



# An Efficative Frame Work for Coin Framing, Smart and Secure Transactions Service

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## Abstract:

Always transactions from multiple banks and for same target (vendor) in a single time are big challenge. So we propose a new Coin Service Transactions (CST) framework. This frame work takes the target amount to be transacted in the form of non equal and distributed model to make funds and will be associated with respective coins. The coin generation is random with various funds allocations with non uniform generations. OTP is framed again and will be framed from coin's funds and again non- equally distributed. Based on transactions per transaction amount will be deducted randomly from each transaction and by CST framework with 4-roll algorithm which generates alphanumeric sequence for further transactions. Once the OTP is authenticated coins will release funds and transactions will be made by CST to do transactions. The transactions amount will be non uniform finally all transactions will be with 0 funds with all empty coins.

**Keywords:** transaction, CST (coin service framework), 4-roll alphanumeric.

## I. INTRODUCTION

A general transaction with respect to semantic based is the main goal of this work. If an alien has to do transactions from various banks (which he/she owns), need to make some coins (non fixed of size) and each coin has to associate with some transactions and that too not fixed. The coins creation has to be made from various bank funds with non equal distribution. Those transactions have to be made from the coins and associated funds. These transactions have to be happened with service oriented framework (SOA) as web services. More clients(s) can be able to do transactions at a given single time in asynchronous model. The client model stubs should able to talk to service's skeleton to do transactions. The whole architecture has to be on SOAP architecture. The main motivation has come from where non smart transactions are there for funds distribution with various banks at a given single time and with asynchronous user's authentication. For multiple transactions and non distributive funds allocation is not there in the current online/direct transactions. So these transactions should be a unknown funds allocation and system or frame work should be generated. So there should be a concrete frame work which should do 4 tasks with one umbrella. 1. Coins generation 2. Funds non uniform association with coins. 3. OTP. 4. Transactions according the non uniform funds from various coins. There are 4 main problems with online/direct transactions from various banks at a time:

**Problem1:** Multiple funds are not getting generated for funds distribution parallel with various banks at any given instant of time. So multiple transactions will happen with different sessions and multiple logins.

**Problem2:** No proper token or coin allocations to associate or allocate the money from various bank vendors which user

associated for further transaction. Each token is per bank and multiple times token allocation.

**Problem3:** There is no online service as cloud model architecture for bank funds gathering and no email password (OTP) for transactions.

**Problem4:** No visual allocation of funds to check the gradual transactional detrimental model.

To create the smart coins with associated non uniformed funds for smart transactions. These transactions are with secured online OTP gateways with user friendly selection with volume of transactions. Fully service oriented architecture has to be online with asynchronous transactions facility and automated with selective transactions per alien and with email security gateway. The transaction gateway (OTP) should be as email but not with SMS gateway. So the fully security will be provided and for further transactions that OTP cannot be reused through transactions left. This way transactions will carry on with fully non distributive model with a new framework (in this work we created a new framework called CST). So transactions with funds framed from coin's and per transaction the funds should be gradually reduced and visually appears to the user. This is the main objective of this work. In this paper we propose a coin generation method which is helpful to do smart and secure transaction. The rest of the paper is organized as follows – Section 2 describes the related work, Section 3 gives the methodology. Section 4 contains the experimental results and observations. The paper is concluded with conclusions and references.

## II.RELATED WORKS

Rocaj.C., Garcia JJ., de la Vega JJ et, al [1] – The principle of work is to test an expanded innovation acknowledgement shown as (TAM) in the online money exchanging relates system. This

exploration means to scrutinize how e-investors are impacted by security and protection mutually with customary TAM builds.

Chen Y-H., Bames S et, al [2] – The online trust is one of the major key obstacles to merchants who wants to prevail on the internet and as internet a medium. There is a lack of trust which dispirit the online shoppers from taking part in web based business. The main aim of this examination is to develop a trust and to make customers intention to buy online. This examination is led with regards to TAIWANESE online book shops.

Roman S., Cuestas P.J et, al [3] There is a rise in the moral concerns of internet users. Likewise, few researchers have called for precise experimental research to address their issues. The related work explains more about the conceptualization and estimation of purchasers observations with respect to the moral of online retailers (CPEOR). Likewise this work also speaks about the connection between CPEOR, shoppers, general internet skill and which is reported as positive work of mouth. The result form a sample of 357 online shoppers tells us that CPEOR can be operationalized. And development is made out of four measurements which are security, protection, satisfaction and non double dealing. The related work also demonstrates that purchaser’s general internet using capability altogether enhances CPEOR.

Grabner-Kraeuter S et, al [4] Numerous consumers are doubtful or suspicious about the functional mechanism of electronic trading and its process which is in transparent and effects from that and quality of the items that are offered to the consumers through web. This work examines the part of shoppers trust as an establishment for the dissemination and electronic trade acknowledgment. From the very first trust is the useful point of view which is the main thing in reducing the vulnerability and unpredictability of exchanges and connections in electronic marks. The investigation mainly focuses on the conditions of e-commerce business that are relevant for the formation of trust problems. There are two types of uncertainty, they are system dependent and transaction specific. Internet forms are the once who can establish and maintain trust.

### III. METHODOLOGY

The architecture explains about the flow of the related work done. Here the person who wishes to make transaction using coins first have to register and login using his Username and password before that the coin service has to be started by the service. Then selection of coin as users wish and internally the funds get collected from various banks account and those get distributed into coins then OTP gets generated if he enters correct OTP then the valid user can make transaction.

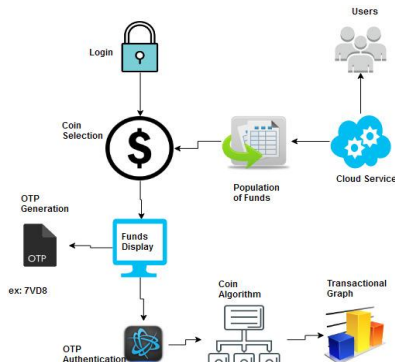


Figure.1. Proposed architecture of coin generation and transaction

The below description explains about the work flow of the architecture shown in Figure 1. Each and every block and the functions associated with them.

#### i. Coin Service

Here in this once the coin service is started by you the splitting of money will take place. So algorithm will be executed while user doing transactions.

#### ii. Login Authentication

In this we are using flute files which stored all the user’s username and as well as users password to login with valid credentials

#### iii. Fund Gather

In this we gather all the funds from different bank to make splitting of money.

#### iv. Money Splitting

In this we are splitting of money based on the user entered amount with the help of coin web service interface.

#### v. OTP

In this before doing any transactions there will be a check as user authentication, so OTP will be sent to user’s valid email-id then only user can make transactions.

#### vi. Encryption:

Encryption is a set of identical binary to strings (text) programmed models which indicates binary data with ASCII text layout by converting/translating to RADIX – 64 notations.

#### vii. Transaction

In this based on the user transactions the splitting of money or number transaction can be plotted on the graph.

Service will be created on SOAP architecture with SOA model. At service side solid skeleton has to be generated for DOM or SAX parsers to parse the broad casting XML envelopes. Normally SOAP transmission will take in the form of XML only and these XML envelopes will be parsed by skeleton at service side and stub at client side. The service is implemented with asynchronous model where multiple clients with multiple transactions with one umbrella and from various stubs. The basic or big transaction(s) will happen only with OTP break. And this OTP will be generated with 4-roll algorithm and with capital letter with numeric ceiling with proper security and will be sent as mail for further transactions. The email is implemented in gateway model and OTP will be sent using ROTA algorithm for encryption and decryption.

#### Advantages of using coins for transaction:

- Log details are saved in flute files which only users who are authenticated can give access to.
- Provide more security while transaction.
- Performance of transaction.
- Easy and fast transaction.
- Unique in transaction.

#### PSEUDO CODE for Coin Generation

Input=Total Amount/Alien

$$\text{Output} = \sum C // \text{Coins}$$

$$N = \text{Coin A-Z} // \text{Total coins}$$

$$A_M \leftarrow \text{Amount}; // \text{Total Amount}$$

$$\text{For each } I \text{ in } 1:n$$

$$t = \psi \left( \sum A_M, 1 \right) \quad (1)$$

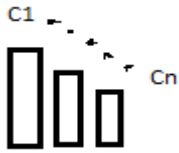
$$\text{temp} = \text{SOUFFLE}[A_M] \quad (2)$$

$$A_M = \text{temp}$$

$$\text{And } c = [A_M, i] \quad (3)$$

$$\text{Input} \quad \sum Tx[1-n] \quad (4)$$

Tx = Trans Amount



Output

$$C1 = \{C1S1 \ C1S2 \ C1S3\}$$

$$C2 = \{C2S1 \ C2S2 \ C2S3\}$$

$$C3 = \{C3S1 \ C3S2 \ C3S3\}$$

$$[A1m1 - C1S1]$$

$$[A1m2 - C2S1]$$

$$[A1m3 - C3S1]$$

The pseudo code explained above is for coin generation firstly the amount is collected from all banks that is the total amount then the amount is shuffled /distributed for number of coins to be generated which is entered by the user and it also shows the decremental flow of amount in each coin for every transaction.

#### IV. EXPERIMENTAL RESULTS

If an alien/users has two or three accounts from various banks and to do transactions from various banks (which he/she owns), need to make some coins (not fixed of size) and each coin has to associate with some funds and that too not fixed. The coins creation has to be made from various bank funds with non equal distribution. That is done from the coin algorithm in start coin service part. OTP is framed by CST framework with 4-roll algorithm which generates alphanumeric sequence for further transactions. Once the OTP is authenticated coins will release funds and transactions will be made by CST . The transaction amount will be non uniform again and will be framed from coins funds and again non equally distributed. Based on transactions per transaction amount will be deducted randomly from each transaction and finally after all transactions the funds should be 0 with all empty coins. The flow of the work done is shown in the figure below

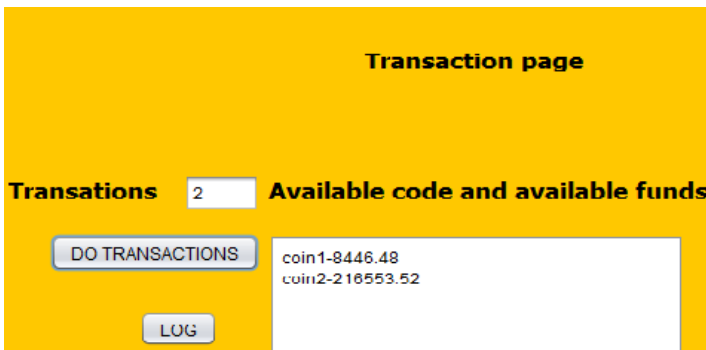


Figure.2. Transaction page for the user

Figure 2 shows transaction page for the user where the user has selected two coins, in figure we can see the funds associated

with two coins and he had wished to finish the coins in two transaction .The log gives history of past transaction .

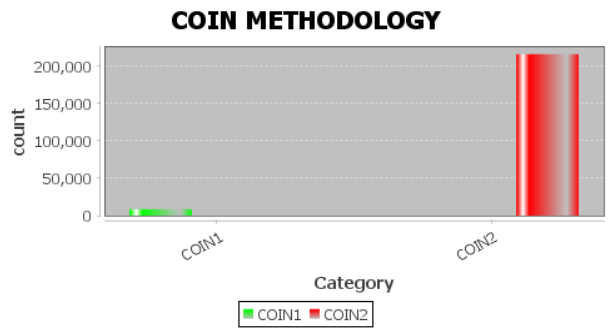


Figure. 3.Graph of coins

Figure 3: shows the graph of coins and fund associated with those coins.

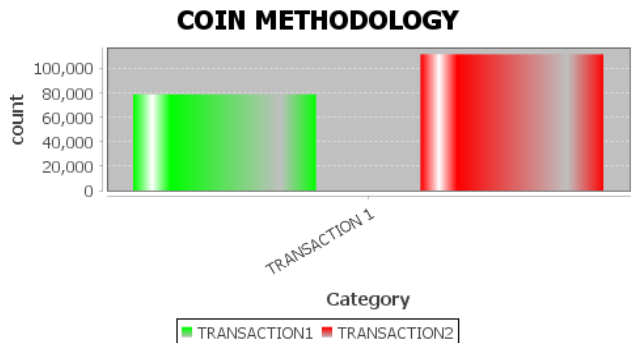


Figure.4.Graph of Transaction1

Figure 4: shows the decrement of coins in graph after first transaction.



Figure.5.Graph of Transaction 2

Figure 5: shows the complete usage of coin in second transaction.

#### V. CONCLUSION and FUTURESCOPE

We can conclude this work as gathering of the total money from all the bank vendors which are owned by the alien. Once the money gathers from all the banks proper coin associations for transaction will be ready for further proceedings. These proceedings can happen for online OTP (One time password) as email only (not with SMS (Short message service)). Transactions can happen visually for now and in the future transactions will be broadcasted as SMS and email for each session. Multiple user authentications per user will not take place and OTP is used for each every total process. And visual password will be provided as OTP as email and MMS (Multimedia message service) in the future enhancement.

## VI. REFERENCES

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