Server Storage Space Reduction, Online Certificate Verification and Validation for Government Exams

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Abstract

The People while applying for different recruitments through online application softcopy uploading of documents like educational qualification, Date of birth proof, Aadhar ID, PAN such category certificate of candidate is required. This results in unnecessary utilization of server space as each of the application requires approximately 2MB storage space and thousands of application are received. Those data occupy more space in server. It may reduce the performance of server. The server can't find out the fake documents, via this process the credentials are verified and it may avoid fake credentials. If credentials are verified then and there at the time of application receiving (uploading), it will be beneficial for all stakeholders. Integration solution with generic interface is needed.

Keywords- Credentials, Verification and Validation

I. INTRODUCTION

The software will be just the solution. It will take the mobile number as an input and will verify the documents already stored on the government servers, which will save the candidates who are all in the trouble of uploading documents.

1) Client Server using the SDK will verify mobile using OTP. And after that client will request to server.
2) After receiving request server is going to validate the request and after successful validation, the server is going to query the digital locker and validate files.
3) And after the successful response, the main server is going to respond back to client-server

II. OBJECTIVES

1) To troubleshoot the difficulties while uploading and verifying the documents.
2) In order to reduce the server space, one separate wallet is maintained.
3) In that wallet the documents like Aadhar card, 10^{th}, 12th mark sheet, Birth certificate etc., of each users are maintained.
4) Once the certificates are uploaded, hash code for the certificate was generated.
5) The hash code can be used by the user whenever in a need to upload the certificates.
6) User can easily retrieve the credentials by using login or Biometric signature.

III. METHODOLOGY

The Certificates to be uploaded are scanned by the Clients (Users) and are uploaded to the Server (Online Storage) along with verification before uploading to the server, then the certificates are uploaded to a digital locker server. After a successful uploading a Hash code is generated which is unique to every certificates and the users can retrieve the certificates later by using the hash code generated from the server.

The upload process are done by using the block chain technology, which can able to retrieve the individual information's (such as Name, DOB etc) and can verify it with another certificates which are uploaded by the same person.

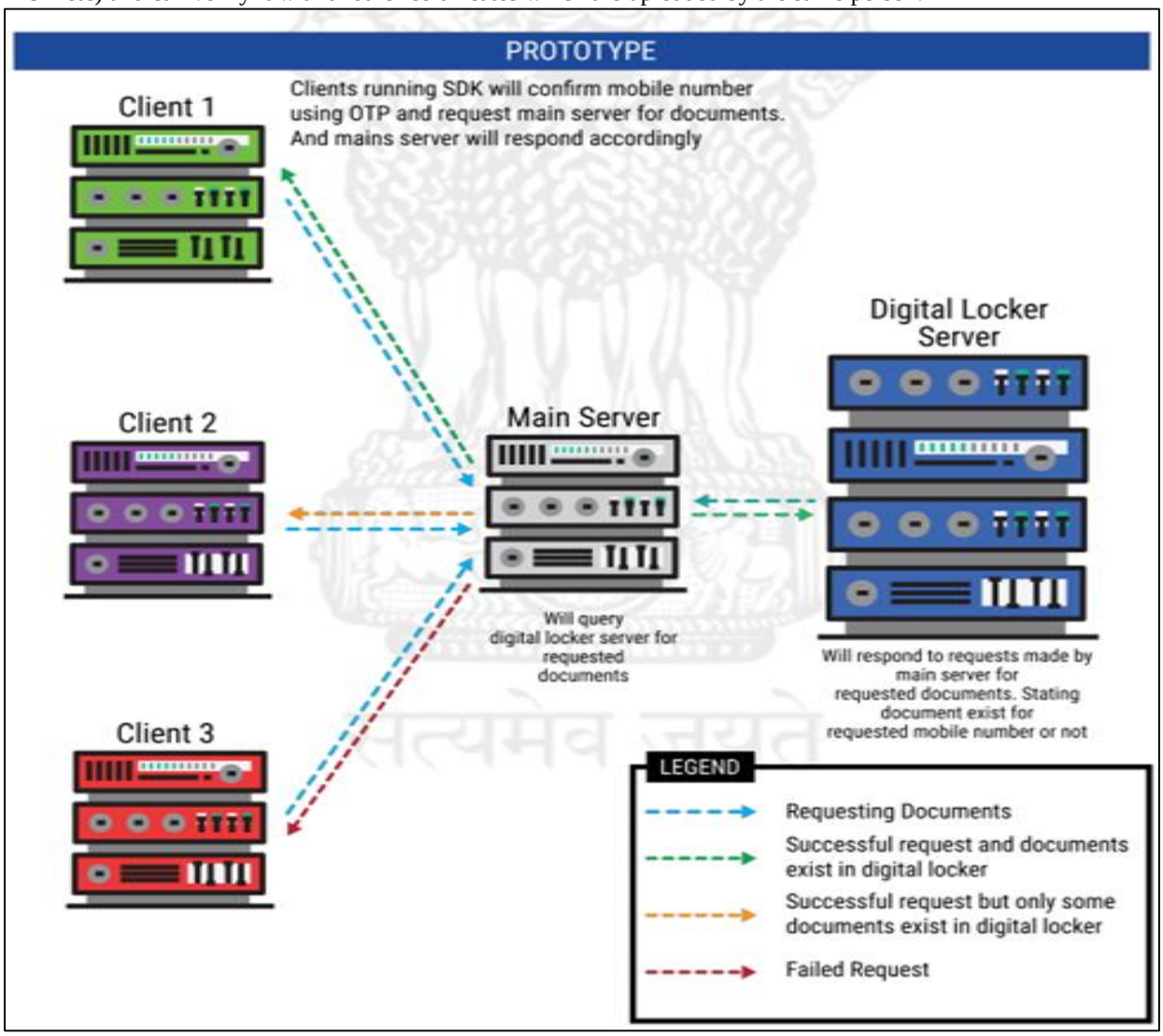

Fig. 1: The clients requesting the already uploaded document from the server

From Fig 1The clients Requesting the already uploaded document from the server then its proceed by various security norms (like OTP generation) and once the request is successful then it can be ready to be altered then they upload to the Government server/NGO server before uploading to it the certificates are verified by the Digital Locker Server for the valid Certificates and further processes.

In below Fig 2 we can see that the client server which runs the SDK to verify documents. It consists of 5 stages,

1) Request Sessions,
2) Verification Credentials,
3) Digital Locker,
4) Results of Stored Documents,
5) Respond to client hence these are the various steps for credential verifications.

Digital locker is the server which is store a verified documents and it will generate a hash code for reduce the storage space where the user want to use the credentials.

It will handle the request and responding for the all the clients.

User can log in using One Time Password or Biometric signature of user.

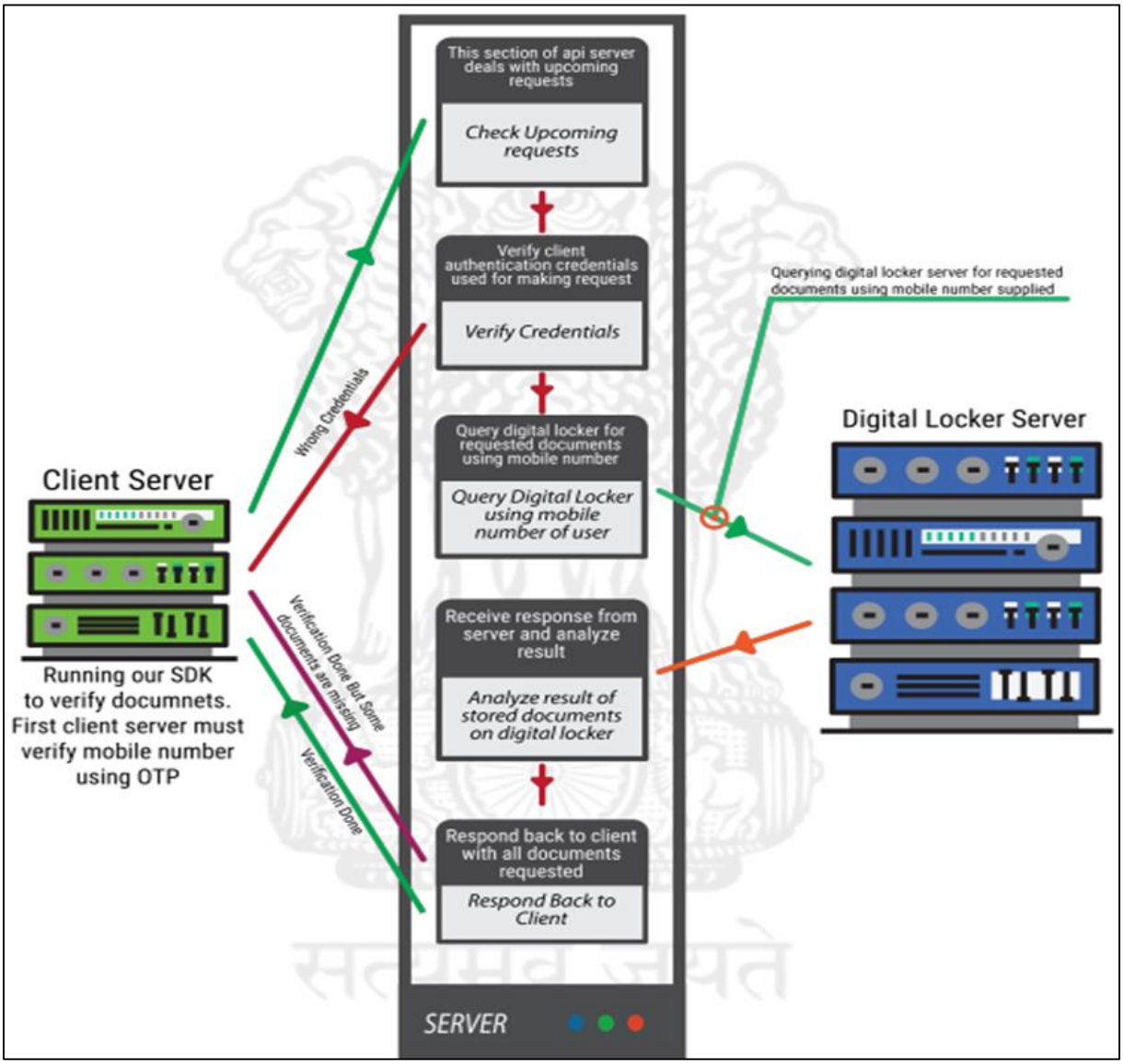

Fig. 2: client server which runs the SDK to verify documents

Fig 3 represents a model of OTP send by digital locker for authentication.

Fig. 3: model of OTP send by digital locker for authentication

IV. CONCLUSION

While applying for different recruitment through online application softcopy uploading of documents like educational qualification, D.O.B proof, category certificate etc. of a candidate is required. This result in unnecessary use of server space as each application requires approximately mobile number as an input and will verify the documents already stored in the government servers, which will save the candidates the trouble of uploading documents, thus making the process easy and less time-consuming. It was very useful for candidates who are all attend the State and Central Government exams. It will result in vast diminishing of memory space. It will increase space utilization and it will reduce uploading time of documents which is required.2MB storage space and thousands of applications are received. If credentials are verified then & there at the time of application receiving then this hassle could be avoided. This software will be just the solution.

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