

A DATA APP FOR E-BIRTH CERTIFICATE

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ABSTRACT

It is the process that confers on a person a legal name and identity it is the gateway to many other rights connected with obtaining driving licenses, passports, and voter registration. The absence of this may lead to denials of rights, which may consequently result in many forms of poverty and underdevelopment. Considering the increasing newborn babies, the manual system of traditional birth registration is usually cumbersome and impracticable. In this respect, the suggested E-birth registration and certificate issuance system will provide a quick and efficient solution to the multitude of challenges faced. It provides users the ability to register for and obtain birth certificates at any place and time. Applicants can apply for birth certificates, check their status online, and verify or download their birth certificates through the use of the system. The system implementation uses MySQL as the backend database and Object Oriented PHP as the Application Programming Interface. The evaluation of the E-birth certificate issuance system in terms of accessibility, speed, cost, and capacity shows that this system highly improves the birth registration process by assisting the government people involved in

birth registration through hastening the registration process, reducing costs, and details of registration safely stored for future reference.

KEYWORDS: *Birth registration, Birth rate monitor, Birth certificate download*

INTRODUCTION

Birth registration is an administrative function that provides a child with legal identity; this makes possible the issuance of passports, opening of bank accounts, and healthcare, among other vital services. It plays an important role in ensuring that children enjoy their rights and participate in civic activities. Unfortunately, in countries such as Somaliland, many children are unregistered, which puts them at risk of losing the opportunity to access basic rights and services. For this purpose, an innovative E-birth registration and certificate issuance system was developed. Basically, this will ease the process of registration by allowing users to make online registration of births, check the status of their application, and download certificates online. It shall be developed using MySQL for database management

and PHP for the application interface, making it user-friendly to operate. It has two primary user roles, which include a system administrator and E-Birth Certificate regular users. Administrators organize, update records, produce reports,

and ensure accuracy in data. Regular users are able to register births, view, and print off certificates. This setup improves efficiency and access, an important element in the handling of an increased demand for birth registration. Its development underscores broader implications of an accurate birth registration in support of effective policy planning at the public level, aiding in combating child trafficking, and ensuring protection for vulnerable populations in cases of emergencies. It also helps in economic planning with reliable population data provided. The overall contribution that the E-birth Registration System can make to the management of birth documents, the creation of feelings of identity and belonging in children, and access to other important services cannot be overemphasized. Inevitably, the security considerations, user experience, and scalability underscored in this system will ensure its continued effectiveness for meeting increasing demand in digital birth registration. Regular updating of the system and training of users go hand in hand with ensuring its robustness and user satisfaction.

LITERATURE SURVEY

The evolution of birth registration from a manual to a digital system is a sea change in the management of vital records. Traditionally, birth registration was characterized by cumbersome paperbased

methods that spawned many errors, inefficiencies, and delays. Conventional systems needed extensive manual handling, which made them slow with a higher risk of inaccuracies. This revolution has been achieved by digital systems, through which internet-enabled devices have easily simplified birth registration. Because of this shift, users could easily register births, get certificates, but more importantly, track the status of their applications in realtime. This improvement is especially useful to institutions like schools, which rely on effective and timely keeping of records for the enrolment and verification of students. Birth registration is not only a matter of administration; it is also a basic human right relevant to accessing many services and claims. To provide a birth certificate, which is required to access education and health services, accurate and timely registration for children is needed. These services will remain unreachable for children if they are not appropriately registered, hence forming a hindrance in effective development and welfare. Research shows that birth registration is a human right. Cases where children have not been registered at birth have been found to create many difficulties in accessing several key services and benefits for the children concerned. For instance, a child without a birth certificate will find it difficult to be admitted to schools or receive health services. It gives a legal identity, which is very essential for obtaining social services and protection. Birth registration coverage gaps pose serious challenges in many developing countries. These gaps usually result from a lack of awareness about the benefits that should accrue from the process and poor infrastructure to undertake the exercise. For

instance, Claudia Cappa and colleagues find that unregistered births are an obstacle to accessing services and exercising rights of prime importance to children's development. One of the important

strategies for establishing the challenges has been the implementation of digital registration systems. Digitization could offer improved access, accuracy, and other process-oriented benefits at the level of governments and organizations regarding birth registration. Digital systems also spread the reach of registration services, allowing more children to have the chance of getting registered and, accordingly, access their rights.

The impact of proper birth registration does not stop at the level of individual benefits; it extends to the governance of the nation and the world at large. Reliable data of birth registration serves very well the planning process of public policy and assists in combating such vices as child trafficking because of providing legal identity. Accurate population data is important in economic planning and resource allocation. Digital birth registration systems thus step into a fair society wherein every child gets registered and enjoys the bare rights for survival. Such systems scale solutions to growing demands and changing needs; hence, they become a core factor in building up an inclusive and equitable society.

EXISTING SYSTEM

A lot of issues exist in current birth record management systems, which are based on traditional manual methods of operation. Data entry into a database is the initial

laborious process prone to human error; hence, it results in inaccurate birth records. Storage of birth certificates is still physical; retrieval is time-consuming and highly susceptible to loss or damage. Verification processes are still manual and, as a result, they cause delays and errors, especially when there are large volumes of applications. Accessibility is also limited, since these records are normally available during working hours and to authorized personnel only. It also has improper access, thus posing security risks, while the recovery mechanisms in case of disaster are inadequate. Birth statistics are not efficiently compiled because of a lack of automated data processing, and thus reporting is slow and inaccurate. From these aspects, there is a need to digitize the system for efficiency, accuracy, and accessibility of birth records.

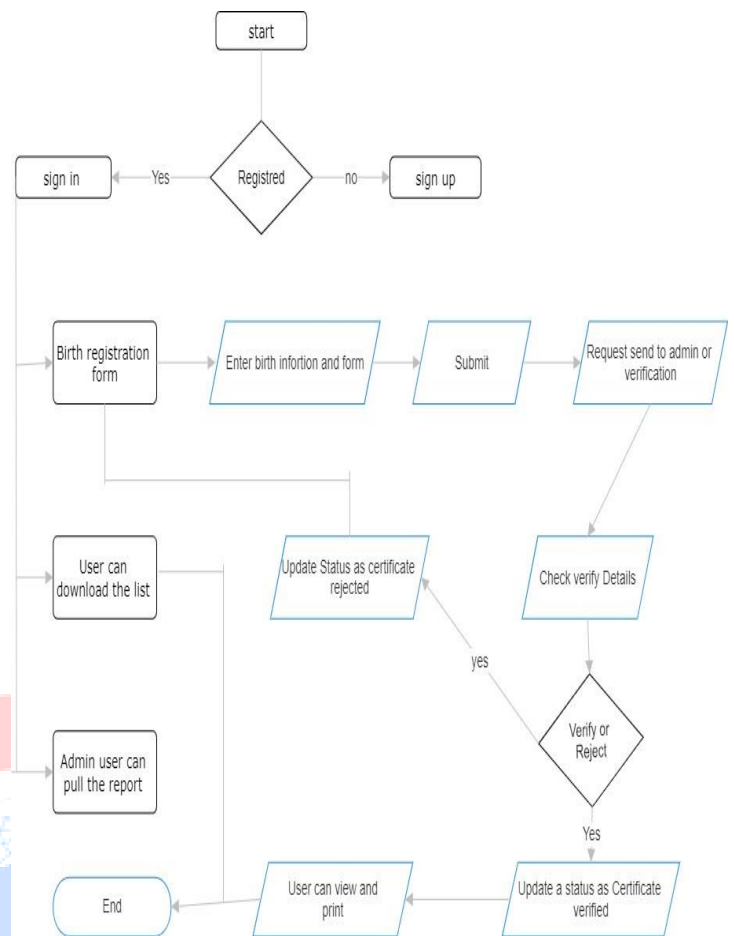
PROPOSED SYSTEM

The digital birth registration system enjoys a number of benefits, basically changing how vital records are managed. This shift is led by an intuitive web portal for online birth registration by parents, hospitals, and authorities, thus minimizing manual data entry errors. The system uses electronic Health Records to accurately update real-time birth details for the efficient verification and management of records. Automated workflows for periodic checks and approvals reduce processing time and administrative workload. Centralized digital records enhance security, accessibility, promote easy document retrieval, reduce the risk of misfiling, and are well managed in terms of admin roles and permissions for accountability, transparency, and audit trails. Data is

validated, and periodic audits ensure accuracy and consistency. Its integration into hospitals and government agencies will also ensure that all the records are updated and accurate, thereby increasing the overall administrative efficiency. It has strong security measures to the information, like encryption and role-based access, that safeguards sensitive information and assures the integrity of the system.

ACTIVITY DIAGRM

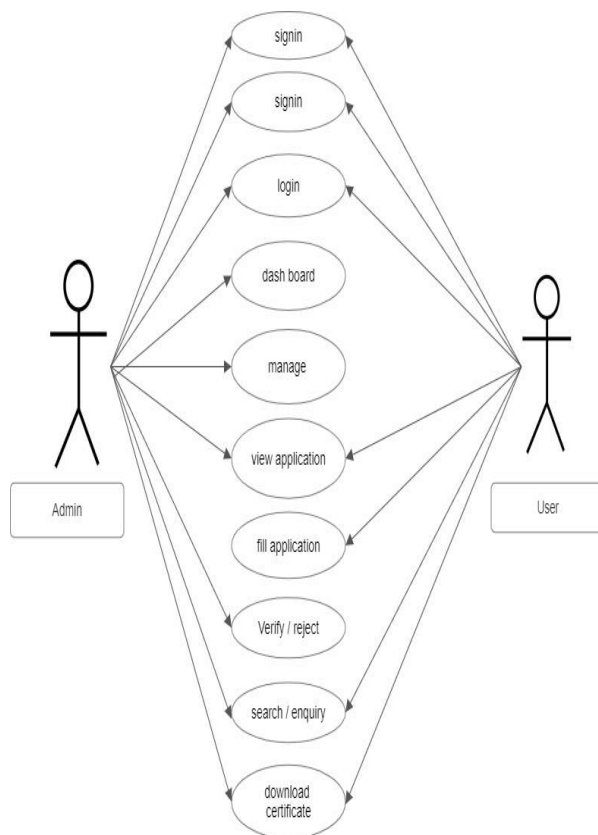
Activity Diagram of E-Birth Certificate System: This diagram shows the process of new birth registration and its certification. Here, the process initiates when the user logs into the system to ensure that no one can access the application view until proper authentication of the user is made. The user fills up a registration form with the details of the name of the baby, date of birth, and details of the parents. The system checks the form for its completeness and accuracy. Subsequently, the information is routed for review to an admin after validation. The admin checks through the data submitted, and if it is correct, approves the registration; the system creates a birth certificate. In case of discrepancies noted on the data, the admin rejects the application; notification is sent to the user to correct the application form. On verification, the user is informed and can subsequently log in to download the birth certificate, hence making the whole process easy and decreasing the need for physical paperwork or visits.



USER CASE

The E-Birth Certificate system represents the online platform established for the issuance and management of birth certificates. It offers support for two main roles: users and administrators. Users—or parents/guardians—apply for a birth certificate, track the status of their application, and download it upon approval. Administrators verify applications, manage the data of users, and generate reports. This system's use case diagram presents a graphic view of all the ways in which the user will interact with the administrator to

outline the functionality each role user can perform within the system.

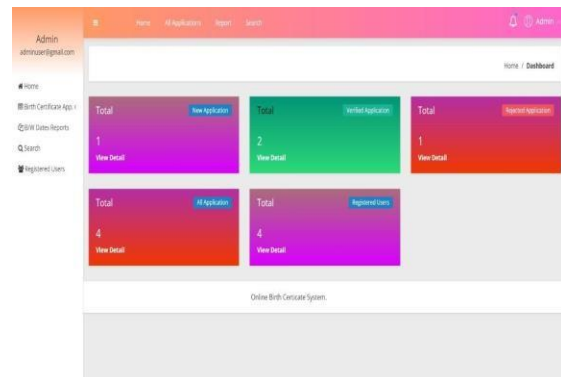


RESULTS

- User Child Birth Register

Here the user can sign up then login and need to fill the child required details for the birth certificate

- Admin dashboard



Here the admin dashboard is the central interface where the admin can see and manage the all general operations

TABLE

Test case no	Testcase name	Input given	Description	Result
1	Firstname	prajval	char (20)	pass
2	lastname	MV	char (20)	pass
3	Mobile number	987654321	Only numeric (10) digits	pass
4	Address	Banglore hosur road	Use the number,lower and uppercase char	pass
5	Password	Prajval@123	specialcharacters,number,lower and uppercase char	pass

User Register Testcase

CONCLUSION

There are several significant advantages of computerization of birth records. First, it allows the completion of the record right in the hospital, an example of simplification in its own right. Such a setup lends itself to the installation of needed equipment and training of personnel, with standards for operation to be set up. Immediate benefits include reduced transcription errors, fewer incomplete reports, less need for follow up queries, and fewer lost certificates. When entered, information is immediately

available for hospital use and can be formatted to be printed or transmitted to state agencies. Lost records can easily be regenerated without re-entry of data. There is no substitute for a birth certificate.

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They are important in keeping track of the nation's population by gender and age. They are issued immediately upon birth and used to establish citizenship. This will make an e-birth certificate system, where people can register and acquire their certificates online, not necessitating having to go to a particular place. The system could be able to organize the population data that is collected easily, hence efficient and ridding other census programs. Future work in this topic will focus on the security of the system after its testing with already existing data.

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