Review of Medication Plan for Patient data using Block Chain Technology

M. Tech. Scholar Harsha Gupta
Department of Computer Science & Engineering
Astral Institute of Technology & Research
Indore, MP, India
guptaharsha2801@gmail.com

Asst. Prof. Shailendra Tiwari
Department of Computer Science &Engineering
Astral Institute of Technology & Research
Indore, MP, India
Shailendra.tiwari4@gmail.com

Tanmay Jain
Tjain0606@icloud.com

Abstract -   This paper helps to prospect the block chain technology and smart contracts to build private ness and aware of applications. The main focal point is on medication plan containing doctors instructions that are built on smart contracts of block chain ,it is just an illustrations use case, but the outcome can be transmitted farther where the evidence of reliability is required and where the careful data is being allotted. Why the medication plan are in requirement of digitalization and why block chain technology is fitting technology for executing such an administration are the first problem to be presented being new and unaware of IT construct the block chain technology is described. After that a design is offered to resolve the issue.

Keywords: Cascade refrigeration system, R22/R404a, AND R744/R404a.

I. INTRODUCTION

In this paper concisely discussion is done on the block chain technology and how the smart contract is employed in medication and portal of pharmacy to safe the data of patient to show how block chain technology and smart contract can be utilized to safely allot and manage private figures among who do not essentially believe one another is main aim of the paper. The necessity for depot of doctor instruction, patient, and profile of pharmacy on a block chain. The question of this research is concentrated on the planning of block chain application as a entire and experiment to assess it from a reliable reference. This calls for enlarge union of existing analog and digital systems and bent improvement of a reduced mistake liable model.

II. LITERATURE REVIEW

- "Autonomous selection of electric vehicle charging station", IEEE International Conference on Identification, Information and Knowledge in the Internet of Things, 2016Matev□Pustišek et al. In this paper the study is done about the biding or debate of electric vehicle from electrical vehicle charging station .considering the things like planned   route, battery status ,real time traffic information about driver all this is done with the help of ethereum block chain technology or internet of things. The payment procedure is not done by it. The price of electric vehicle charging could be minimize and could lead to new traffic model by the relationship between electric vehicle and smart grid .Practically it is not in use.

- "smart contract -Dumb idea" , IEEE Computer Society ,2017KieronO'HaraContracts are made since 19th century and have to follow hierarchy. The contracts were also made in 20th century and have to follow hierarchy which were based on trust hierarchy have to follow by all but in this century the problem was that if third party makes any kind of issue then it was very difficult to know it .but the smart contract of 21th century was excellent idea . the third party issue or security based issue is very small by the smart contract . Smart contract does it with the help of ethereum block chain technology and bit coin block chain. Smart contract are speechless contract but great contract in digital era or digitally work .smart contract have its own rule and must be followed.

- "Validation and verification of block chain" ,IEEE Computer Society , 2017Daniele Magazine et al. This paper describes briefly about block chain as what is block chain ? how can it be used and where to be used answer to all these question is that block has a chain in a perceptual mode and each block has separate data and hash value and can be used for the purpose of security. Block chain can be used in different sector such as online shopping, banking sector finance etc.

- "Block chain and smart contract for digital certificate" ,IEEE International Conference on Applied System Innovation ,2018 Jiin-Chiou Cheng et al. Every year nearly one million people for education and for more advance education or for job generate fake certificate all this problem solution is find out by block chain the solution of these problem is find out by block chain because block chain have un modifiable property and produce Q-R code for each certificate.

Table 1. Comparison of researcher approaches.

Paper name	Author name	Publisher name	Publishing year	Method
Autonomous selection of electric vehicle charging station	Matev Pustišek	IEEE International Conference on Identification	2016	Combination of IOT and BC enables a variety of novel internet applications
smart contract - Dumb idea	Kieron O'Hara	IEEE Computer Society	2017	Block chaining with smart contract
Validation and verification of block chain	Daniele Magazzeni	IEEE Computer Society	2017	Block chaining with smart contract
Block chain and smart contract for digital certificate	Jiin-Chiou Cheng	IEEE International Conference	2018	The system's Application was programmed on the Ethereum platform and isrun by the EVM.
Medical image sharing	Huanrong Tang	IEEE International Conference	2018	the ethereum is used to build a block chain
Online voting application using ethereum blockchan	ShaliniShukla	IEEE	2018	used Solidity to write our smart contract.
Block chain Applications in the Biomedical Domain-A scoping reviews	George Drosatos et	journal	2019	This study follows the scoping review methodology

- "Medical image sharing", 1st IEEE International Conference on Hot Information-Centric Networking (HotICN 2018) Huanrong Tang et al. The block chain technology is used because 90 percent of patient data are leakage and their personal information are not safe by this technology the medical image sharing which is based on smart contract and credit score is secured. Some rules and regulation and records were used by image sharing during the establishment of smart contract.

- "Online voting application using their unblock chain" , IEEE , 2018ShaliniShukla et al This paper tells that the voting is online because the offline voting is not safe . the online voting is done with the help of block chain(peer to peer network)because the block chain have secret value to keep the data safe and all the voter have their unique
Identification number by this number voters get chances to vote and vote submitted as a transaction and their secret value added to security block in the chain.

- "Block chain Applications in the Biomedical Domain-A scoping reviews", Computational And Structural Technology, journal (17), 2019George Drosa to set al In biomedical domain the block chain is used. Investigation is greatly focused on honesty, combination and access control of health records and related patient data. Other various and absorbing applications are submerged addressing medical research clinical trial medicine supply chain a medical insurance.

III. CONCLUSION

In this paper an evidence of postulated application was set up to function as an electronic medication plan in a entire dissolution way in a way to accomplish a point to point network assure enough to store private figure a system of smart contract developed in a solidity programming language in mixture with a permission block chain planning and common cryptographic tool was proposed regarding to established design research benchmark the outcome artifact is evaluated and found to fulfill all the essential requirements , though the estimated benchmark were fulfilled , it is crucial that no protestation the security outside of the pock have been made.

REFERENCE

[1]. Sergei Tikhomirov ,EkaterinaVoskresenskaya and Ivan Ivanitskiy ,"Smart Check: Static Analysis of Ethereum Smart Contracts " in ACM/IEEE 1st International Workshop on Emerging Trends in Software Engineering for Block chain May 27, 2018 .page no.9-16.

[2]. Fabian Ritz and Alf Zugenmaier ,"The Impact of Uncle Rewards on Selfish in ethereum" in mining IEEE European Symposium on Security and Privacy Workshops 2018. Page no. 50-57.

[3]. KarthikeyanBhargavan1,Thomas Sibut-Pinote , Nikhil Swamy , and Santiago Zanella-Béguelin ," Formal Verification of Smart Contracts" , in Short Paper October 24 2016 . Page no.91-96.

[4]. Matev□Pustišek, Andrej Kos, Urban Sedlar ,"Blockchain Based Autonomous Selection of Electric Vehicle Charging Station" ,International Conference on Identification,2016 . page no.217-222.

[5]. KieronO'Hara,"Smart Contracts – Dumb Idea",IEEE computer society ,2017 . page no.97-101.

[6]. Daniele Magazzeni and Peter McBurney,William Nash ,"Validation and Verification of Smart Contracts: A Research Agenda" ,ieee computer society ,2017. page no.50-57.

[7]. Gaoying Cui ,Kun Shi ,Yuchen Qin ,Lin Liu, Bing Qi, Bin Li ,"Application of Block Chain in Multi – level Demand Response Reliable Mechanism", in 3rd International Conference on Information Management ,2017 . page no.337-341

[8]. □igaTurk, and Robert Klinc ,"Potentials of Block chain Technology for Construction Management" ,ScienceDirect, Creative Construction Conference 2017, CCC 2017, 19-22 June 2017 . page no.638-645.

[9]. QianchenYu, Arne Meeuw2 and Felix Wortmann , "Design and implementation of a block chain multi-energy system " , Springer Open , Energy Informatics Research ,2018. page no.312-318.

[10]. Jiin-ChiouChen ,Narn-Yih Lee , Chien Chi , and Yi-Hua Chen , "Blockchain and Smart Contract for Digital Certificate" , IEEE International Conference on Applied System Innovation,2018 . page no.1046-1051.

[11]. HuanrongTang ,Ning Tong ,JianquanOuyang ," Medical Image Sharing System Based On Block chain and Smart Contract of Credit Score" ,1st IEEE International Conference on Hot Information-Centric Networking (HotICN) ,2018. page no.240-241.

[12]. ShaliniShukla ,Shashank D O ,Thasmiya A N ,Dr. Mamatha H R ,"online voting application using ethereum blockchain" ,IEEE ,2018. Page no. 873-880.