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## Developing on Hyperledger Fabric Blockchain

**Duration: 2 Days    Course Code: U67927G**

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### Overview:

This instructor-led Hyperledger training course is designed for developers and who want to take a comprehensive deep dive on Hyperledger Fabric v1.4.

This training course has been created to walk you through Chaincode Development, Testing, and Deployment for a Hyperledger Fabric Network catering specifically toward Golang written Chaincode (Fabric's original Chaincode Language). Additionally as an Application Developer you will learn how to write, and prepare Client Applications using the most mature Standard Development Kit in Hyperledger Fabric, NodeJS. There are use cases, proof of concepts, as well as interactive lab work about the concepts.

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### Objectives:

- Understand why Blockchain is needed and where
  - Explore the major components of Blockchain
  - Learn about Hyperledger Fabric and the structure of the Hyperledger Architecture
  - Learn the features of the Fabric model including chaincode, SDKs, Ledger, Security and Membership Services
  - Perform comprehensive labs on writing chaincode
  - Explore the architecture of Hyperledger Fabric
  - Understand and perform in depth labs on Bootstrapping the Network
  - Perform comprehensive labs to integrate/develop an application with Hyperledger Fabric running a smart contract
  - Build applications on Hyperledger Fabric
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### Prerequisites:

This course is highly technical in nature and would require the student to be comfortable with coding. To prepare for the class all students MUST:

- Familiarity with Hyperledger Fabric Component Structure & purposes
  - Knowledgeable on Golang Basics & Node JS basics
  - Minimal Command Line Interface Familiarity
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## Content:

- Blockchain Basics (Overview)
- Hyperledger Fabric Development Environment
- Knowing the Difference: Composer
- Chaincode Use Cases
- Chaincode Basics
- Golang Shim Development
- Databases for the Developer
- Chaincode Dev. Deployment and Interactions
- Clients ; SDK Development: Fabric-Network
- Clients ; SDK Development: Fabric-Client Interactions
- Logging and Monitoring

Lab: Setting up the Developer Environment

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Lab: Writing the Chaincode Structure

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Lab: Creating Rich Queries

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Lab: Packaging ; Deploying the Chaincode

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Lab: SDK Development Pt. 1 Writing User Persistence Info

Lab: SDK Development Pt. 2 Transacting and Querying

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## Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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