National Workshop on Block Chain and Its Applications

The Department of IT, VFSTR deemed to be University, Vadlamudi organized a Three day National workshop on "Block Chain and its applications" during 23-25 December 2019. Dr. Manish Jain and Mr. Akhilesh Kumar Chousara, Corporate Trainers from Samriddhi solutions, Indore were the resource persons of the workshop. 11 faculty members, research scholars and 55 students were attended the workshop.

Inaugural Session: The workshop started with a welcome address by Dr. N. Veeranjaneyulu, Co-ordinator of the workshop. He briefly introduced the theme of the workshop and emphasized the need of Block chain technology.

In the first session, Dr. Manish Jain introduced the concepts of Block Chain and emerging technologies related Block chain technology. He focused on Blockchain Concepts, features, Public VS private Blockchain, Security of Blockchain and Blockchain use cases. He also introduced the concept of Bitcoin, Uses of Bitcoin, Getting Bitcoin Wallet, Getting and Sending Bitcoins, Mining Bitcoin, Earning Bitcoin Programmatically. In the second session of day 1, he introduced the concept Crypto currency, Concept of Opening Crypto currency Wallets, Buying Crypto currency Wallets, Withdrawal Crypto currency Wallets, Bitcoin with Crypto currency, Overview of samriddhi Mudra with live examples.

In the third session of day 1, the resource persons discussed the Ethereum Introduction, Ethereum VS bitcoin, Ethereum Features, Smart Contracts, Ethereum Installation, Ethereum Accounts, Smart Contracts, Ethereum Virtual Machine and Deploying Smart Contracts, Solidity Programming Fundamentals for Ethereum Applications. After this session participants were able to perform Solidity language and the Remix development environment, Basics of Solidity and Solidity construct, Using Solidity to write Smart Contracts, Running and testing Solidity applications using Truffle and Basic understanding of Blockchain Use Cases in business.

Second day of the workshop focused on Hyperledger, Fundamentals of Hyperledger, Hyperledger Architecture, Etherium VS Hyperledger, Hyperledger Composer, Docker, Npm, Git and Environment Setup.

In the second session,resource person discussed about Hyperledger Fabric, Fabric Introduction, Hyperledger Fabric, ChainCode, Genesis Block Configuration, Creating Network Using Fabric.

On the final day of the workshop, the resource persons gave some projects on block chain and guided through online and blog.

The following projects were discussed and implemented:

Block chain based smart contract for SCM network e.g. Shipping Perishable Goods Business Network

Block chain based solution for Business Network to illustrate using Access Control over Personally Identifiable Information.

Block chain based solution for Commodities Trading Business Network.

Block chain based solution for Vehicle Lifecycle Management.

Block chain based solution for vehicle Manufacturing Management.

Block chain based smart contract for e-voting solution.

Block chain based smart contract for fund collection and fund distribution.

Block chain based crypto currency Implementation.

In the concluding session, Dr. K. V. Krishna Kishore, Head of the department, congratulated all the participants for attending the workshop on advanced and emerging technology like this. He also mentioned these types of workshops will improve the confidence of the students and better weightage will be given in placements. He appealed the faculty members and research scholars to dissimilate this knowledge to all the remaining students.