

AUTOMATING E-GOVERNMENT SERVICES WITH ARTIFICIAL INTELLIGENT

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ABSTRACT

The project is entitled as — E-Government systemll for users to know government services , most innovative information and communication technologies, and design the system as web-based internet applications, to provide citizens and businesses with more convenient access to government information and services, to improve the quality of the services and to provide enhanced democracy. The strategic objective of e-governance is to support and simplify governance for all parties - government, citizens and businesses. The use of ICTs can connect all three parties and support processes and activities. In other words, in e-governance uses electronic means to support and stimulate good governance. In this project user can apply all certificates in web sites like birth certificate, income certificate, death certificate, community certificate and so on. The citizen request directly sent to appropriate department for getting approval. After proper intimation, the

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certificate can be issued to users. This can be reducing the time for waiting in the queue for getting government certificates. And also post events on web site to know upcoming activities by government. Advantages for the government involve that the government may provide better service in terms of time, making governance more efficient and more effective. In addition, the transaction costs can be lowered and government services become more accessible.

MODULE DESCRIPTION

➤ User login

Registration:

There is registration form available where new users can create their account by providing required information to the system. The registration form details are like name, father name, age, gender, mobile number, address, and etc. These details are stored in the database. And then can getting to

the username and password in the system.

➤ **Login form:**

In this module, user can login in the system using username and password. This main module for users who are apply certificates in online

➤ **Hospital login:**

In this module, hospital admin login to the system to view the users who are applied death certificates and birth certificates. And verify the details of users and provide approval with intimation to admin. If the user details are not matched means, send intimation as wrong person.

Revenue login:

In this module, revenue department provide approval to users who are apply community and income certificates. If the users details are found means, approval intimation send to admin otherwise consider as fake information

EXISTING SYSTEM

Government Certificate is the most important identity document that makes it possible for anyone in possession of it to benefit from a gamut of services offered by the Indian

Government to its citizens. It becomes necessary to obtain Birth, Death, Community and Income Certificate because it serves to establish the date and fact of one's birth for a whole range of purposes, like acquiring the right to vote, admission to schools and to the Government Service, claiming the right to marry at the legally permissible age, settlement of inheritance and property rights. But in existing system, there is no online application for applying certificates. Users can went straightly to the government office and waiting long time to get the certificates. And difficult to get approval from various departments. Sometimes, fake certificates may be issued.

DISADVANTAGES

- Provide time and cost complexity
- Manual system can be applied in realtime
- Fake certificate can be issued
- Difficult to get approval from hospital and revenue departments

1.1 PROPOSED SYSTEM

E-governance is more than just a government website on the Internet. Objectives are generally to improve efficiency and effectiveness and to save costs. The driving force can also

be public demand for online services and information that increase democratic participation, accountability, transparency, and the quality and speed of services. Establishing a simple Management Information System at district level that will capture information generated from three selected areas namely: birth, death, community and income certificates online. In proposed system, we can design the web application using C#.NET and SQL SERVER as back end. This web site has two accounts such as admin and users. Users can register their details such as name, age, address, mobile number and so on. After user got user name and password for authorization. User enters into the system and provides certificate type such as birth, death, community and income certificate. The requirements can be differ for each certificate type. If the user can be choose certificate type means, approval information just forward to appropriate departments. After getting approval, certificates are ready and sent to user account. User can directly get the certificate online and also print from

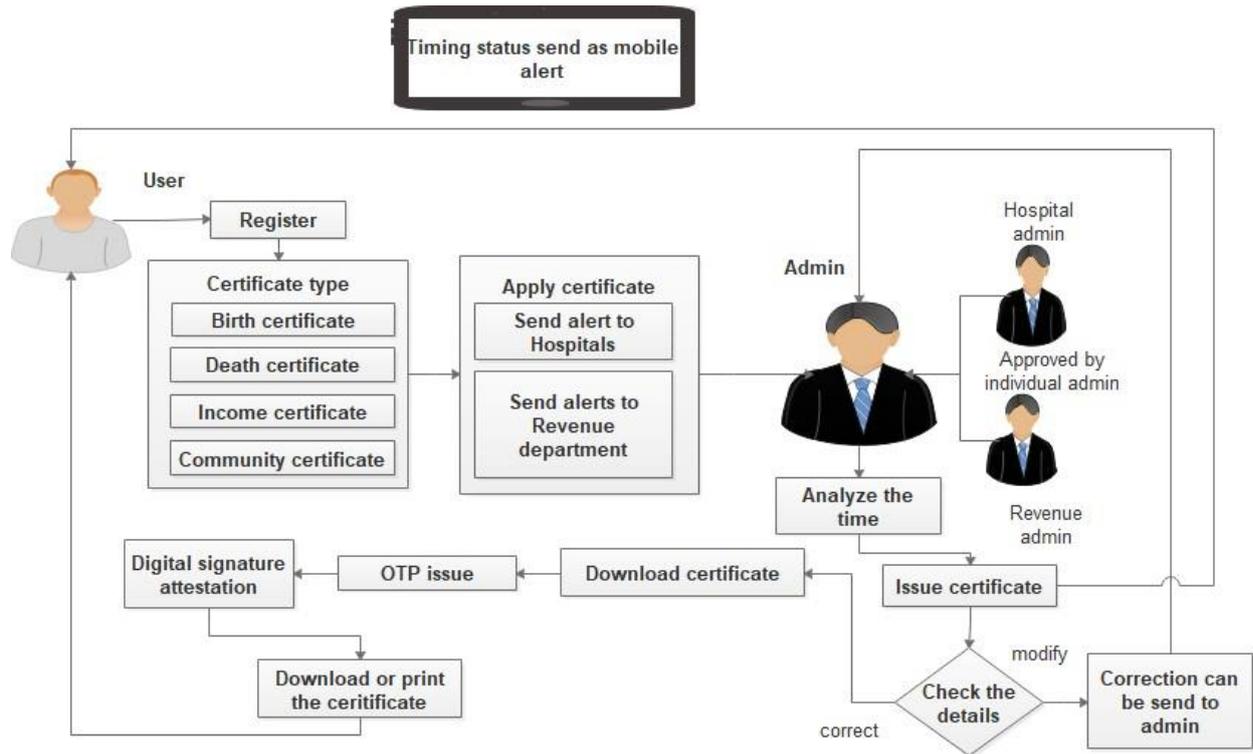
our website.

ADVANTAGES

- Improve efficiency and effectiveness in capturing and processing information obtained from the selected areas.
- Facilitate utilization of the information system outputs for good governance.
- Provide a computerized district governance model to be adopted by the district for all sectors and later on by other districts and central government departments.
- Reduce complexity and time
- Provide certificate in printable format in online

2.1.1 SYSTEM ARCHITECTURE

In this architecture, display the overall framework of proposed system. User can apply the certificates anytime and anywhere. The certificate can be forward to admin system and forward to hospital and revenue departments. Admin can be providing the issue details to user. Then get the certificate using OTP security. Finally download or print certificate with certificate attestation



.Net Framework

The .NET Framework (pronounced dot net) is a software framework developed by Microsoft that runs primarily on Microsoft Windows. It includes a large library and provides language interoperability (each language can use code written in other languages) across several programming languages. Programs written for the .NET Framework execute in a software environment (as contrasted to hardware environment), known as the Common LanguageRuntime (CLR), an application virtual machine that provides services such as security,

memorymanagement, and exception handling. The class library and the CLR

The .NET Framework's Base Class Library provides user interface, data access, databaseconnectivity,cryptography,web application development, numeric algorithms, and networkcommunications. Programmers produce software by combining their own source code with the

.NET Framework and other libraries. The .NET Framework is intended to be used by most new applications created for the Windows platform. Microsoft also produces an integrateddevelopment environment

largely for .NET software called Visual Studio

in possession of the private key. Strong naming is required to add assemblies to the GlobalAssemblyCache

Security

.NET has its own security mechanism with 2 general features: Code Access Security (CAS), and validation and verification. Code Access Security is based on evidence that is associated with a specific assembly. Typically the evidence is the source of the assembly (whether it is installed on the local machine or has been downloaded from the intranet or Internet). Code Access Security uses evidence to determine the permissions granted to the code. Other code can demand that calling code is granted a specified permission. The demand causes the CLR to perform a call stack walk: every assembly of each method in the call stack is checked for the required permission; if any assembly is not granted the permission a security exception is thrown.

Class library

The .NET Framework includes a set of standard class libraries. The

class library is organized in a hierarchy of namespaces. Most of the built-in APIs are part of either System.* or Microsoft.* namespaces. These class libraries implement a large number of common functions, such as file reading and writing, graphic rendering, database interaction, and XML document manipulation, among others. The .NET class libraries are available to all CLI compliant languages. The .NET Framework class library is divided into two parts: the Base Class Library and the Framework Class Library

The Base Class Library (BCL) includes a small subset of the entire class library and is the core set of classes that serve as the basic API of the Common Language Runtime.^[9] The classes in mscorlib.dll and some of the classes in System.dll and System.core.dll are considered to be a part of the BCL. The BCL classes are available in both .NET Framework as well as its alternative implementations including .NET Compact Framework, Microsoft Silverlight and Mono.

The Framework Class Library (FCL) is a superset of the BCL classes and refers to the entire class library that ships with .NET Framework. It includes an expanded set of libraries,

including Windows Forms, ADO.NET, ASP.NET, Language Integrated Query, Windows Presentation Foundation, Windows Communication Foundation among others. The FCL is much larger in scope than standard libraries for languages like C++, and comparable in scope to the standard libraries of Java.

2.1.2 SQLSERVER:

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet). Microsoft markets at least a dozen different editions of Microsoft SQL Server, aimed at different audiences and for workloads ranging from small single-machine applications to large Internet-facing applications with many concurrent users. Data storage in a database, which is a collection of tables with typed columns. SQL Server supports different data types, including primary types such as Integer, Float, Decimal, Char (including

character strings), Varchar (variable length character strings), binary (for unstructured blobs of data), Text (for textual data) among others. The rounding of float to integers uses either Symmetric Arithmetic Rounding.

also contain other objects including views, stored procedures, indexes and constraints, along with a transaction log. A SQL Server database can contain a maximum of 2^{31} objects, and can span multiple OS-level files with a maximum file size of 2^{60} bytes (1 exabyte). The data in the database are stored in primary data files with an extension .mdf. Secondary data files, identified with a .ndf extension, are used to allow the data of a single database to be spread across more than one file, and optionally across more than one file system. Log files are identified with the .ldf extension.

Storage space allocated to a database is divided into sequentially numbered pages, each 8 KB in size. A page is the basic unit of I/O for SQL Server operations. A page is marked with a 96-byte header which stores metadata about the page including the page number, page type, free space on the page and the ID of the object that owns it. Page type defines the data

CONCLUSION

The project of E-government for reaching the goal of paperless offices. The management of documents using our model of hierarchical process folders is tailored to the execution of government processes. Within a process folder all documents of a process are stored and every change of a document results in a new version. This enables a traceable version history of all process data. Therefore, our model is comparable to a changing file containing all information of a government process with the addition that every version can be restored. The included archival storage mechanism facilitates later inspection of all completed processes. Our model of security levels provides security mechanisms that are tailored to the processing of distributed government processes within and between authorities. The two proposed concepts are implemented in the reference architecture for e-government software system.

FUTURE ENHANCEMENT

The study is limited by the fact that it has explored what already exists, and has considered a limited number of representative studies and five

important city e-Government Web sites. Study of five city Web sites is limited by the features / functions considered, which in turn are limited by their dependence on a previous model. An actual survey of users/citizens of the target city and its officials would be invaluable to identify their perceived needs and expectations from the city e-government; such a survey may even throw up new features or areas, which have not been hitherto considered for implementation or research.

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