

Developing on Hyperledger Fabric Blockchain

Durée: 3 Jours **Réf de cours: U67927G** **Méthodes d'apprentissage: Classe à distance**

Résumé:

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.

Classe à Distance - site Client

Cette formation peut être suivie à distance en synchrone depuis n'importe quel site pourvu d'une connexion internet (2 Mb/s en symétrique recommandés). Le programme (théorie et pratique) suit le même déroulé pédagogique qu'en présentiel. La solution technologique adoptée permet aux apprenants à distance de suivre les présentations faites au tableau, de voir et d'entendre l'instructeur et les participants en temps réel, mais également d'échanger avec eux.

Objectifs pédagogiques:

- 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

Pré-requis:

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

Contenu:

- 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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Autres moyens pédagogiques et de suivi:

- Compétence du formateur : Les experts qui animent la formation sont des spécialistes des matières abordées et ont au minimum cinq ans d'expérience d'animation. Nos équipes ont validé à la fois leurs connaissances techniques (certifications le cas échéant) ainsi que leur compétence pédagogique.
- Evaluation : Chaque participant, à l'issue de la formation, répond à un questionnaire d'évaluation qui est ensuite étudié par nos équipes pédagogiques en vue de maintenir et d'améliorer la qualité de nos prestations.
- Suivi d'exécution : Une feuille d'émargement par demi-journée de présence est signée par tous les participants et le formateur.