

A REPORT ON
Blockchain & Its Applications

Date: 31st Oct to 1st Nov, 2020

Platform: Cisco Webex Meetings

GUJCOST, DST, Govt. of Gujarat Sponsored

Two Days National Level Webinar on

Blockchain & Its Applications

31st October to 1st November, 2020

Introduction

Department of Computer Engineering, SOCET, Silver Oak University, in association with SOU IEEE SB had organized a national level two-day webinar on "**Blockchain & Its Applications**" sponsored by GUJCOST, DST and Government of Gujarat during **31st October, 2020 to 1st November, 2020**.

Blockchain is an emerging platform for developing decentralized applications and data storage, over and beyond its role as a platform for cryptocurrencies. The basic tenet of this platform is that it allows one to create a distributed and replicated ledger of events, transactions, and data generated through various IT processes with strong cryptographic guarantees of tamper resistance, immutability, and verifiability.

Course Contents

- Understanding Blockchain Technology
- Permissions & Permissionless Blockchains
- Demonstration of Blockchain Application
- Opportunities, Societal impact and Challenges
- Hyperledger Blockchain

About the Session

Day 1

Date: 31st October, 2020

Time: 12:50 PM to 4:15 PM IST

Day 1 of “Blockchain and Its Applications” was ignited by two very prominent personalities. Mr. Amit Padmani, who has a total 5+ years’ experience in Mobile Application development. He has strong expertise in React Native, Android/IOS, Hyperledger Indy, Hyperledger Aries and many more niche technologies. Along with him, we had invited Ms. Ankita Patidar who has 5+ years’ experience in Development. She is strong in niche technology of Node.js, React.js, Nest.js, JavaScript and many more such skills.

Ms. Ankita Patidar kickstarted the session by explaining what is Blockchain and how it actually works in the backend. She went on with explaining its significance and how because of its characteristics like Immutability and decentralized nature, it is widely used in several fields like governance, shopping, smart homes, supply chains, medical and healthcare etc. Adding to that, she talked about technological scenarios in the current world, with and without the addition of the concepts of Blockchain in those.

After that Mr. Amit Padmani took over the session and explained the concepts of Identity and its types that included a briefing on Self-sovereign identity which is the reflection of the

concept of distributed ledger in Blockchain. He concluded by describing various use cases of Self-sovereign identity in current world's technological business models. At last both the speakers concluded their session by solving doubts of participants.

The next session was conducted by Mr. Rizwan Shaikh who is a prominent Information Security Researcher and Cyber Crime Consultant with more than 7 years of experience in the meadow of Ethical Hacking, Information Security and Cyber Law. He has trained more than 20,000 individuals in Colleges, Corporates and Government Departments. He is an expert with great knowledge on cryptocurrency. In order to share his vast pool of knowledge in the domain of cryptocurrency, he explained what is cryptocurrency and its worldwide usage. He further shared information regarding various concepts of cryptocurrency like mining, traders, exchangers and many such. Finally, he concluded his session by a question and answer session with participants.

Day 2

Date: 1st November, 2020

Time: 12:50 PM to 4:15 PM IST

The second day of this two-day webinar on Blockchain and its applications started with a warm welcome to the participants and speakers. The first session was conducted by Mr. Fenil Khatiwala, who is working as an Assistant Professor at Chhotubhai Gopalbhai Patel Institute of Technology, Uka Tarsadia University in the Computer Engineering Department. He has more than 9 years of teaching experience. In his session he started by giving a brief idea about blockchain technology and its applications. He briefed about the history of blockchain and how this technology has evolved till now. Then he explained about architecture, design and protocol of blockchain. He also described various benefits of this technology. Next, he explained different security and privacy aspects of blockchain. At last by sharing various challenges and drawbacks of this technology and also demonstrated a few examples of blockchain, he concluded his session.

The session was further carried by our next speaker, Ms. Jignasha Dalal, who is working as an assistant professor in KJ Somaiya Institute of Engineering & Information Technology, Mumbai. She has 14 years of teaching experience and is pursuing her PhD with Mumbai university. She started her session by explaining the core concept of Bitcoin and Ethereum. Then she classified the difference between these two terminologies; that is Bitcoin and Ethereum. She further got across various other examples of blockchain. At the end she showed a few smart contract examples. The session was concluded by solving doubts of participants by both the speakers.

Conclusion:

The session turned out to be very informative and helpful to all the participants. More than 50 participants were a part of this illuminating experience, where they came to know about a lot of things regarding "Blockchain and Its Applications" which will help them a lot in the future.

The event was concluded by expressing gratitude towards all the enthusiastic participants, prominent and distinguished speakers and the immense contribution and support of Management of Silver Oak University, Provost, Dr. Saurin Shah sir, our Head of Computer Engineering Department and Faculty Branch Counsellor, Dr. Satvik Khara sir, our Faculty coordinators and the entire organizing team. This webinar was organised by Department of Computer Engineering, SOCET, Silver Oak University in association with Silver Oak University IEEE Student branch and sponsored by GUJCOST, DST and Government of Gujarat.

Some feedbacks after the event

- Very well and easy understanding of this trending topic of blockchain was delivered, really learned a lot.
- Very nice and informative session
- It was an amazing webinar. Looking forward to more workshops like this.
- It was a great webinar on such a deep topic like Blockchain, all the information was really insightful.
- Amazing webinar! Learned a lot about Blockchain and its real world applications.

Some glimpse of the event



Blockchain Demo

Participants: Fenil Khatiwala (Computer Engineering), Webinar Organizing, Webinar Organizing, Jignasha Dalal.

Blockchain Interface:

- Block # 2 (Green): Nonce: 182884, Data: This is demo., Prev: 000015783b764259d382017d91a36d206d060e2cbb3567748f, Hash: 000064278d935ec1b5c4ed896e2f56d6e1bb2b049fca8fc771c
- Block # 3 (Red): Nonce: 12937, Data: [Empty], Prev: 000064278d935ec1b5c4ed896e2f56d6e1bb2b049fca8fc771c, Hash: 2ab1b7e5865934c203e1562cda83d6936ca7e004422a31b67fc

IBM Food Trust Trace

Participants: Jignasha Dalal, Fenil Khatiwala (Computer Engineering), Webinar Organizing, Viren Patel.

Trace View: Broccoli, Carrots & Celery Pack (001185294089)

Timeline: Start March 18, 2019, End April 1, 2019

Supply Chain Flowchart:

- Manufacturing Plant (1): Nantico Carrots (4 lots), Julianne Cut Nantico Carrots (2 lots)
- Distribution Centers (2): Whole Broccoli (2 lots), Broccoli Florets (2 lots)
- Stores (5): Fresh Celery (4 lots), Cut & Washed Celery (3 lots), Broccoli, Carrots & Celery Pack (3 lots)

JD	FK	CE	WT	VP
Jignasha Dalal	Fenil Khatiwala	Computer Engineerin	Webinar Organizing	Viren Patel

AP	AP	CE	VP	WT
Ankita Patidar	Amit Padmani	Computer Engineerin	Viren Patel	Webinar Organizing t