Developing Applications - Blockchain

Empower your organization to achieve more

Developing Applications - Blockchain is a two-day instructor led, blockchain introduction training workshop with hands-on labs.

This two days hands-on workshop help students understand and leverage Blockchain technology.

You will come out the workshop equipped with the understanding Microsoft vision of Blockchain, including Blockchain as a S (BaaS), the COCO Framework, App Builder and Enterprise Smart Contracts.

Understanding of the common blockchain frameworks, such as Ethereum, Hyperledger, Corda Chain, Quorum. Differentiation between public and private blockchain, various consensus algorithms (PoW, PoA, PoS), programming Smart Contracts and developing and deploying DApps (Decentralized Applications).

Outcomes

Education
Overview of Blockchain technology and business use cases using timely and relevant content written and presented by field based subject matter experts.

Hands On Labs
Take your team to the next level by leveraging the benefits of a blockchain technology to design and develop solutions for today and tomorrow.

Acceleration
Accelerate integration of common Microsoft Azure application blocks. Ensure that your solution uses recommended practices to take advantage of the power of Azure

Capabilities
Workshop will help you meet today’s and tomorrow’s challenges by acquiring knowledge on Blockchain technology. Quality education on advanced Blockchain concepts for anyone interested in staying current with the latest industry technology.

01 Learn From The Experts
Learn from industry experts that help enterprise customers solve their most challenging problems.

02 Learn By Doing
Several hours of hands-on labs to practice and immediately put use newly acquired skills.

03 Technical Depth
Learn from highly technical content developed by experts using real-world scenarios.
Scope

Duration: 2 days

Day one

Start

Introduction
- Module 1 – Blockchain Overview
- Lab Setup
- Module 2 – Blockchain Business Use Case
- Launch

Industry landscape
- Module 3 – Blockchain Ecosystem – Keys Players and Technologies
- Module 3 – Lab
- Lunch
- Module 4 – Introduction to Smart Contracts

Closing

Customer evidence

- By 2022, at least one innovative business built on Blockchain technology will be worth $10 billion.
- By 2030, 30% of the global customer base will be made up of things, and those things will use blockchain as a foundational technology with which to conduct commercial activity.
- By 2025, the business value added by blockchain will grow to slightly over $176 billion, then surge to exceed $3.1 trillion by 2030.

Gartner predictions

Day two

Start

Smarts Contracts and App Deployment
- Module 4 – Smart Contracts (Cont.)
- Lab
- Building and Deploying App
- Lab

Closing

Microsoft vision of Blockchain
- Module 2 – Microsoft vision of Blockchain
- Lab
- Closing

Syllabus

Target Audience – Developers and Architects
Audience of this training requires software development background including ability to write code in high level programming language (e.g. C#, C++, Java, Go etc.). However, knowledge of smart contract development in (e.g. Solidity, Chaincode etc.) is not needed.

Additional details

- Blockchain Use Cases – Supply chain, Finance, Healthcare, Govt, Advertising, Provenance, Real estate
- Azure Blockchain as a Service (BaaS)
- Microsoft COCO Framework
- Microsoft Enterprise Smart Contracts
- Public, Consortium and Private Blockchains
- Smart Contact Development - Solidity Language Remix, Truffle
- Advanced Smart Contracts – Off Chain Storage, Oracles, Cryptlets
- Consensus Algorithms – Proof of Stake, Proof of Work, Proof of Authority
- DApps - Building Decentralize Applications

Syllabus

Scope of the delivery will be defined in the scoping call with the customer (usually 3 modules per day). Following are the topics covered during the course of this workshop

- Blockchain Fundamentals
- Blockchain Frameworks – Ethereum, Hyper ledger, Corda, Chain and Quorum