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Consumer-To-Consumer Product Trading with Strategic Consumer Behavior

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ABSTRACT-

Technological improvements have brought about a boom in the recognition of consumer-to-consumer product trading (C2C-PT). It is doubtful how C2C-PT impacts the manufacturer (called the "firm") and customers within the market. We consequently construct analytical models to discover this problem. We do not forget a case in which a company develops and sells a product to customers inside the market. Consumers have their own heterogeneous random valuations of the product and are strategic in the sense that they're forward-searching application maximizers. The firm makes the top-rated choice on the product promotion charge. We examine the affects of C2C-PT on each the firm and clients. We select the most appropriate purchasing option for the consumer and establish the most desirable pricing policy for the company. We show that the presence of C2C-PT may both advantage and hurt the firm and consumers. At the same time, the patron's strategic conduct will always cause damage to the firm. Most interestingly, we prove that strategic buying behavior is not continually useful to consumers themselves.

Keywords: Consumer-to-consumer product trading, Consumer behavior

I.INTRODUCTION

The sharing economy has recently grown dramatically and has led to changes in manufacturing and supply chain operations. Technological advances and also the increasing popularity of mobile devices and apps have led to the establishment of various platforms, like Airbnb, Uber, and eBay. These platforms offer various sharing economy services, which might be free or paid, or operate through bartering and exchanging goods and services. The sharing economy has permeated many aspects of our daily lives, and includes the sharing of homes, rides, clothes, books, toys, and digital products. according to statista.com, about 44.8 million adults used sharing economy services within the US in 2016, and this figure was forecasted to extend to 86.5 million by 2021.1 Consumer-to-consumer product trading (C2C-PT), a variety of sharing economy, is becoming increasingly popular. Increased Internet and smartphone usage has enabled people to interact in C2C-PT activities with friends, relatives, neighbors, and others worldwide.

II.PROBLEM STATEMENT

There is no security concerns within the Consumer-to-consumer product trading. It may cause some serious issues and it may lead to collapse the trading service or to leakage users data. Market Cleaning Mechanism - the market mechanism is a mechanism by which the utilization of cash exchanged by buyers and sellers with an open and understood system useful and time in a market. It is a technique to research the aggregated data. it's been criticized for weak environmental integrity, high transaction costs and time in a market. It is a method to analyze the aggregated data. it's been criticized for weak environmental integrity, high transaction costs and complicated governance.

III.PROPOSED SYSTEM

Blockchain security system will help to generates local matches supported the users' lists, and therefore the users ship the exchanged products or meet in person to trade. Hash Function – A hash function converts strings of various length into fixed-length strings referred to as hash values or digests. you can use hashing to scramble passwords into strings of authorized characters as an example. The output values cannot be inverted to provide the original input

.

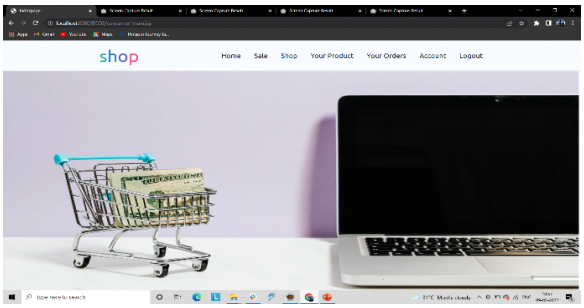
It synchronizes the data or transaction when generate. Hash functions is used to protect the integrity of data. It is possible to calculate the hash of the info and compare the two values.

IV.MODULES

In this paper, there are five stages for trading the product from the C2CPT. First stage is Login and the second stage is Product upload and the third stage is Product view and forth stage is Payment and final stage is Payment Status.

LOGIN

This is the first 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

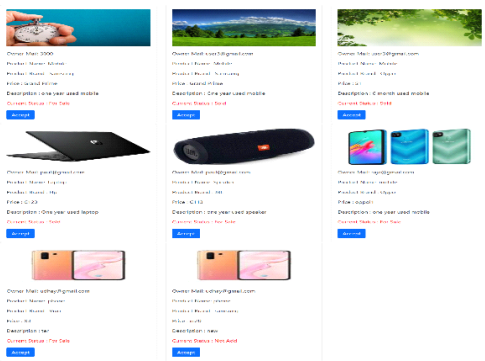


CONSUMER PRODUCT UPLOAD

In this module is used to help to the user to upload the product with the land longitude and the user will update the report along with their opinion and the will be stored the database.

PRODUCT VIEW

In this module the Consumer will View the product. And Request the Another Consumer will be responsible for checking your product to Response.



- **PAYM*E*NT**

In this module the Consumer will make the payment to another consumer's product item. Consumer will be responsible for your Payment stored in database.

- **PAYMENT VIEW**

In this module is used to help to the Consumer to View the Payment status report to check the payment, Paid or Not with the land longitude and the will update the report along with their opinion and the will be stored the database.

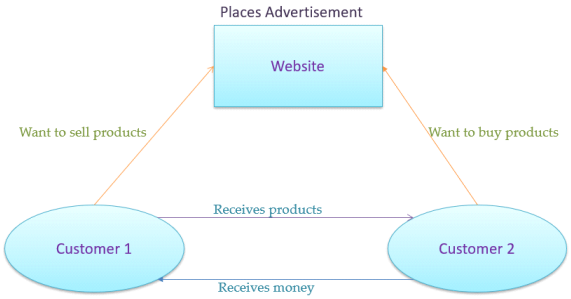
V.CLASSIFICATION

SHA ALGORITHM

There is no security concerns in the Consumer-to-consumer product trading. It may cause some serious issues and it may lead to collapse the trading service or to leakage users data. Market Cleaning Mechanism - the market mechanism is a mechanism by which the use of money exchanged by buyers and sellers with an open and understood system of value and In the field of cryptography and crypt analytics, the SHA-1 algorithm could be a crypt-formatted hash function that is used to take a smaller input and produces a string that is 160 bits, also referred to as 20-byte hash value long. The hash value therefore generated, is understood as a message digest which is often rendered and produced as a hexadecimal number which is specifically 40 digits long.

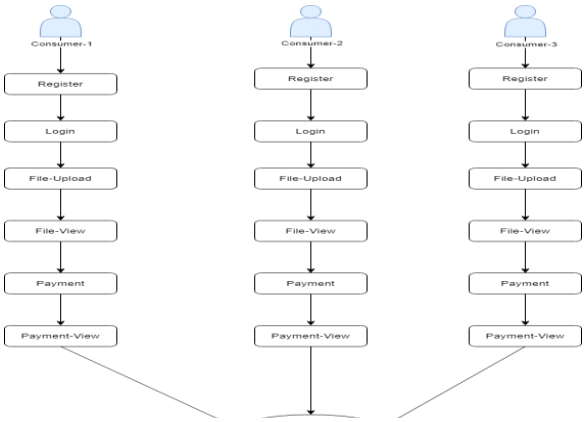
VI.METHODOLOGY

- The cryptographic hash functions are utilized and used to keep and store the secured type of data by providing three different styles of characteristics like pre-image resistance, which is additionally called the primary level of image resistance, the second level of pre-image resistance and collision resistance.
- The cornerstone lies within the undeniable fact that the pre-image crypt resistance technique makes it hard and longer consuming for the hacker or the attacker to seek out by supplying the hash value for the first intended message.
- The security, therefore, is provided by the character of a one way that has a function that is mostly the key component of the SHA algorithm. The pre-image resistance is vital to withdraw brute force attacks from a collection of huge and powerful machines.
- Similarly, the second resistance technique is applied where the attacker must undergo a tough time decoding the subsequent error message even when the primary level of the message has been decrypted. The last and most difficult to crack is that the collision resistance, making it extremely hard for the attacker to search out two completely different messages which hash to the identical hash value.



VII.IMPLEMENTATION

The systems architect establishes the essential structure of the system. We propose a Hash code Solomon algorithm and that we can put a small a part of the data on the local machine and fog server so as to protect the privacy. Moreover, supported on computational intelligence, this algorithm can compute the distribution proportion stored within the cloud, fog, and native machine, respectively. Through the theoretical safety analysis and experimental evaluation, the feasibility of our scheme has been validated, which is absolutely a robust supplement to the existing cloud storage scheme.



Technological advances and the increasing popularity of mobile devices and apps have led to the establishment of numerous platforms, such as Uber and eBay. These platforms offer various sharing economy services, which can be free or paid, or operate through exchanging goods and services. Increased an internet and smartphone usage has enabled people to engage in C2C -PT activities with friends, relatives, neighbors, and others worldwide.

VIII.FUTURE ENCHANCEMENT

- Implementing a real-world database system.
- Improving protocol efficiency, both in terms of the amount of messages sent and the size of those messages..
- Implement using two are more algorithms. By incorporating other ancillary modalities like speech recognition and adding suitable adaptive weights for each modality, the efficiency and reliability of the system can be further enhanced.
- Further implement this system to online examination.

CONCLUSION

There are numerous online trading platforms available today. However, they have a number of flaws that university students who simply want a basic, yet intelligent, and user-friendly platform for trading on campus do not appreciate (or within a small community). consumer-to-consumer could be a source of communication for companies to Customers, and the simplest way to solve Customers' problems through a community effort. Companies can find out future trends, and might work towards zero complaints by understanding Customer issues, and ensuring Customer problems do not re-occur.

Consumer-to-Consumer is that the buying and selling of products and services, or the transmitting of funds or data, over an system, primarily the web. Business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer, and consumer-to-business transactions are all possible. After that, the recommender system would suggest sale products to the possible buyer. Overall, the platform aimed at direct consumer-to-consumer trading would be more intelligent, user-friendly, and simple to use.

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