

# SECURE CHANNEL OF KEY MANAGEMENT FOR REAL ESTATE BY USING FOG COMPUTING METHOD

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**Abstract-** Recent years witness the development of cloud computing technology. With the explosive growth of unstructured data, cloud storage technology gets more attention and better development. However, in current storage schema, user's data is totally stored in cloud servers. In other words, users lose their right of control on data and face privacy leakage risk. Traditional privacy protection schemes are usually based on encryption technology, but these kinds of methods cannot effectively resist attack from the inside of cloud server. In order to solve this problem, we propose a three-layer storage framework based on fog computing. The proposed framework can both take full advantage of cloud storage and protect the privacy of data. Besides, Hash-Solomon code algorithm is designed to divide data into different parts. Then, we can put a small part of data in local machine and fog server in order to protect the privacy. Moreover, based on computational intelligence, this algorithm can compute the distribution proportion stored in cloud, fog, and local machine, respectively. Through the theoretical safety analysis and experimental evaluation, the feasibility of our scheme has been validated, which is really a powerful supplement to existing cloud storage scheme.

## **II. INTRODUCTION**

Fog computing is an emerging model of storage to provide scalable, elastic and pay-as-you-use service to cloud computing users. For individual usage, the subscribers enjoy the freedom to access to their data anywhere, anytime with any device. When cloud storage is utilized by a group of users, it allows team members to synchronize and manage all shared documents. In real estate project we store the details of land in fog computing for security purpose. They also have customer, land owner, admin details are stored. By stored in fog computing they reduce latency compared with cloud computing. It is very useful to the users for land sales and buying. Moreover, it also saves the user a lot of capital investment of expensive storage equipment.

## **III. PROPOSED SYSTEM**

### **2.1 -To improve the security :**

In this proposed method we are using Hash-Solomon Code Algorithm to encrypt the data. Then user2 want to access the file by the permission of user1 share the authenticated key. The hash value is fully determined by the data being hashed. The hash function uses all the input data. The hash function "uniformly" distributes the data across the entire set of possible hash values. Encrypt the information in fog computing with help of hash solomon algorithm code. On the other hand, land owner may not produce fake details on fog computing. With help of hash solomon code it can detect the fraudulent in real estate business.

## **MODULES**

### **OWNER INTERFACE DESIGN(land owner)**

This is the first module of our project. The important role for the land owner is to move login window to user window. This module has created for the security purpose. In this login page we have to enter login user id and password. It will check username and password is match or not (valid user id and valid password). If we enter any invalid username or password we can't enter into login window to user window it will shows error message. So we are preventing from unauthorized user entering into the login window to user window. It will provide a good security for our project. So server contain user id and password server also check the authentication of the user. It well improves the security and preventing from unauthorized user enters into the network. In our project we are using JSP for creating design. Here we validate the login user and server authentication.

### **CUSTOMER INTERFACE DESIGN**

This is the second module of our project. The important role for the customer is to move login window to user window. This module has created for the security purpose. In this login page we have to enter login user id and password. It will check username and password is match or not (valid user id and valid password). If we enter any invalid username or password we can't enter into login window to user window it will shows error message. So we are preventing from unauthorized user entering into the login window to user window. It will provide a good security for our project. So server contain user id and password server also check the authentication of the user. It well improves the security and preventing from unauthorized user enters into the network. In our project we are using JSP for creating design. Here we validate the login user and server authentication.

### **ADMIN LOGIN**

This is the Third module in our project, here symbolizes a unit of work performed within a database management system (or similar system) against a database, and treated in a coherent and reliable way independent of other transactions. A transaction generally represents any change in database. user will transfer the amount to provider .

## **OWNER FILE UPLOAD**

In this module is used to help to the owner the file with the land longitude and the owner will set their key along with their file and the file will be stored the database.

## **CUSTOMER FILE UPLOAD VERIFICATION**

In this module the customer will also upload the file with the land longitude and the customer will set their key along with their file and if the file is different means it will validate and shows the output particular status of the land and details are stored in the particular data base.

## **ADMIN FILE VERIFICATION**

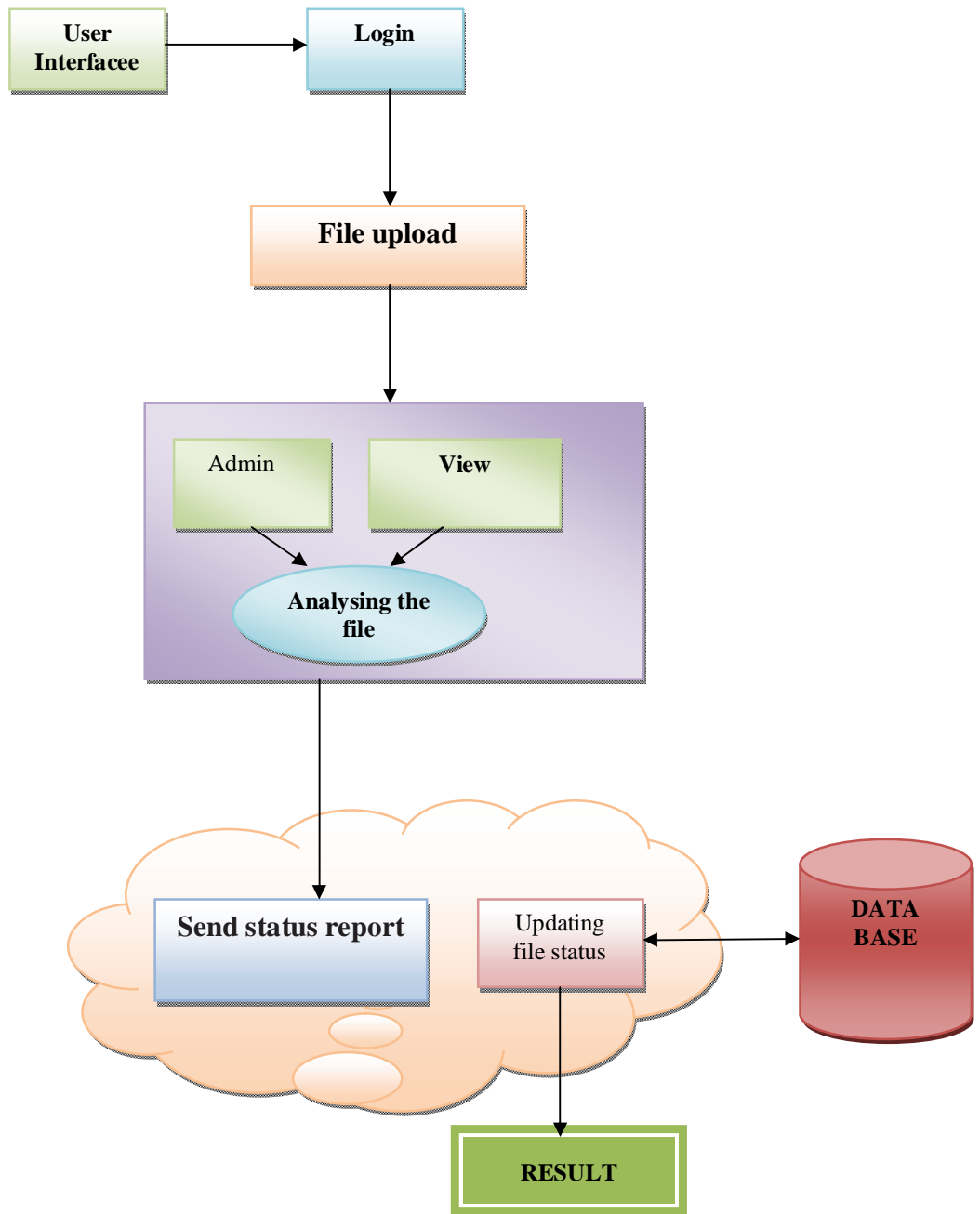
In this project what we are going to perform means admin verify the land property file.The particular owner and customer upload the same file .if the file does not match the admin will alert the owner and customer.And advices to upload the same file and it will verify the longitude of land and it verifies.

## **VIEW MESSAGE DETAILS**

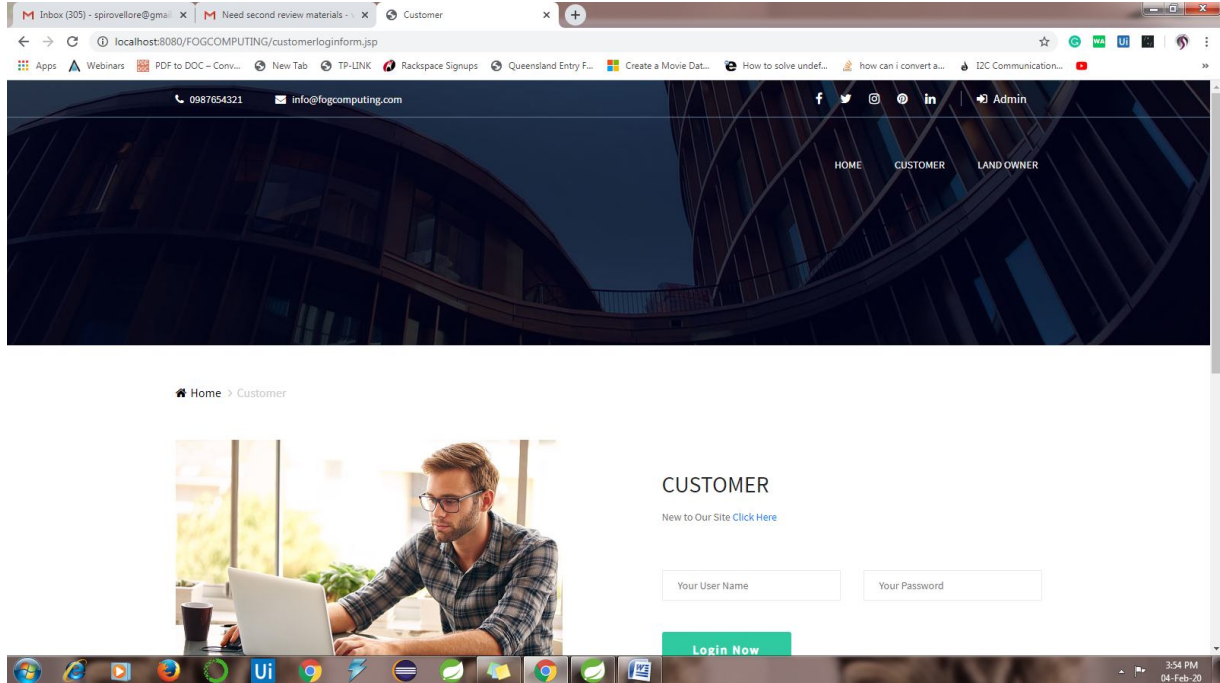
In this project,the owner and customer receive the message,if the files are validating correctly.

## **SYSTEM ARCHITECTURE**

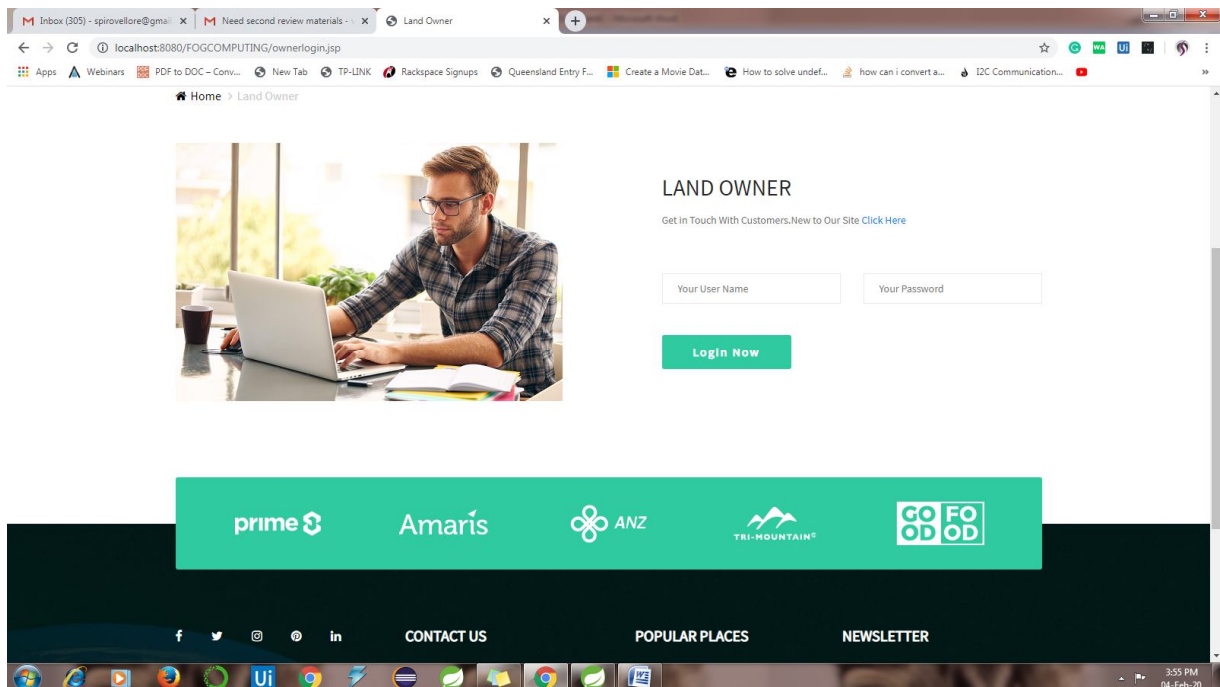
The systems architect establishes the basic structure of the system, we propose a Hash code Solomon algorithm and a we can put a small part of data in local machine and fog server in order to protect the privacy. Moreover, based on computational intelligence, this algorithm can compute the distribution proportion stored in cloud, fog, and local machine, respectively. Through the theoretical safety analysis and experimental evaluation, the feasibility of our scheme has been validated, which is really a powerful supplement to existing cloud storage scheme. Here user have to be register first after registration they have to be login after login. After login they can upload file after completion of file uploading that content will be encrypted it will be securable .That file will share to four admin if any user need that file they have to be register after login register after login they can send a request for file .for that request if four admin accepted then they can get the File. to the owner the file with the land longitude and the owner will set their key along with their file and the file will be stored the database. The particular owner and customer upload the same file .if the file does not match the admin will alert the owner and customer. And advices to upload the same file and it will verify the longitude of land and it verifies. Here user have to be register first after registration they have to be login .After login they can upload file after completion of file uploading that content will be encrypted it will be securable .That file will share to four admin if any user need that file they have to be register after login register after login they can send a request for file .for that request if four admin accepted then they can get the File. to the owner the file with the land longitude and the owner will set their key along with their file and the file will be stored the database. The particular owner and customer upload the same file .if the file does not match the admin will alert the owner and customer. And advices to upload the same file and it will verify the longitude of land and it verifies.



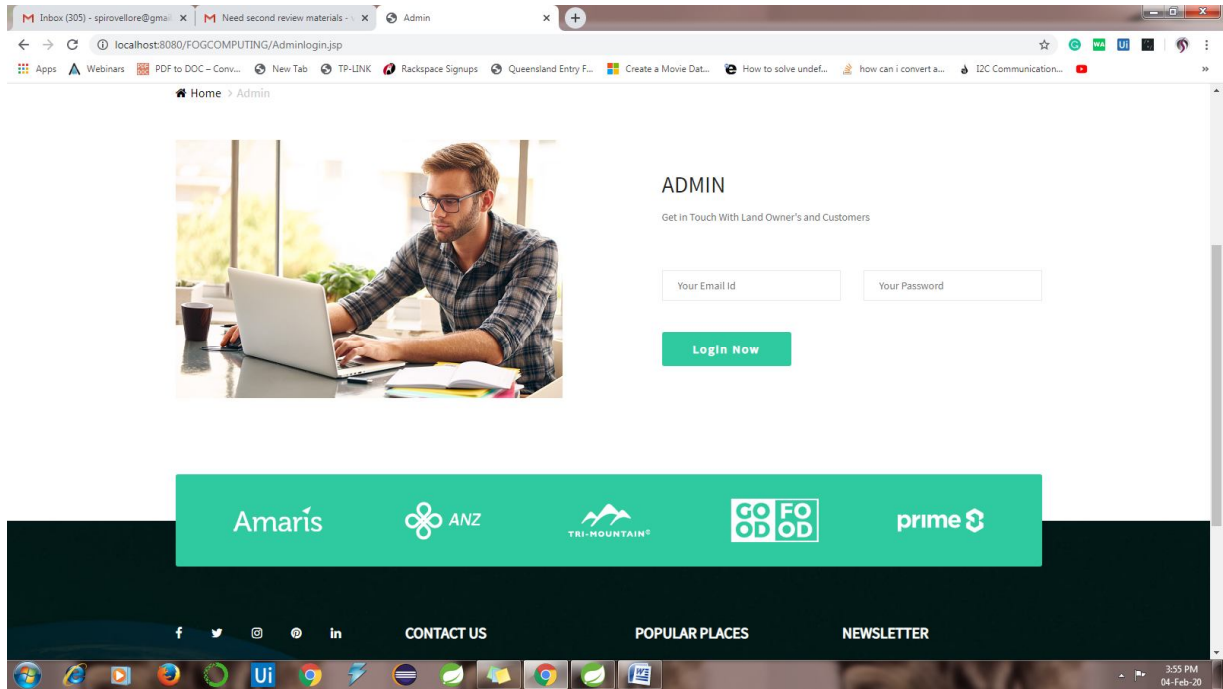
## IV EXPERIMENT AND RESULT



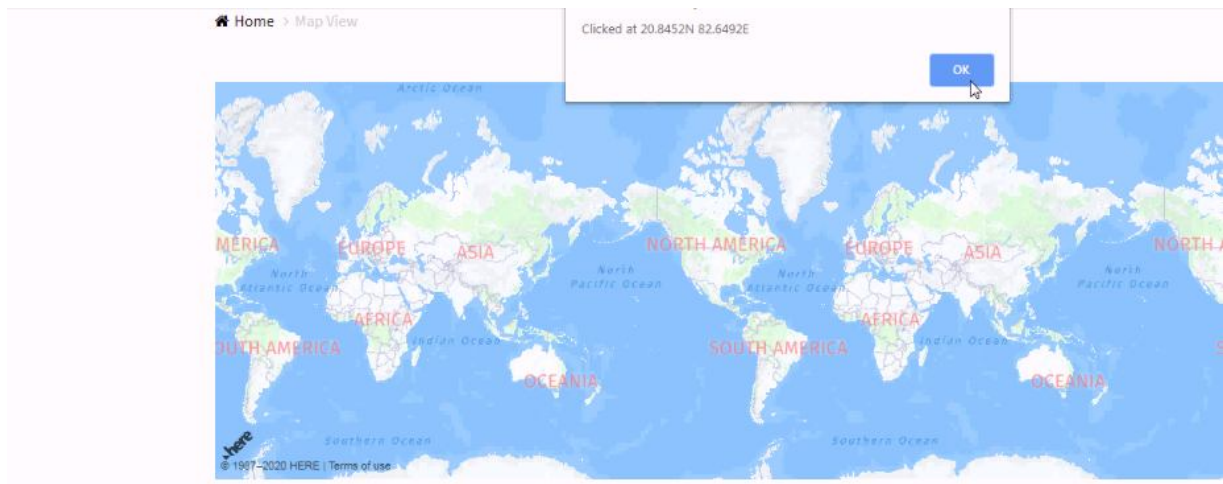
(a)Customer Login



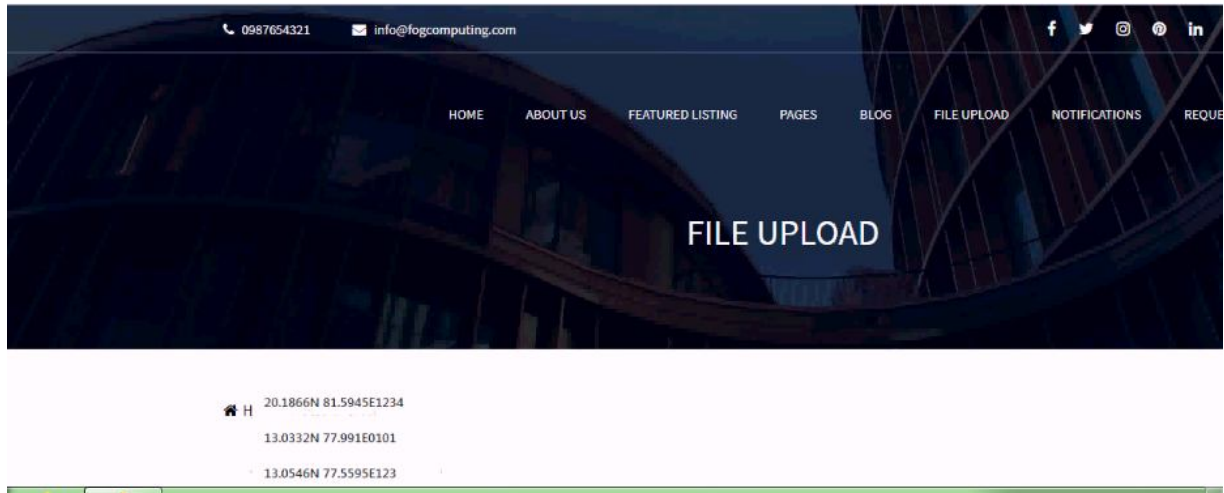
(b)Land Owner Login



(c)Admin login



(d) Map View of land



(e) File uploaded



(F) FILE MATCHED

#### IV. CONCLUSION

This application is overcome the security issues of existing project. The customer and land owner can upload the requirement of land. The admin can verify the details and detect the fraudulent details by using fog computing. The users can update the user name and password to login the application. Both of them can enter the same username and password they can login the page otherwise they shows invalid. By using Hash salmon code they can distributed data as end user, fog and cloud to overcome the issues of existing project. We cannot access the information without admin knowledge.

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