

Hyperledger Training - Developing on Hyperledger Fabric

Category: Software Development & Programming | **Vendor:** Blockchain Training Alliance

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This instructor-led Hyperledger training course is designed for developers and administrators who want to take a comprehensive deep dive on Hyperledger Fabric and Hyperledger Composer. This Hyperledger training course has several comprehensive labs, giving you real world experience. In 3 days, you will learn the need for blockchain applications, where blockchain is used, and about Hyperledger Fabric, the open source framework for developing blockchain applications and solutions with a modular architecture.

About This Course

This instructor-led Hyperledger training course is designed for developers and administrators who want to take a comprehensive deep dive on Hyperledger Fabric and Hyperledger Composer. This Hyperledger training course has several comprehensive labs, giving you real world experience. In 3 days, you will learn the need for blockchain applications, where blockchain is used, and about Hyperledger Fabric, the open source framework for developing blockchain applications and solutions with a modular architecture.

Who Should Attend

Developers

Administrators

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Understand why Blockchain is needed and where

Explore the major components of Blockchain

Learn about Hyperledger Fabric v1.1 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 v1.1

Understand and perform in depth labs on Bootstrapping the Network

Gain a detailed understanding of the benefits, components and architecture of Hyperledger Composer

Learn Hyperledger Explorer and Hyperledger Composer Playground

Perform comprehensive labs to integrate/develop an application with Hyperledger Fabric running a smart contract

Build applications on Hyperledger Fabric v1.1

Detailed Course Outline

Introduction to Blockchain

- Introduction to Blockchain
- What is Blockchain
- Types of network
- Public network
- Permissioned network
- Private network
- Need for Blockchain Components of Blockchain
- Consensus
- Provenance
- Immutability
- Finality
- Where can Blockchain be used
- Example on Blockchain

How Blockchain Works

- How Blockchain Works
- Structure of Blockchain
- Block
- Hash
- Blockchain
- Distributed
- Lifecycle of Blockchain
- Smart Contract
- Consensus Algorithm
- Proof of Work
- Proof of Stake
- Practical Byzantine
- Fault Tolerance
- Actors of Blockchain
- Blockchain developer
- Blockchain operator
- Blockchain regulator
- Blockchain user
- Membership service provider
- Building A Small Blockchain Application

Introduction to Hyperledger Fabric v1.1

- Introduction to Hyperledger
- What is Hyperledger
- Why Hyperledger
- Where can Hyperledger be used
- Hyperledger Architecture
- Membership
- Blockchain
- Transaction
- Chaincode
- Hyperledger Fabric
- Features of Hyperledger
- Fabric Installation of prerequisite

Getting Started With Fabric Model

- The Fabric Model
- Features of Fabric Model
- Chaincode
- SDKs
- Ledger
- Privacy through channels
- Security and Membership services
- Assets
- Consensus
- Components of Fabric Model
- Peer
- Orderer
- Certificate Authority
- Building your network

Chaincode

- Chaincode
- Chaincode API
- How to write a Chaincode
- Lab Work

Architecture of Hyperledger Fabric v1.1

- Architecture of Hyperledger Fabric
- Transaction
- Ledger
- Nodes
- Peer
- Endorser
- Ordering Nodes
- Channels
- Certificate Authority
- Transaction Flow
- Lab Work

Bootstrapping

- Bootstrapping the Network
- Introduction
- Lab Work
- Task 1 - Generate the crypto material for the various participants.
- Task 2 - Generate the genesis block for the Orderer node and start ordering service (solo node).
- Task 3 - Generated the configuration transaction block to create a new channel.
- Task 4 - Sign the configuration block and create the new channel.
- Task 5 - Make peers of all the organizations join the channel that we created in Task 4

Introdcution to Hyperledger Explorer

- Introduction To Hyperledger Explorer
- Block Details Peer List
- Chaincode List
- Transaction Details
- Installation of Hyperledger Explorer
- Starting the Explorer App

Introduction to Hyperledger Composer

- Introduction
- Components of Hyperledger Composer
- Benefits of Hyperledger Composer
- Key Concepts
- Hyperledger Composer Solution
- Installation

Hyperledger Composer Playground

- Hyperledger Composer Playground
- Introduction
- Playground Overview Lab Work

Additional Course Details

Nexus Humans Hyperledger Training - Developing on Hyperledger Fabric training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Hyperledger Training - Developing on Hyperledger Fabric course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Hyperledger Training - Developing on Hyperledger Fabric?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Hyperledger Training - Developing on Hyperledger Fabric course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Hyperledger Training - Developing on Hyperledger Fabric training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Hyperledger Training - Developing on Hyperledger Fabric?

Yes, we provide corporate training, dedicated training, and closed classes for Hyperledger Training - Developing on Hyperledger Fabric. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for Hyperledger Training - Developing on Hyperledger Fabric?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Hyperledger Training - Developing on Hyperledger Fabric training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

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