EDUXLABS
edu's Xpert (Esoir Solution)

5-Days Live Online Instructor-led Training

on

Blockchain Technology & Its Applications

TOTAL DURATION – 15-HRS LIVE

3 Hours / Per-Day

Training Highlights:

3+ Hands-on Blockchain Projects covered during the training.

Total 15+ Hours live online Instructor-led Training.

Training includes:
Projects, Training PPT's & Recording.

certificate of completion will be provided to each participant.

LIST OF PROJECTS WILL BE COVERED DURING TRAINING:-

Project 1: **Smart Contract:**
Development of smart block-based contact for project development

Project 2: Crypto-wallet:
Creating Crypto wallet for handling cryptocurrency

Project 3: Cryptocurrency:

ERC-20 tokens & creating own cryptocurrency using solidity for Ethereum

Project 4: Blockchain based Lottery

Picking a Winner from various Blockchain Nodes taking part in a lottery.

About Block Chain Course: -

Block chain is something which will lead majority of data storage and information sharing for upcoming IT industry. We will understand about fundamentals of blocks and the immutability related. The protocol behind the chain formation of blocks with data stored will be understood with practical implementations. Consensus Protocol creation for blockchain formation will be created using python script to understand blockchain from very core. As a hands on we will understand how a banking system works and transaction can be done using blockchain technology.

Course Content [15-Hours]

Session 1:-

Module 1: Blockchain Intuition

- What is a Blockchain
- Understanding a SHA256 Hash
- Immutable Ledger
- Distributed P2P Network
- How Mining Works : The Nonce
- How Mining Works : The Cryptographic puzzle
- Byzantine Fault Tolerance
- Consensus Protocol : Defence Against Attackers
- Consensus Protocol : Proof of Work
- Decentralized or Distributed?

Session 2 :-

Python Fundamentals: -

- Python Variables
- Python Data Types
- Comparison in Python
- Loops and Function
- Classes

Session 3 :-

Practical and Hands on: -

Create a Demo Block Chain

Session 4 :-

Module 2(A): Cryptocurrency Intuition

- Bitcoin Stats
- Bitcoin's Monetary Policy
- Understanding Mining Difficulty
- Mining Pools
- Nonce Range
- How Miners Pick Transactions
- CPU's vs GPU's vs ASIC's
- How do Mempools Work?
- Orphaned blocks
- The 51% Attack
- The DAO Attack
- Soft & Hard Forks
- Extra bits of Target Conversion

Session 5:-

Module 2(B): Cryptocurrency Transactions Intuition

- Transaction and UTXO’s
- Transaction fees
- How wallet works
- Signatures :- Private and Public Keys
- Signatures and Keys Demo
- What is Segregated Witness (SegWit)
- Public Key vs Bitcoin Address
- Hierarchically Deterministic (HD) Wallets

Session 6 : -

Practical and Hands on :-

- Create a Crypto Currency

Session 7 :-

- **Decentralisation and Exchange of Cryptocurrency**

Session 8 :-

Module 3: Smart Contract Intuition

- What is Etherium
- What is a Smart Contract
- Ethereum Virtual Machine & Gas
- Decentralized Autonomous Organizations (DAOs)
- The DAO Attack
- Soft & Hard Forks
- Initial Coin Offerings (ICO's)
- ICO Case Study
- Blockchain and Web 3.0

Session 9:-

Practical and hands on :-

- Create a Smart Contract

Session 10:-

- Doubt and Project discussion and Deployment

Training includes:

Training will be taken by one Industrial Expert with the experience of 6-8 years in the industry and has delivered more then 1000+ sessions in India and abroad. The training hour is 3 to 4 hours/ each day. Mode of training is Instructor-led live online

- 15-Hours Instructor-led live online Hands-on based learning with Projects.
- Interactive Query Session.
- Soft copy of Training material, PPT's, Projects code & Recordings.
- Training certificate of completion will be provided to each Attendee.

Who can attend?

- Training is best suitable for Engineering college faculty, Research scholar, Student & Working IT Professional.

The requirement for the live online Training

- Computer system with internet

EduxLabs Teams
(Esoir Business Solutions Gurugram)
M: +91-7053133032 | 8318635606
Email info@eduxlabs.com | www.eduxlabs.com