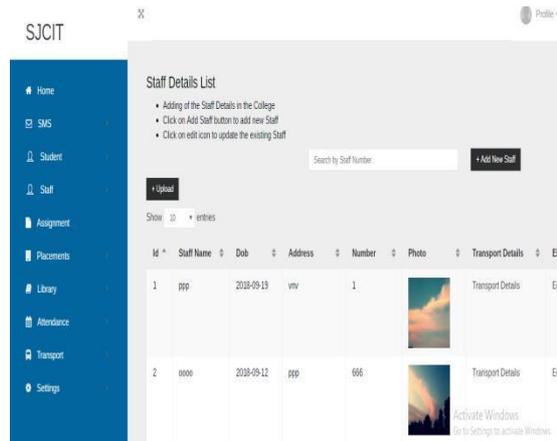


Fig 4.5: Staff Details

Attendance:

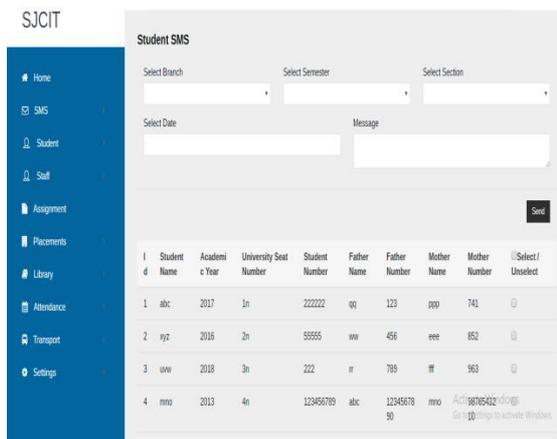


Fig 4.6: Attendance Module

5. SYSTEM REQUIREMENTS SPECIFICATION:

Hardware Requirements:

- Processor : Pentium IV 2GHz and Above
- RAM : 4GB RAM
- Monitor : 15” Color Monitor
- Keyboard
- Mouse
- Networking

Software Requirements:

- Operating system : Windows 10, Android
- Coding Language : Angular JS

- Data Base : MySQL Server
- Server : Local Host
- Developing Tool : Visual Studio

6. CONCLUSION:

This paper will give the more guidelines to modify the existing system because the colleges only has frontend there is need of backend also, for this we designed this project. This software suits for all colleges to maintain their student and employees information in easy way. This is general software for all colleges. By using this software the maintenance of student and employees database become very easier. This software provide them very easier option to search for the Student details, Attendance, Internal marks, Internal result, Placement details, Student promotion details and so on.

7. REFERENCES:

1. Srikant Patnaik, Khushboo Kumari Singh, Rashmi Ranjan, Niki Kumari, "Management System" International Research Journal of Engineering and Technology in 2016.
2. S.R.Bharamagoudar et al , "Web-Based Student Information Management System, International Journal of Advanced Research in Computer and Communication Engineering Vol. 2, Issue 6, June 2013.
3. <https://www.tutorialspoint.com/php/>
4. <http://www.w3schools.com/php/>
5. <https://en.wikipedia.org/w/index.php?title=Special:Search&profile>
6. <http://php.net/manual/en/intro-what-is.php>
7. <http://www.planet-php.net/>

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