Training: The Linux Foundation
LFD272 Hyperledger Fabric for Developers

TRAINING GOALS:

Hyperledger Fabric for Developers helps you build expertise and obtain practical skills in implementing business logic by writing chaincode – Fabric's smart contracts – and creating enterprise blockchain-based applications.

What You'll Learn

In this course, you'll learn how to implement and test a chaincode in Node.js for any use case, manage the chaincode life cycle, create Node.js client applications interacting with Hyperledger Fabric networks, control access to the information based on a user identity, set up and use private data collections and much more.
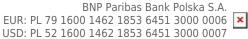
Who Is It For

This course is designed for developers who want to master their skills in the Hyperledger Fabric chaincode and application development.

CONSPECT:

- Course Introduction
- Hyperledger Fabric: Components and Concepts Review
- Chaincode Basics
- Chaincode Lifecycle
- Ledger Data Range Queries
- CouchDB as a State Database
- Using Chaincode to Read the History of Assets
- Programmatic Access Control: Client Identity
- Chaincode Specifics
- An Overview of HL Fabric Node.js SDK
- Main Application Components
- Interaction with HL Fabric CA from an Application
- Events Processing
- Private Data Collections

REQUIREMENTS:

To best benefit from this course you should have:

- Understanding of Hyperledger Fabric architecture and components: Ledger, Channel, Chaincode, types of network nodes (Endorser, Committer, Orderer, etc.), transaction flow, Certificate Authority (CA)
- Experience with NodeJS:
  – Ability to install NodeJS, run applications from the cli; knowledge of basic language constructions; familiarity with package management
- Knowledge of Docker basics:
  – Ability to install docker daemon, run docker containers locally, understand and use basic commands
- Experience with the command line/shell of a Linux operating system
- Familiarity with NoSQL databases and general understanding of CouchDB
- We highly recommend that you first take the [Introduction to Hyperledger Blockchain Technologies (LFS171x)](#) MOOC which is free to audit on edX.

Lab Info

Lab exercises in this course are designed to work either on native hardware, or using a virtual machine (VM), under a hypervisor, such as those in the KVM, VMWare, or Virtual Box families. Detailed instructions to set up your lab environment are provided in the course.

Difficulty level

CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

TRAINER:

Certified The Linux Foundation Trainer.

ADDITIONAL INFORMATION:

- Online, Self Paced
- 18-20 Hours of Course Material
- Hands-on Labs & Assignments1

- No Video Content
- 12 Months of Access to Online Course
- Digital Badge
- Discussion forums