Research Paper

Blockchain Based E-Commerce Application

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ABSTRACT
Nowadays, E-commerce applications are attracting numerous users and merchants to conduct their daily business online which includes payment of bills, online banking, buying tickets and purchasing goods, etc. E-commerce transaction security is a major concern for E-commerce websites along with their customers. The basic requirements for any E-commerce transaction are privacy, authentication, integrity, and non-repudiation. This paper presents a transaction processing for an E-commerce application by using a Blockchain technology.
KEYWORDS: *Blockchain, E-commerce, attacks*

I. INTRODUCTION

Ecommerce is one of the directing industries around the world. Ecommerce platforms bear tremendous clutch and storehouse to manage large quantities of data and other services. Indeed though the diligence has superior performing at present, there are ways to enhance it further, which is possible through blockchain technology. Blockchain can helpe-commerce concerns to manage data moreover efficiently. The platforms can keep information about users, products, orders, deliveries, manufacturers, merchandisers, and highly again in an systematized manner in a blockchain network. Blockchain is well- known for its security features that give the ecommerce sector with redundant layers of security. It cuts down the interposers and promotes peer- to- peer deals. We get numerous added features like quick deals, reduced chargeback frauds, client reviews verification, substantiated product immolations. With traceability, blockchain guarantees end- to- end product shadowing to the guests. Eventually, people can track their orders in real- time and also check the products ' authenticity.

II. RELATED WORK

Security is one of the star and continuing enterprises that circumscribe guests and associations engaging with ecommerce. The end of this paper is to explore the perception of security ine-commerce B2C and C2C websites from both client and organizational perspectives.(1) With the rapid-fire development of E-commerce, security issues are arising from people's attention. The security of the sale is the core and crucial issues of the development of E-commerce. This paper about the security issues of Ecommerce conditioning put forward result strategy from two aspects that are technology and system, so as to ameliorate the terrain for the development ofE-commerce and promote the farther development ofE-commerce.(2) Web operations decreasingly integrate third- party services. The integration introduces new security challenges due to the complexity for an operation to coordinate its internal countries with those of the element services and the web customer across the Internet.(3) Ecommerce web point possessors on one side are allowing of how to attract further guests and how to make the callers feel secured when working on the point, on the other side how the end druggies should rate a ecommerce website and what they should do to cover themselves as one among the online community. Our ideal of writing this exploration analysis journal is to make the compendiums to have clarity of studies on the technology which helps all of us to do secure deals along with safety tips. And how ecommerce point possessors, have to make their online callers to be of important comfort or Trust an ecommerce point via Trust marks, and by their security strategies.(4)

PROPOSED SYSTEM

proposed system presents a Blockchain based E-commerce application which stores all the customers and product details and manage with single centralized server and if server is crashed or get hacked then services will not available for customers. to overcoe this proble we present a blockchain based E-commerce application.

Blockchain has inbuilt support for data encryption and immutableand it will consider each data as block/transaction and associate each block storage with unique hash code and before storing new records Blockchain will verify hash code of previous blocks and if all nodes' blocks verification successful then data is consider as secured. Fig 1 shows the flowchart of existing system
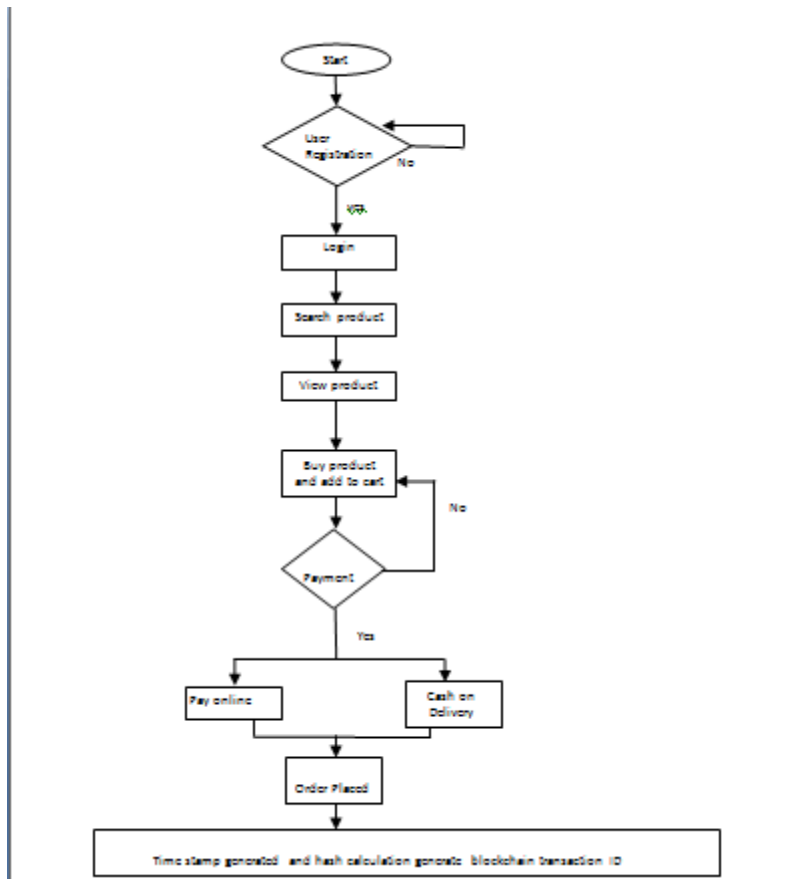
User Registration and Authorization : using this modules users can register and authenticate themselves.
Search and View Product : using this modules users are able to search and view the product.
Buy product: with this modules users are able to buy the product.
Place order: with this modules users are able to Place order.

III. CONCLUSION:

In existing E-commerce application all customers and product details will be stored and managed in single centralized server and if this server crashed due to too many requests and or if server is hacked then services will not be available to other customers and to overcome from this problem, we are migrating E-commerce application to Blockchain which will maintain data at multiple nodes/servers and if one node down then customers can get data from other working nodes. We have used Blockchain to provide security.

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