

SMART RESOURCE UTILIZER USING DIGITAL SIGNATURE VERIFICATION

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ABSTRACT

In the present scenario, people are buried up in heavy work culture, as everyone is engaged with busy schedules and hectic tasks that make them deviate from family life. If any issues encounter unexpectedly, it distracts them and makes them choose over the work they have to accomplish primarily. It is important to manage both professional and family life. In such circumstances, every one of us would have fantasized about a kind of house which doesn't have any leaks in pipes, if it doesn't have any mess in fixing a furniture and a kind of house which never face any maintenance issues and every one of us have thought that a life would be much better if no point of issue arises in getting a service at your doorstep and if there is no mess in bargaining a labour for home service. In such a situation's Commerce plays a vital role in today's life as it has so many advantages in our life because it makes convenient in the daily life of the people. So, giving a thought to that aspect of life is to design and develop a system that provides many services at your doorstep in just one click. A System that provides a variety of services like plumbers, movers and packers, repairpersons, cleaners, electricians, painters, taxi service laundry and many more. To make it comfortable for all the users our system also provides a mobile environment that offers ease in accessing our services. A very simple process is carried out to book a service(s), and our system is specialized in providing a confirmation email about the selected service. People can choose the particularity of service required by uploading the image of the desired specification. The system is versatile as service can be booked from everywhere to anywhere you desire. And it also provides alert for the decomposed building to be demolished by the government, at the same time this software provides building materials by agencies. It also helps to request approval for new buildings.

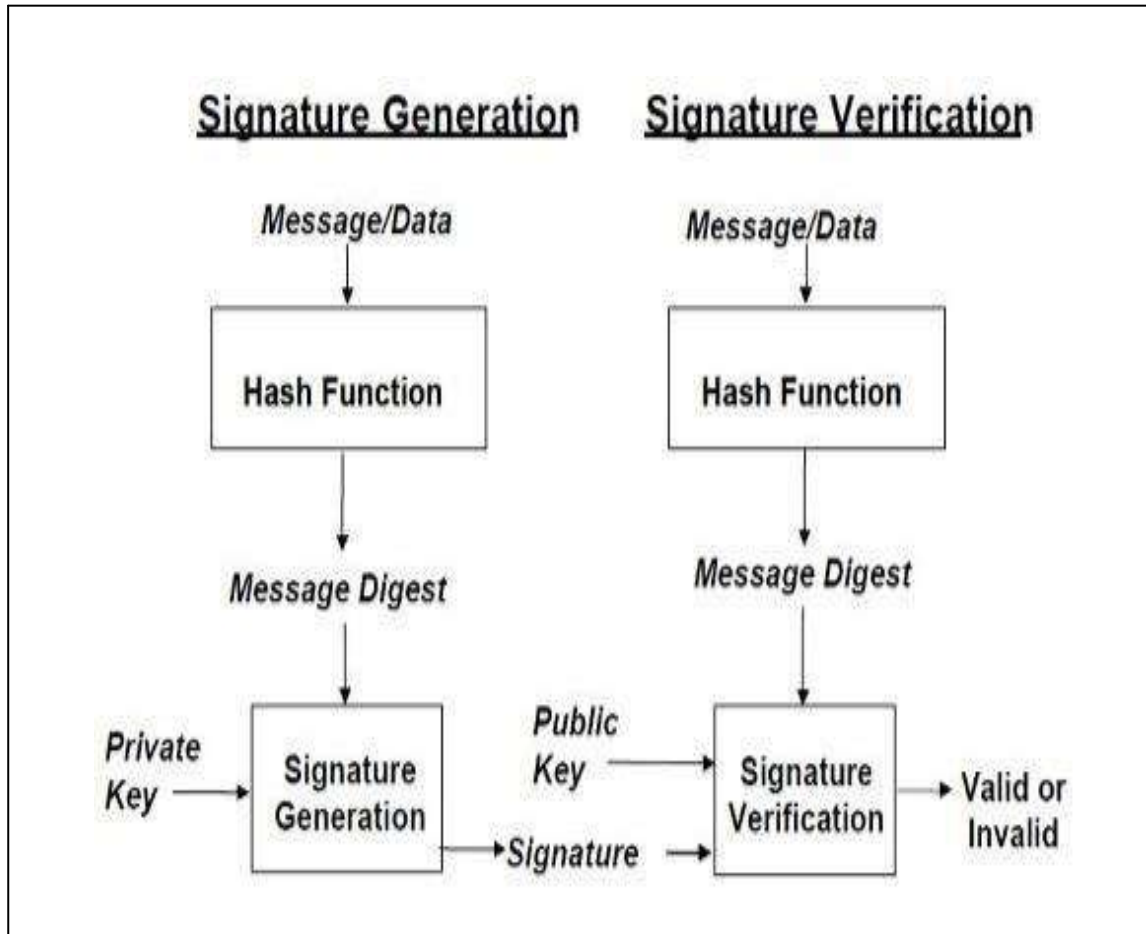
INTRODUCTION

The advancements in technology and software since the last decade made it easy to copy or alter the contents of digital images. Therefore image authentication is necessary to verify integrity. Conventionally, image authentication methods contents can be classified into two groups: digital signature based (Andersen *et al* 2002; Bjork *et al* 2002) and watermark-based (Howard *et al* 2001); love *et al* 2001). In digital signature method a hash file of the image consisting of its features is generated by an algorithm which is further encrypted by the sender's private key before transmission and is used to digitally sign the image. At receiver side the received hash file is decrypted by the user's key and a new hash file of received image is created by the same algorithm and for validation of the signature both hash files are compared, if they match it means no damage has occurred and sender is an authentic user. But if there is a mismatch, it shows that either the tampering is done by an adversary or proper expansion of image is not achieved at the receiver.

In the current scenario, internet is the major need of everyone's day-to-day life. There is need of internet access in everyone's life as well as in every field either in the field of education, business, marketing or entertainment. With increase of these requirements there is more and more possibility of data theft. So, there is need of secure communicating channel in order to prevent data theft or forgery. One of the security issues is interception of data while in transmitting channel. So, to prevent these issues there is need of digital signature in order to ensure that data is coming from authentic user. A digital signature is used for authentication of data as well as user in order to determine whether the correct data is coming

from the authenticate sender, then it is necessary to verify it. Digital signature is used for authentication, integrity checking as well as for non-repudiation. One way to avoid non-repudiation condition is to create a unique character that guarantees the authenticity of the data as well as user. Cryptography has been used as a data protection method. To do this, you can use one of the network security technologies called Digital Signature.

Digital Signature Generation and Verification Flow Diagram :



In their implementation, digital signatures simultaneously combine two algorithms, namely hashing algorithms and public key algorithms. Digital signature is performed in two steps: In the very first step a hash value is generated out of message that is termed as signature and further this has value is encoded by applying any asymmetric key algorithm and transmit the data to the receiver. In the send step the receiver receives the message enclosed with hash value and determines whether the signature is authentic or not. For better bandwidth utilization an image must be compressed before transmission. But lossy compression results in destroyed image file at the receiver and it also alters the luminance of pixels. Therefore to authenticate a compressed image becomes challenging as the hash files at sender and receiver can't be identical. So a threshold level must be set in order to achieve proper authentication. Our

goal in this paper is to develop a digital signature based image authentication method which gives better performance for practical applications like lossy jpeg compression or formatting techniques.

RESULTS AND DISCUSSION

In this system, we are achieving estimate the life time of buildings by this feature government should find the buildings to be demolish. The system also contain buildings in destroy state. The another feature of the system, finding service providers like construction workers and technicians like electricians, plumbers, tv repairman etc. based on near to your location that is useful to the users to select the right person for providing the services. This is useful to the users to reduce spending time for contacting the technicians because the user request to the technicians and service provider respond the users request. Users can communicate with government. Users can find household service providers near them. The proposed system has highly automated services. Records analytics is much easier to handle. It is comfortable for all the users our system also provides a mobile environment that offers ease in accessing our services. Implementation of cloud computing makes the system powerful. The Complexity of using the system is reduced so the users are like to use this system. High Data analytics available. A very simple process is carried out to a services. The request and respond feature is used in this system so the users use this feature to request the near by technicians or service providers and the technicians respond the requested users concurrently. Modern communication tools have created almost limitless opportunities to improve information flow. Digital signatures will someday give us the ability to routinely transact official business between government and the public over computer networks. Certification authorities (CAs) are the legal entities responsible for ensuring the appropriate and consistent establishment of identity in the issuance of digital certificates. A CA generates a matched set of electronic keys that correspond to certificate and are necessary to digitally sign a document. Each set contains a public key kept in a public.

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