

TENABLE ONLINE ISSUE OF BIRTH CERTIFICATE FOR REGIME CONGLOMERATE

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Abstract - A Birth certificate is a vital role that documents the birth of child. Currently, Birth Certificate can get by any person only by designating Date of Birth and gender, which reveals the birth details as well as some personal details of any person without any security or authentication. Even terrorists can misuse it by knowing our personal details. Consequently, in this project we intend to avail in security of the regime website by bringing in a database security system that involves to enter a Registration Number and Mail ID before getting into an access. The Registration Number is unique to each birth. So, the sanction can be made only by a parents or family members who has the Registration Number. This software security system provides security purport by integrating Registration Number and Mail ID in the subsisting application. Hence the security issues can be overcome by engendering OTP(One Time Password) via Mail ID.

Key Words: Birth Certificate; Security; Authentication; OTP;TOTP

1. INTRODUCTION

The birth certificate is the first official record of incipient born baby in this world. The birth certificate records all the details from the denomination of the child's parents to the time of birth. As per rules, births will have to be registered within 21 days at the place of its occurrence. The birth certificate is a very paramount document both for the individual and the nation additionally. This certificate can be downloaded by anyone from the e-accommodation centre. By entering the person's information like D.O.B(Date Of Birth) and gender one can facilitate download it. This certificate includes person's personal information. By knowing the information one can facilitate misuse it. This can transpire due to less security provided in the subsisting system. Thus, the authentication will become more secure by engendering OTP via Mail.

1.1 EXISTING METHOD:

In the existing method, the birth certificate can be downloaded by any person, this reveals the birth details as well as some personal details of any person without any security or authentication. Once entering into the Birth certificate-(district name) website, it just asks for the D.O.B and gender, after submitting it. Then it will show the birth certificate of several people that matching with the fields. From that we can choose the specific person by verifying with their father's name. Nowadays, every people having

accounts in social media like facebook, where they need to register their D.O.B., by using that, anyone can easily misuse it. Thus it is not secured, so the personal details of a specific person can be get by any unauthorized one.

1.2 LIMITATIONS

- No security.
- More possibility of misuse.
- Identification of particular person from the search list is time consuming.
- Details can be hacked by unauthorized person.

2. PROPOSED SYSTEM

One can download the birth certificate from e-accommodation centre or any other place, only if he knows the Registration number and Mail ID. Without entering the Registration number and Mail ID or Mobile Number, no one can facilitate download the birth certificate. Hence it can be downloaded from online only by a sanctioned person. Once entering into the Birth certificate-(district name) website, it will ask for the D.O.B, gender, Mail ID and Registration number, after submitting it. Then the OTP will be engendered. The Time-based One-Time Password algorithm (TOTP) is an algorithm that computes a one-time password from a shared secret key and the current time. TOTP is an example of a hash-based message authentication code (HMAC). It combines a secret key with the current timestamp using a cryptographic hash function to generate a one-time password. Thus, the user has to enter that OTP into the form, later it will show the birth certificate of designated person precisely that matching with the fields. Hence, this method provides more security to the birth certificate and it is facile to retrieve a particular one.

2.1. ADVANTAGES

- It reduces time involvement.
- Provides more security to the website.
- Facile to retrieve.
- Unauthorized person cannot be accessed.

2.2. GENERATION OF ONE TIME PASSWORD

One Time passwords, as the name suggests, are passwords that can be used only one time. It has an Expiry time on how long the password remains valid after it has been issued. It can be valid for 5 minutes only. One time passwords are not

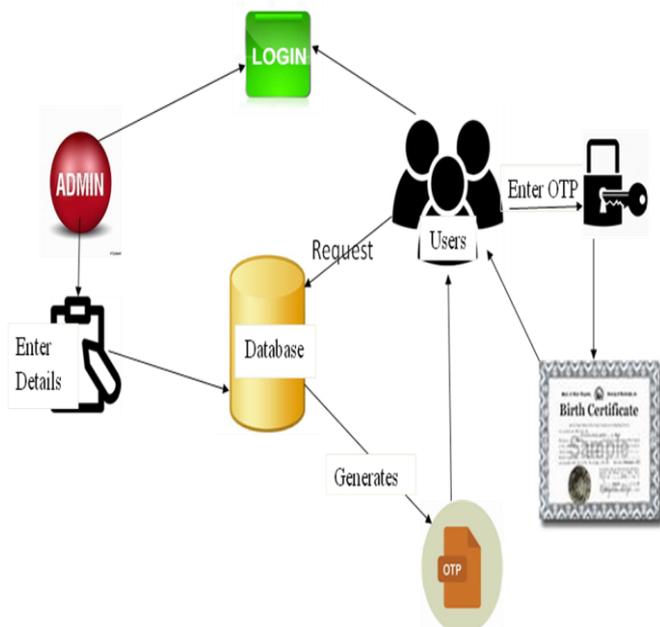
vulnerable to replay attacks, since the password cannot be used again.

According to the existing methods for authentication, the first step is to enter the Registration Number and Mail ID for User authentication. Once the user is authenticated, he gets the One Time password by Mail on his registered Mail ID and a token is generated which is automatically stored on user's machine. Token with status value 1 is valid which signifies that OTP can still be used by the user. The moment the user uses the generated OTP or after a period of 5 minutes since the user received the OTP on mobile, the OTP expires and its token value changes from 1 to 0.

2.3. TOTP ALGORITHM

The **Time-based One-Time Password algorithm (TOTP)** is an algorithm that computes a one-time password from a shared secret key and the current time. TOTP is an example of a Hash Based Message Authentication Code (HMAC). It combines a secret key with the current timestamp using a cryptographic hash function to generate a one-time password. In a typical two-factor authentication application, setup proceeds as follows: a user enters username and password into a website or other server, the server generates a secret key which the user enters on to their TOTP application on a smartphone or other device. To verify that process worked, the user application immediately generates a one-time password to be checked by the server. On subsequent authentications, the user enters their username, password and the current one-time password. The server checks the username and password as normal then also runs TOTP to verify the entered one-time password. For this to work, the clocks of the user's device and the server need to be roughly synchronized.

3. ARCHITECTURE DIAGRAM



4. CONCLUSIONS

There are lots of issues in the subsisting method like no security, misuse, etc. It even requires lot of time to find a particular person's birth certificate by matching it with their father's denomination. The proposed system eliminates all the circumscriptions of the subsisting system. Through registration number, the particular person can be identified. The Registration Number is unique to each birth. Same time this registration number is kenneed only to the sanctioned person, so the details cannot be misused in any ways. For providing security, OTP can be engendered via registered Mail ID or Mobile Number.

5. SIMULATION RESULT:

LOGIN SCREENSHOT



ADMIN SCREENSHOT



USER SCREENSHOT



OUTPUT SCREENSHOT

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