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Titolo	Mastering blockchain : distributed ledger technology, decentralization, and smart contracts explained // Imran Bashir
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Edizione	[Second edition.]
Descrizione fisica	1 online resource (656 pages) : illustrations
Soggetti	Blockchains (Databases) Electronic funds transfers
Lingua di pubblicazione	Inglese
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Note generali	Inlcudes index.
Sommario/riassunto	Learn about cryptography and cryptocurrencies, so you can build highly secure, decentralized applications and conduct trusted in-app transactions. About This Book Get to grips with the underlying technical principles and implementations of blockchain Build powerful applications using Ethereum to secure transactions and create smart contracts Explore cryptography, mine cryptocurrencies, and solve scalability issues with this comprehensive guide Who This Book Is For This book will appeal to those who wish to build fast, highly secure, transactional applications. It targets people who are familiar with the concept of blockchain and are comfortable with a programming language. What You Will Learn Master the theoretical and technical foundations of the blockchain technology Understand the concept of decentralization, its impact, and its relationship with blockchain technology Master how cryptography is used to secure data - with practical examples Grasp the inner workings of blockchain and the mechanisms behind bitcoin and alternative cryptocurrencies Understand the theoretical foundations of smart contracts Learn how Ethereum blockchain works and how to develop decentralized applications using Solidity and relevant development frameworks Identify and examine applications of the blockchain technology - beyond currencies Investigate alternative blockchain solutions including

Hyperledger, Corda, and many more Explore research topics and the future scope of blockchain technology In Detail A blockchain is a distributed ledger that is replicated across multiple nodes and enables immutable, transparent and cryptographically secure record-keeping of transactions. The blockchain technology is the backbone of cryptocurrencies, and it has applications in finance, government, media and almost all other industries. Mastering Blockchain, Second Edition has been thoroughly updated and revised to provide a detailed description of this leading technology and its implementation in the real world. This book begins with the technical foundations of blockchain technology, teaching you the fundamentals of distributed systems, cryptography and how it keeps data secure. You will learn about the mechanisms behind cryptocurrencies and how to develop applications using Ethereum, a decentralized virtual machine. You will also explore different other blockchain solutions and get an introduction to business blockchain frameworks under Hyperledger, a collaborative effort for th...

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