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ONLINE LAW SYSTEM

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***Abstract*— This project is entitled as "online law system" to develop a portal in which lawyers and public can get some information about law and legal information. Build a web application connected with a database, where the lawyer details, public details, section details, court details and criminal details are stored. Using this system, law system and law information and details can be done automatically, efficiently and accurately. When we use this application, administrator is a responsible person for storing law and section detail, adding criminal details and updating court details in the country through online and which reduces paper work process and manual process. Whenever lawyers and public want to view the law particulars, they can enter into this application by giving their endorsement details to approve. It reduces burden and cost of time for the laws and section management during legal issues which are stored in the database to refer them in future. This project is also used to get acquaintance about lawyers available in each court and can understand about the law section by public without any other help and any other intervention.**

Index Terms- legal consultancy, enlist lawyers, uniqueness

I. INTRODUCTION

This "Online Law System" based online service offering user the convenience and quality of in-house and in-business legal consultancy service and other facilities in the field of law. Through our service, we give user the opportunity to get answers to all your legal questions, for which user would go to a lawyer. Our uniqueness comes from providing user with direct access to a written opinion from our panel of lawyers practicing in your requested area of law. The responses to your questions given by the lawyers in this project are not stock answers - they are personalized replies tailored to your specific situation. Our system provides user with information that enables user to make decisions. We also provide value to user by simplifying the communication process. We collect information beforehand and enlist lawyers practicing in your problem area. We also save the amount of time and money user spend consulting with a lawyer to determine whether user have a case or not. According to your own schedule, you can describe your situation in the comfort and privacy of your home or office. You can then secure a quick and free of cost assessment of your legal rights or liabilities by a licensed lawyer before committing any significant time or money to retain your own lawyer

Lawyers that are part of the network of this project: -

- Maintain an active license to practice law
- Are in good standing in their respective fields.
- Maintain an office for the practice of law and are regularly engaged in the practice of law.

We are committed to responding to all questions received through this site at the earliest possible and within a maximum period of two-three business days of receipt (not including weekends and National holidays). Response time is closely monitored.

All the data of the users are stored in a database and the analyses are done manually by the veterans of the astrology field. Once the analysis is over, the solution of the particular user is sent through E-mail about the topic the user queried. Our uniqueness comes from providing user with direct access to a written opinion from our panel of lawyers practicing in your requested area of law. The responses to your questions given by the lawyers in this project are not stock answers - they are personalized replies tailored to your specific situation. Our system provides user with information that enables user to make decisions. We also provide value to user by simplifying the communication process.

We collect information beforehand and enlist lawyers practicing in your problem area. We also save the amount of time and money user spend consulting with a lawyer to determine whether user have a case or not. According to your own schedule, you can describe your situation in the comfort and privacy of your home or office. You can then secure a quick and free of cost assessment of your legal rights or liabilities by a licensed lawyer before committing any significant time or money to retain your own lawyer.

II. LITERATURE REVIEW

Late in the 1970s, bulletin board systems allowed individuals to log into sites through modems, which were very slow at that time, and to post to the board, respond to earlier posts, and develop a nascent sense of community. As Internet access grew and modem speed improved, bulletin boards grew in popularity and were dedicated to many purposes such as community activism, political discussion, and special interests. USENET is one example of a popular bulletin board system open to everyone. At their peak in the early 1990s, almost 45,000 bulletin board systems were in existence.

In 1986, LISTSERV—a proprietary software program—was developed to automate a mailing list using

email addresses. Similar email programs or "listservs" became very popular because individuals could sign up for a mailing list that interested them and await the emails that would be sent out automatically by some central person or organization. By 2006, the top 20 such email programs delivered 6.8 million emails a day worldwide; and the top 20 lists had almost 20 million subscribers (LISTSERV 2006).

Online discussion possibilities have now developed well beyond bulletin board systems, and a variety of formats is available. These range from simple to complex, from newspaper web sites that offer readers an opportunity to comment on a story, book reviews uploaded by readers to the Amazon.com site, and sites devoted to discussing political issues. Current examples of more elaborate discussion and sharing sites made possible by the rapidly evolving set of tools called "Web 2.0" are collaboration sites (e.g., Google.docs); social networks (e.g., Facebook); and online meetings or webinars, which offer various levels of interaction (from asking questions online to commenting through a live phone link). These different tools allow interactions with others that may occur sporadically or quite frequently. Within higher education, online class discussions involving both students and faculty members can occur through course management systems and may be held synchronously or asynchronously.

Another communication type is the blog which has exploded in use, totaling 83.1 million blogs worldwide in May 2007 (Baron 2008) and 133 million blogs in January 2009 (Singer 2009). Who is blogging? The Pew Internet and American Life Project (Lenhart and Fox 2006) found that 12 million American adults blogged in July 2006 while 57 million American adults read blogs (Singer 2009). Blogs can be characterized as personal, professional, or political. Technorati.com (2008) is one of several web sites that monitor the growth in blogs, blogging, and bloggers.

In a study of blogs in 2003 and 2004, Herring et al. (2006) used content analysis to identify structure, content, and changes to blogs over time. Not surprisingly, the number of words posted increased over time. Posts to the blogs studied were largely text-based, and only 38% linked to other sites. Names used by the bloggers were largely the first name (32.4%) or full name (33.5%); only 8% and 24.4% used no name or a pseudonym, respectively. Content analysis is a popular analytical tool for investigating blogs (Herring et al. 2004, 2005; Papacharissi 2004)

.III. EXISTING SYSTEM

In existing system, they have implemented law system and section analysis system by manually and by paper work which will be displayed in court or law books which may not be used by all the public to acquire knowledge of law. When public are trying to view and get the law details through particular lawyer at the same time may get crowd on the place and problems may be occurred. Lawyers may also forget some law section. It may lead many problems. They should refer them through books or they should collect the data regarding the particular law. It may take lot of time consumption; human intervention may mistake sometime. During law section details referred and written in the ledger, they may provide the percentage erroneously which may lead the difficulty.

IV. PROPOSED SYSTEM

In proposed system, admin can enroll the law and section details, criminal details of each crime through online. Administrator can view results of all the lawyers including their working court, public details and view the criminal details for future reference and clarification. Lawyers and public can view the law sections details for the each section and constituency and look at the court details for each state separately. Moreover, this application will help the public to know the personal details about the lawyers who are working in various courts and various departments. It will be very useful for the public when they meet some illegal issues, they can communicate with the lawyers and understand about the law. All the public department and private institutes can access accurate information quickly and easily when required, thereby improving its operational efficiency & effectiveness.

V. METHODOLOGY

All the data of the users are stored in a database and the analyses are done manually by the veterans of the astrology field. Once the analysis is over, the solution of the particular user is sent through E-mail about the topic the user queried. Our uniqueness comes from providing user with direct access to a written opinion from our panel of lawyers practicing in your requested area of law. The responses to your questions given by the lawyers in this project are not stock answers - they are personalized replies tailored to your specific situation. Our system provides user with information that enables user to make decisions. We also provide value to user by simplifying the communication process.

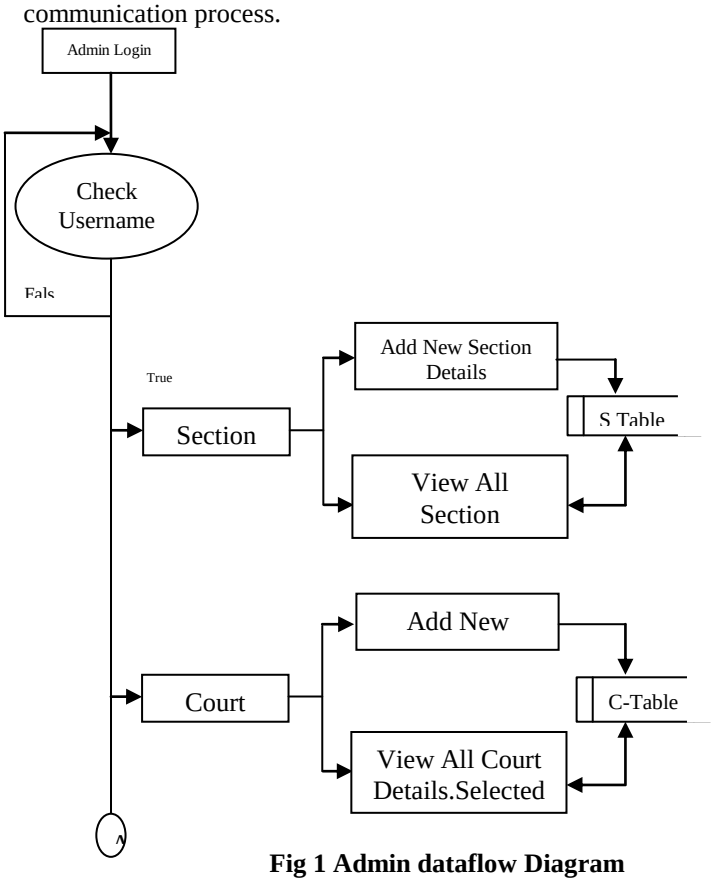


Fig 1 Admin dataflow Diagram

We collect information beforehand and enlist lawyers practicing in your problem area. We also save the amount of time and money user spend consulting with a lawyer to determine whether user have a case or not. According to your own schedule, you can describe your situation in the comfort and privacy of your home or office. You can then secure a quick and free of cost assessment of your legal rights or liabilities by a licensed lawyer before committing any significant time or money to retain your own lawyer.

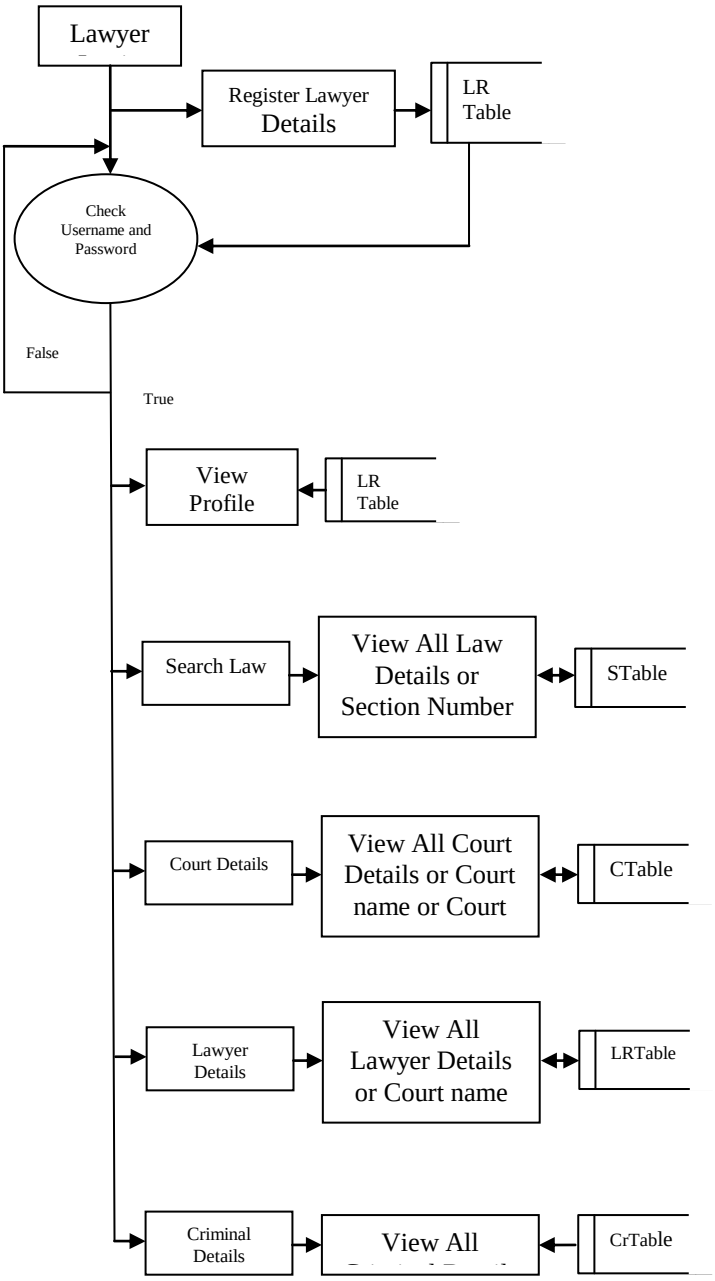


Fig 2 Lawyer Dataflow Diagram

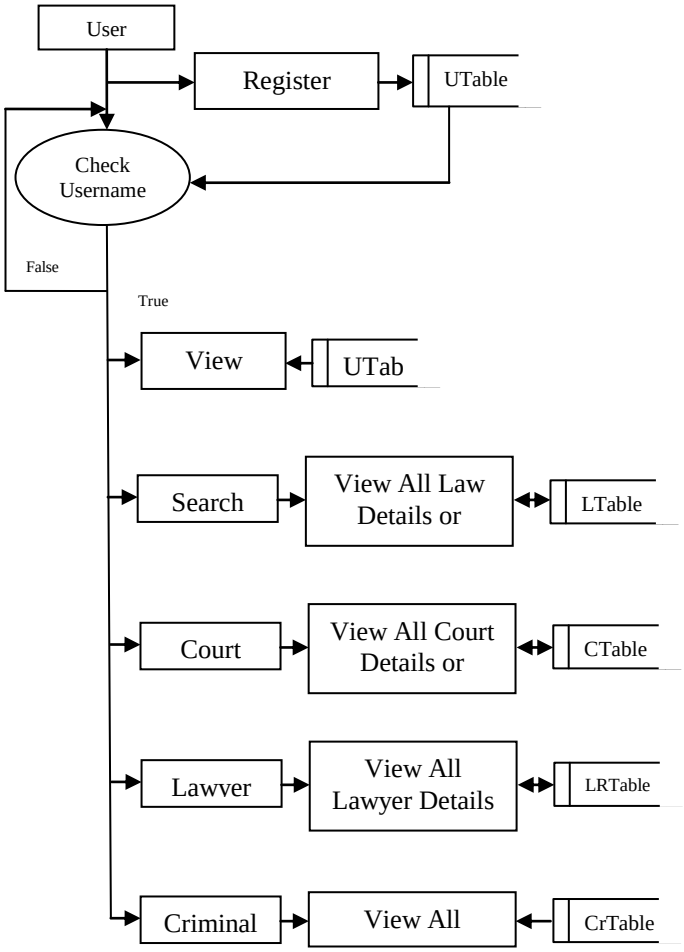


Fig 3 User Dataflow Diagram

VI. TECHNOLOGY USED

1) ASP.NET

ASP.NET, THE NEXT VERSION OF ASP, IS A PROGRAMMING FRAMEWORK THAT IS USED TO CREATE ENTERPRISE – CLASS WEB APPLICATIONS. THE ENTERPRISE CLASS WEB APPLICATIONS ARE ACCESSIBLE ON A GLOBAL BASIS LOADING TO EFFICIENT INFORMATION MANAGEMENT. HOWEVER, THE ADVANTAGES THAT ASP.NET OFFERS MAKE IT MORE THAN JUST NEXT VERSION OF ASP.NET.

ASP.NET is integrated with visual studio.Net, which provides a GUI designer, a rich toolbox and a fully integrated debugger. This allows the development of applications in a what you see is what you get (WYSIWYG) MANNER.

The .NET Framework is a common environment for building, deploying, and running Web Services and Web Applications. The .NET Framework contains common class libraries - like ADO.NET, ASP.NET and Windows Forms - to provide advanced standard services that can be integrated into a variety of computer systems.

The .NET Framework is language neutral. Currently it supports C++, C#, Visual Basic, JScript (The Microsoft version of JavaScript). The new Visual

Studio.NET is a common development environment for the new .NET Framework. It provides a feature-rich application execution environment, simplified development and easy integration between a number of different development languages.

Unique Features Of .Net Environment

1. Internet Inside
2. Common Language support
3. Common Class Libraries
4. Common Language Runtime
5. Garbage Collection.
6. Cross Language Reference
7. Web Services

INTERNET INFORMATION SERVICE 6.0

IS 6.0 has strong support for more programming to take place on the server, to allow the new Web Applications to run in any browser on any platform.

ASP.NET

- ASP.NET is a server-side scripting technology that enables scripts (embedded in web pages) to be executed by an Internet server.
- ASP.NET is a Microsoft Technology
- ASP.NET stands for Active Server Pages
- ASP.NET is a program that runs inside IIS
- IIS stands for Internet Information Services
- IIS comes as a free component with Windows 2008
- IIS is also a part of the Windows NT 4.0 Option Pack
- The Option Pack can be downloaded from Microsoft PWS is a smaller - but fully functional - version of IIS PWS can be found on your Windows 95/98 CD.
- ASP.NET 3.0 is the latest version of ASP.NET, but there will never be an ASP.NET 4.0 version.
- ASP.NET is the next generation ASP.NET, but it's not an upgraded version of ASP.NET. ASP.NET is an entirely new paradigm for server-side ASP.NET script
- ASP.NET is a part of the new .NET (dotnet) Framework. Microsoft spent three years rewriting ASP.NET from the ground up, and ASP.NET is not fully backward compatible with ASP.NET 3.0.
- ASP.NET has better language support, a large set of new controls and XML based components, and better user authentication.
- ASP.NET provides increased performance by running compiled code.
- ASP.NET code is not fully backward compatible with ASP.NET.
- ASP.NET is a server-side programming language.
- ASP.NET is an object-oriented programming language.
- Active Server Pages - ASP.NET
- ASP.NET is the latest version of ASP.NET. It includes Web Services to link applications, services and devices using HTTP, HTML, XML and SOAP.

NEW IN ASP.NET

1. New Language Support
2. Programmable Controls
3. Event Driven Programming
4. XML Based Components
5. User Authentication
6. User Accounts and Roles
7. High Scalability
8. Compiled Code
9. Easy Configuration
10. Easy Deployment
11. Includes ADO .NET

WEB SERVICES

- Web services are small units of code
- Web services are designed to handle a limited set of tasks
- Web services use XML based communicating protocols
- Web services are independent of operating systems
- Web services are independent of programming languages.
- .NET Web Services
- Web services are small units of code built to handle a limited task.
- Small Units of Code
- Web services are small units of code designed to handle a limited set of tasks.

XML BASEDWEB PROTOCOLS

Web services use the standard web protocols HTTP, XML, SOAP, WSDL, and UDDI.

HTTP

HTTP (Hypertext Transfer Protocol) is the World Wide Web standard for communication over the Internet.

XML

XML (extensible Markup Language) is a well-known standard for storing, carrying, and Exchanging data.

SOAP

Simple Object Access Protocol is a lightweight platform and language neutral

Communication protocol that allows programs to communicate via standard Internet

HTTP

WSDL

WSDL (Web Services Description Language) is an XML-based language used to define web services and to describe how to access them.

UDDI

Universal Description, Discovery and Integration is a directory service where businesses can register and search for web services.

UDDI is a public registry, where one can publish and inquire about web services.

INDEPENDENT OF OPERATING SYSTEM

Since web services use XML based protocols to communicate with other systems, web services are independent of both operating systems and programming languages.

An application calling a web service will always send its requests using XML, and get its answer returned as XML. The calling application will never be concerned about the operating system or the programming language running on the other computer.

BENEFITS OF WEB SERVICES

- Easier to communicate between applications.
- Easier to distribute information to more consumers.
- Rapid development.
- Web services make it easier to communicate between different applications.
- They also make it possible for developers to reuse existing web services.
- Instead of writing new ones.

Web services can create new possibilities for many businesses because it provides an easy way to distribute information to a large number of consumers. One example could be flight schedules and ticket reservation systems.

BACK END

SQL SERVER

The database component of Microsoft® SQL Server™ 2008 is a Structured Query Language (SQL)–based, scalable, relational database with integrated Extensible Markup Language (XML) support for Internet applications. Each of the following terms describes a fundamental part of the architecture of the SQL Server 2008 database component:
DATABASE

A database is similar to a data file in that it is a storage place for data. Like a data file, a database does not present information directly to a user; the user runs an application that accesses data from the database and presents it to the user in an understandable format.

Database systems are more powerful than data files in that data is more highly organized. In a well-designed database, there are no duplicate pieces of data that the user or application must update at the same time. Related pieces of data are grouped together in a single structure or record, and relationships can be defined between these structures and records.

When working with data files, an application must be coded to work with the specific structure of each data file. In contrast, a database contains a catalog that applications use to determine how data is organized. Generic database applications can use the catalog to present users with data from different databases dynamically, without being tied to a specific data format.

A database typically has two main parts: first, the files holding the physical database and second, the database management system (DBMS) software that applications use to access data. The DBMS is responsible for enforcing the database structure, including:

- Maintaining relationships between data in the database.
- Ensuring that data is stored correctly, and that the rules defining data relationships are not violated.
- Recovering all data to a point of known consistency in case of system failures.

RELATIONAL DATABASE

Although there are different ways to organize data in a database, relational databases are one of the most effective. Relational database systems are an application of mathematical set theory to the problem of effectively organizing data. In a relational database, data is collected into tables (called relations in relational theory).

A table represents some class of objects that are important to an organization. For example, a company may have a database with a table for employees, another table for customers, and another for stores. Each table is built of columns and rows (called attributes and tuples in relational theory). Each column represents some attribute of the object represented by the table. For example, an employee table would typically have columns for attributes such as first name, last name, employee ID, department, pay grade, and job title. Each row represents an instance of the object represented by the table. For example, one row in the Employee table represents the employee who has employee ID 12345.

When organizing data into tables, you can usually find many different ways to define tables. Relational database theory defines a process called normalization, which ensures that the set of tables you define will organize your data effectively.

SCALABLE

SQL Server 2008 supports having a wide range of users access it at the same time. An instance of SQL Server 2008 includes the files that make up a set of databases and a copy of the DBMS software. Applications running on separate computers use a SQL Server 2008 communications component to transmit commands over a network to the SQL Server 2008 instance. When an application connects to an instance of SQL Server 2008, it can reference any of the databases in that instance that the

user is authorized to access. The communication component also allows communication between an instance of SQL Server 2008 and an application running on the same computer. You can run multiple instances of SQL Server 2008 on a single computer.

SQL Server 2008 is designed to support the traffic of the largest Web sites or enterprise data processing systems. Instances of SQL Server 2008 running on large, multiprocessor servers are capable of supporting connections to thousands of users at the same time. Although SQL Server 2008 is designed to work as the data storage engine for thousands of concurrent users who connect over a network, it is also capable of working as a stand-alone database directly on the same computer as an application. The scalability and ease-of-use features of SQL Server 2008 allow it to work efficiently on a single computer without consuming too many resources or requiring administrative work by the stand-alone user. The same features allow SQL Server 2008 to dynamically acquire the resources required to support thousands of users, while minimizing database administration and tuning. The SQL Server 2008 relational database engine dynamically tunes itself to acquire or free the appropriate computer resources required to support a varying load of users accessing an instance of SQL Server 2008 at any specific time. The SQL Server 2008 relational database engine has features to prevent the logical problems that occur if a user tries to read or modify data currently used by others.

STRUCTURED QUERY LANGUAGE

To work with data in a database, you have to use a set of commands and statements (language) defined by the DBMS software. Several different languages can be used with relational databases; the most common is SQL. The American National Standards Institute (ANSI) and the International Standards Organization (ISO) define software standards, including standards for the SQL language. SQL Server 2008 supports the Entry Level of SQL-92, the SQL standard published by ANSI and ISO in 1992. The dialect of SQL supported by Microsoft SQL Server is called Transact-SQL (T-SQL). T-SQL is the primary language used by Microsoft SQL Server applications.

EXTENSIBLE MARKUP LANGUAGE

XML is the emerging Internet standard for data. XML is a set of tags that can be used to define the structure of a hypertext document. XML documents can be easily processed by the Hypertext Markup Language, which is the most important language for displaying Web pages.

Although most SQL statements return their results in a relational, or tabular, result set, the SQL Server 2008 database component supports a FOR XML clause that returns results as an XML document. SQL Server 2008 also supports XPath queries from Internet and intranet applications. XML documents can be added to SQL Server databases, and the OPENXML clause can be used to expose data from an XML document as a relational result set.

V. EXPERIMENTAL RESULTS AND DISCUSSION

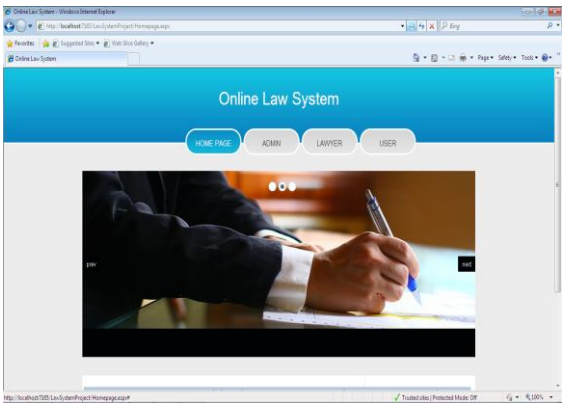
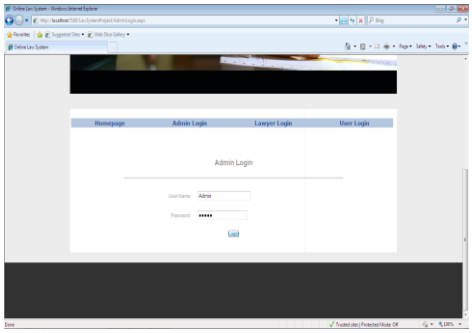


Fig 4 Home page

Administrator

Administrator is a main controller of this application. Administrator can enter into this application by giving his credential such user id and password. After he is approved as authorized person, he can do the several enrollment processes. Here, Administrator is a responsible person for registering the details about the criminal details such as their contact details and their crime details, enrolling the law details with their section number, section details with section number and its rules which are defined in constituency in brief. He also enlists the court details for each type of court which may be either high court or Supreme Court or district court and for each state. Finally, admin can view information about registered lawyers, public details, criminal details with their crime, court details with their contact information and details of all the law sections which are presents Indian constituency.



Fg 5 Admin Login

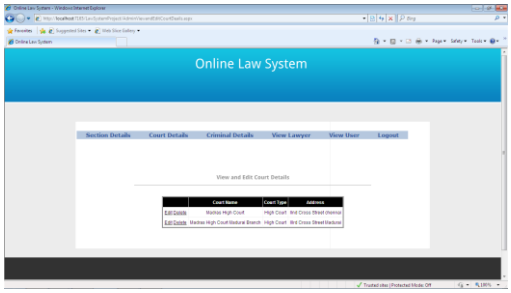


Fig 6view & edit court details

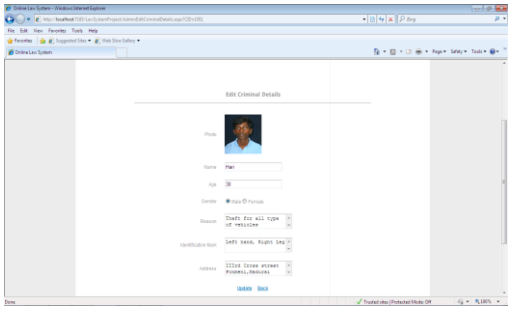


Fig 7 update criminal details

Lawyer Registration

This module is implemented and evaluated by legal representative and lawyers of this application. In which lawyers should register their person details, contact details and working court details which may be high court, district court or Supreme Court. In which, lawyer will give the information such as court id in which they are working, name, qualification, expertise in which law. They should also provide the password for their credentials; this password can be updated by lawyers in future if they wish to modify.

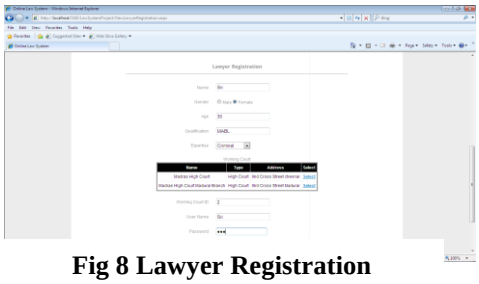


Fig 8 Lawyer Registration

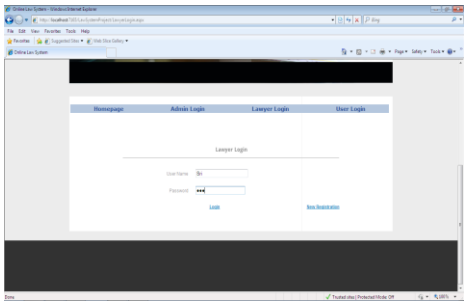


Fig 9 lawyer Login

Fig 10 Lawyer View Criminal Details

Public Registration

This module is executed and evaluated by users and public of this application. In which, public or user should give the information about their details such as name, mail id, contact number, address details and user name and password. User id and password are credential for each user to authorize them into the application. Users can update the password in future based on their requirements. After the registration process, they are eligible to access and use this online law system portal..

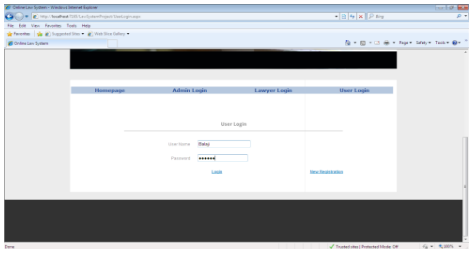


Fig 11 User Registration

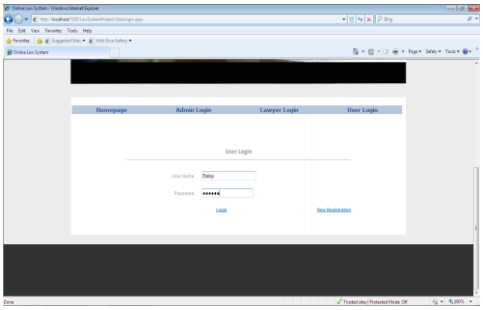


Fig 12 User Login

Lawyer Bestow

By this module, lawyers can enter into this application by giving their credentials such as user id and password. Once they are declared as authenticated and authorized to this system, they log into this portal. Lawyers are the persons who are legitimate to search law information which are stored in

the server by giving section number or by giving section name. For searching by section name, they can give some set of keywords which are presented in the rules of the particular section. They can also view the details about the courts which are available in the country, criminal details with their crime and details of all the lawyers with their working court and personal details to communicate each other.

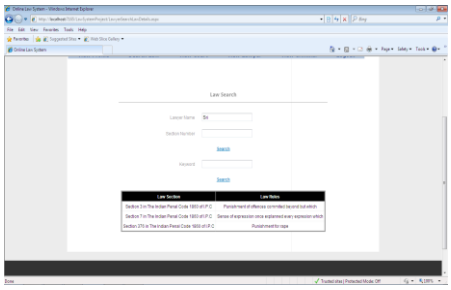


Fig 13 Law search

Public/User Depiction

In this module, public and users can log into this application by giving their user id and password to check their authorization. After they are considered as authorized, they can view court details, criminal details, lawyer details to get the idea about the law details and lawyer details. Public can search the particular law details by giving their section name with keyword. After that it will show the corresponding details to get some knowledge about the particular law and its section details. They can also get the court details with their address as well as lawyer details with their address to contact them when they are needed.

Fig 14 user view criminal details

VI. CONCLUSION

By using the implemented application portal, we can solve the several problems, reduce the complexity, avoid human mistakes and generate the result quickly. By using this system an organization can handle its all kinds of above mentioned works efficiently, accurately and swiftly with all kinds of security features by involving a few staffs. This computerized online law system and section analysis system is developed to facilitate the general administration system and manage the enormous information of the court details, lawyer details and section details of each law and the processes involved in a court and law sections. It will be very useful for both public and lawyers to enhance their knowledge about Indian penal code. So, that any other institute or organization or individual or lawyer can access accurate information quickly and easily as and when required, thereby improving its operational efficiency & effectiveness.

VII. FUTURE ENHANCEMENT

The computerized system has been designed and developed flexibly for the current requirements of the user. The reports modules contain options for creating various reports needed by the Company.

In future new reports can be added in this module when the user requirement changes. This software is not providing any backup facilities and budget allocations. In future backup facilities and budget allocations may be added as additional features in the system. We collect information beforehand and enlist lawyers practicing in your problem area. We also save the amount of time and money user spend consulting with a lawyer to determine whether user have a case or not. According to your own schedule, you can describe your situation in the comfort and privacy of your home or office.

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