Simplified Online Admission Process

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Abstract: In the modern world of technology, computer are affecting our lives in more ways than we probably are aware off. Now a days as the population is increasing there is a great demand for modern and rapid technology. Thereby our project aims at designing a software based web application useful for students. The main principle behind the need of college admission system is an easy supervision of institutes. Our project thereby introduces an application which will be useful in college admission system. As this college management system includes the admission process of student, starting from when the student takes admission in college in first year till the student completes his course and collect leaving certificate from the college. It can handle the details of students such as name, email-id, contact number, address and documents details. This Student Database has been designed taking into account the practical needs to manage a Students data. Moreover, it provides security at product level as well as user level.

Keywords: PHP (hypertext preprocessor); ARC (Application Form Receipt Centers) centers; unique identification.

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1. INTRODUCTION:

The main objective of the existing system is to provide a user-friendly interface. The system, which is proposed, now computerizes all the details that are maintained manually. Once the details are fed into the computer there is no need for various persons to deal with separate sections. Only a single person is enough to maintain all the reports. The security can also be given as per the requirement of the user and those requirements are: Large volumes of data can be stored with case. Flexible maintenance of file or data is possible by using this system. Records stored are updated easily without more efforts. Stored data and procedures can be easily edited. Accurate calculations are made, and the more important advantage from this system is less manpower required.

2. LITERATURE REVIEW:

Following section describe the literature review as:
•Jadhav Snehal Balasaheb, Supekar Bhagyashri Sitaram, Wakode Vrushali Khushalrao, Vasaikar Nikita Ashok and Mandlik Priyanka Bhausaheb presented a paper on Web Based College Admission System in year [2014]. It represents a system that is based on the concept of web services with the database residing on a remote server. Also this paper focuses on adding a web based technology using which we can get the notifications given by the institutes. College Management Software is web enabled software designed to manage the entire Operations of an institution. College Management Software is a simple yet powerful one joint integrated platform that connects all the various departments of an institution like Administration, Account, Student section, Student and many more specialized modules. We have seen over the years that the process of notice boards, important notification about academics has

been carried out manually almost across all educational institutions .The process is not only time consuming but also inefficient .Today, we need not to maintain paper based Notice boards. Also in this system we are going to add the web based technology using which we can get the notifications given by the institutes. Following this thought, we have developed a system based on the concept of web services which is implemented on Android mobile application as well as on PC that communicates with the database residing on a remote server. The Unique ID system provides unique identification numbers to the persons who using this system. UID Number which would not just help the admin to track down individuals, but would make life far easier for users as they would not have to submit multiple documents each time because those will be available and to be used.

•Vijay Bhuria, R.K Dixit presented a paper on Online off-Campus process for engineering in year [2009]. This paper presents systematic procedure & guideline to the students for admission process & carrier guidance. In our result the online counseling process for admission of various courses in engineering college gives more satisfaction & system has good reliability. Online Off campus counseling was started by government of Madhya Pradesh, Department of technical education in the year of 2009 for admission purpose of various courses. The online counseling process has great advantage to the students as compared to the face to face counseling in terms of time & money. This paper presents systematic procedure & guideline to the students for admission process & carrier guidance. In our result the online counseling process for admission of various courses in engineering college gives more satisfaction & system has good reliability.

•Zhao Yong-Xia presented a paper on MD5 Research in year [2010]. This paper describes the MD5 algorithm. It analyses the theories from program codes and sums up some

current crack approaches of this algorithm. According to these crack ways, the paper brings forward the corresponding measures for improvement and adopts procedures to achieve a project to prove its validity.

3. RELATED THEORY:

The MD5 message-digest algorithm is a widely used cryptographic hash function producing a 128-bit (16-byte) hash value, typically expressed in text format as a 32digit hexadecimal number. MD5 has been utilized in a wide variety of cryptographic applications, and is also commonly used to verify data integrity.MD5 is a one-way function; it is neither encryption nor encoding. It cannot be reversed other than by brute force attack. MD5 was designed by Ronald Rivest in 1991 to replace an earlier hash function, MD4. The source code in RFC 1321 contains a "by attribution" RSA license. The security of the MD5 has been severely compromised, with its weaknesses having been exploited in the field, most infamously by the Flame malware in2012.The CMU Software Engineering Institute considers MD5essentially"cryptographically broken and unsuitable for further use". Simple password security using MD5 algorithm:

It's very simple and straight forward; the basic idea is to map data sets of variable length to data sets of a fixed length. In order to do this, the input message is split into chunks of 512-bit blocks. A padding is added to the end so that its length can be divided by 512. Now these blocks are processed by the MD5 algorithm, which operates in a 128-bit state, and the result will be a 128-bit hash value. After applying MD5, generated hash is typically a 32-digit hexadecimal number. Here, the password to be encoded is often called the "message" and the generated hash value is called the message digest or simply digests. Although MD5 is a widely spread hashing algorithm, is far from being secure, MD5 generates fairly weak hashes. Its main advantages are that it is fast, and easy to implement. But it also means that it is susceptible to brute-force and dictionary attacks. Rainbow tables with words and hashes generated allows searching very quickly for a known hash and getting the original word.

3.2 PHP (Hypertext Preprocessor)

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive back ronym PHP. Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management system and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

3.3 My Sql

SQL is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).
Originally based upon relational algebra and tuple relational calculus, SQL consists of a data definition language, data manipulation language, and a data control language. The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language (4GL), it also includes procedural elements.
SQL was one of the first commercial languages for Edgar F. Codd's relational model, as described in his influential 1970 paper, "A Relational Model of Data for Large Shared Data Banks."[6] Despite not entirely adhering to the relational model as described by Codd, it became the most widely used database language.[7][8]

1. Query Store: One

Common problem many organizations face when upgrading versions of SQL Server is changes in the query optimizer (which happen from version to version) negatively impacting performance. Without comprehensive testing, this has traditionally been a hard problem to identify and then resolve. The Query Store feature maintains a history of query execution plans with their performance data, and quickly identifies queries that have gotten slower recently, allowing administrators or developers to force the use of an older, better plan if needed. The Query Store is configured at the individual database level.
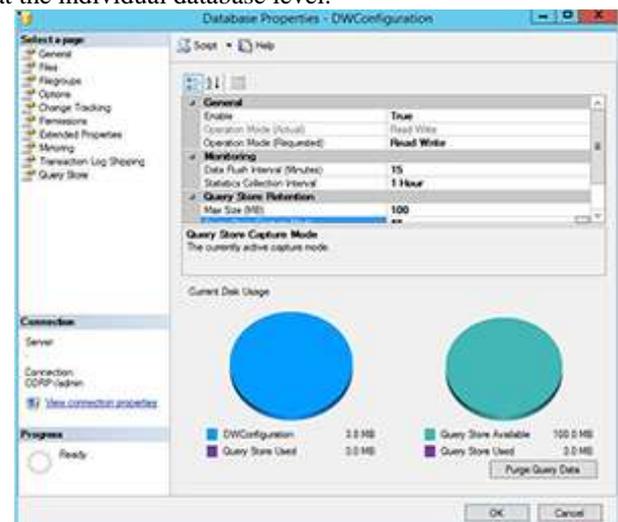

Figure.3.3.a: Query Store Configuration.

2. Stretch Database:

One common idiom in recent years, is how cheap storage is. While it may be cheap to buy a 3TB drive from Amazon, if

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you are buying enterprise-class SAN storage or enterprise SSDs, you will know that storage is still very expensive. Microsoft is trying to help reduce your storage (and processing costs) with a hybrid feature called "Stretch Database." The basics of Stretch Database are that some part of your tables (configurable or automated) will be moved into an Azure SQL Database in the cloud in a secure fashion. When you query those tables, the query optimizer knows which rows are on your server and which rows are in Azure, and divides the workload accordingly. The query processing on the Azure rows takes place in Azure so the only latency is for the return of the rows over the network. As an additional enhancement, you are only charged for the SQL Database in Azure when it is used for queries. You do, however, pay for the Azure Blob storage, which, generally speaking, is much cheaper than enterprise storage.
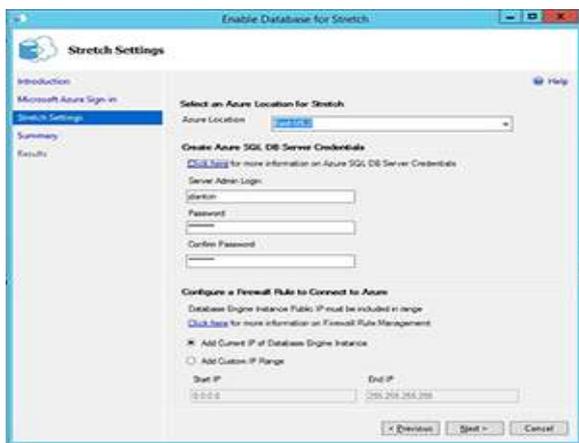

Figure3.3.b: Configuring Stretch Database.

3.4 HTML (Hyper Text Markup Language):

Hyper Text Markup Language, commonly referred to as HTML, is the standard markup language used to create web pages. Along with CSS, and JavaScript, HTML is a cornerstone technology used to create web pages, [1] as well as to create user interfaces for mobile and web applications. Web browsers can read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically and, before the advent of Cascading Style Sheets (CSS), included cues for the presentation or appearance of the document (web page), making it a markup language, rather than a programming language.

3.5 CSS (Cascading Style Sheets):

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language.[1] Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

4. METHODS OF IMPLEMENTATION
4.1 WAMP SERVER

Wamp Server refers to a software stack for the Microsoft Windows operating system, created by Romain Bourdon and consisting of the Apache web server, Open SSL for SSL support, MySQL database and PHP programming language. The acronym WAMP refers to a set of free (open source) applications, combined with Microsoft Windows, which are commonly used in Web server environments. WAMP is a variation of LAMP for windows system. It is also used for web development and internal testing, but may also be used to serve live websites. The most important part of WAMP package is Apache or Apache HTTP Server which is used to run the web server within windows. By running a local Apache web server on a Windows machine, a web developer can test web pages on the web browser without publishing them live on the internet. WAMP also includes MySQL and PHP which are the two most common technologies used for creating dynamic websites. MySQL is a high speed data base while PHP is a scripting language that can be used to access data from database. The WAMP stack provides developers with the four key elements of a Web server: an operating system, database, Web server and Web scripting software. The combined usage of these programs is called a server stack. In this stack, Microsoft Windows is the operating system (OS), Apache is the Web server, and MySQL handles the database components, while PHP, Python, or PERL represents the dynamic scripting languages.

4.2 EDIT PLUS VERSION:3

• Edit Plus is a text editor, HTML editor, PHP editor, Java editor and Hex Viewer for Windows. While it can serve as a good Notepad replacement, it also offers many powerful features for Web page authors and programmers. Syntax highlighting
for HTML, PHP, Java, C/C++, CSS, ASP, Perl, JavaScript, VBScript, Python and Ruby on Rails. Also, it can be extended for other programming languages based on.
• Seamless Web browser for previewing HTML pages, and FTP (also sftp and FTPS) feature for uploading local files to FTP server.
• Other features include Hex Viewer, HTML toolbar, user tools, line number, ruler, URL highlighting, auto completion, clip text, column selection, powerful search and replace, multiple undo/redo, spell checker, customizable keyboard shortcuts, and more.
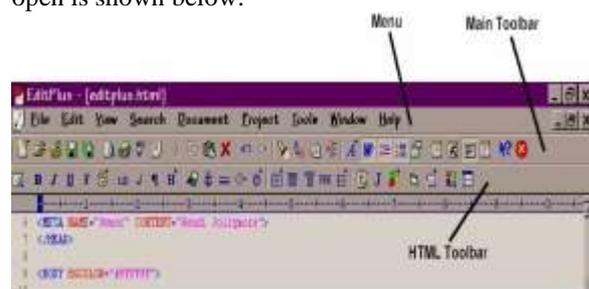A portion of the main window with an HTML document open is shown below:

Figure no.4.2: Edit plus

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4.3 BROWSER

A web browser (commonly referred to as a browser) is a software application for retrieving, presenting, and traversing information resources on the World Wide Web. An information resource is identified by a Uniform Resource Identifier (URI/URL) and may be a web page, image, video or other piece of content. Hyperlinks present in resources enable users easily to navigate their browsers to related resources. Although browsers are primarily intended to use the World Wide Web, they can also be used to access information provided by web servers in private networks or files in file systems. The major web browsers are Firefox, Internet Explorer/Microsoft Edge, Google Chrome, Opera, and Safari. The ways that web browser makers fund their development costs has changed over time. The first web browser, World Wide Web, was a research project. Netscape Navigator was sold commercially, as was Opera. Internet Explorer, on the other hand, was bundled free with the Windows operating system (and was also downloadable free), and therefore it was funded partly by the sales of Windows to computer manufacturers and direct to users. Internet Explorer also used to be available for the Mac. It is likely that releasing IE for the Mac was part of Microsoft's overall strategy to fight threats to its quasi-monopoly platform dominance - threats such as web standards and Java - by making some web developers, or at least their managers, assume that there was "no need" to develop for anything other than Internet Explorer. In this respect, IE may have contributed to Windows and Microsoft applications sales in another way, through "lock-in" to Microsoft's browser.

5. FLOW CHART

- Start.
- The user has to login
- Login can be done in three different ways
  - Student
    - Staff
    - Unauthorized person
- If login done by an unauthorized person then go to the last step.
- When a student logs into their account then they can check their documents.
- If there are any issues regarding their documents then the students reports the staff.
- Whenever the staff member logs in he views a notification from the students regarding their documents and accordingly updates the students profile.
- If the documents are correct then the students can start with the filling of form1.
- After filling of the form1 by the student, the staff receives a notification for verification of the details filled in form1.
- Whenever the staff logs in, and views the notification for verification of the form1 he makes a decision regarding the acceptation or rejection of the form1.

- If the form1 is rejected, the student has to fill the form again which is notified to the student by a notification.
- If the form1 is accepted the student has to proceed with filling of form2 which is also notified to the student by a notification.
- Now the student fills form2.
- After this the staff logs in and views the notification from the student regarding form2.
- According to the cut-off of the colleges, the staff allots the student colleges filled in form2.
- This happens in the case when the form2 is accepted or else if the cut-off of all the colleges filled in form2 is higher than the score then it results in the form2 to be rejected.
- Either the form2 is accepted or rejected the student is notified accordingly.
- On acceptance of the form2, college is allotted to the student.
- Stop.

6. CONCLUSION:

Simplified Admission Process (SAP) is a web enabled software application .We have seen over years that the existing admission process is quite time consuming and inefficient. By reducing the various drawbacks we create a web based application for managing the admission of the student. This is an online system which initiates with visiting of the university site. After this the student has to login and fill in the register form which will be verified by the university. Thus the admission process will be completed by allotting the colleges to the students. It is cost effective, practical, user friendly and offering highest security for authentication purpose. Thus the main objective of this project is that it is helpful for reduction in manual work so less man power is required.

In this way we are going to develop college management system, which is helpful for Reduction in manual work so less manpower required. Students records can be accessed within few seconds. Our system primarily focuses on building an efficient and user friendly communication system for the educational institutions. This system can be I further used in the form of Mobile Application for Windows & Android OS.We can also make list of colleges displayed will be according to the marks obtained by the students and sending email on registered mail id's on every notification, also the student gets notified for current notices by the SMS or e-mails.

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