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Titolo	Beginning Ethereum Smart Contracts Programming : With Examples in Python, Solidity, and JavaScript // by Wei-Meng Lee
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2023
ISBN	9781484292716 1484292715
Edizione	[2nd ed. 2023.]
Descrizione fisica	1 online resource (377 pages)
Disciplina	005.43
Soggetti	Python (Computer program language) Internet programming Open source software Python Web Development Open Source
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1: Understanding the Science Behind Blockchain – Cryptography -- Chapter 2: Understanding Blockchain -- Chapter 3: Implementing Your Own Blockchain Using Python -- Chapter 4: Creating Your Own Private Ethereum Test Network -- Chapter 5: Using the MetaMask Chrome Extension -- Chapter 6: Getting Started with Smart Contract -- Chapter 7: Storing Proofs Using Smart Contracts -- Chapter 8: Using the web3.js APIs -- Chapter 9: Developing Web3 dapps using Python -- Chapter 10: Project: Online Lottery -- Chapter 11: Creating Your Tokens -- Chapter 12 - Creating Non-Fungible Tokens (NFT) Using ERC-721 -- Chapter 13 – Introduction to Decentralized Finance.
Sommario/riassunto	Use this book to write an Ethereum blockchain smart contract, test it, deploy it, and create a web application to interact with your smart contract. This new edition has been expanded and updated to cover web3.js APIs, additional Consensus Protocols, non-Fungible Tokens (NFTs), developing NFT tokens using ERC-721, and more! Beginning Ethereum Smart Contracts Programming, second edition is your fastest

and most efficient means of getting started if you are unsure where to begin and how to connect to the Ethereum blockchain. The book begins with a foundational discussion of blockchain and the motivation behind it. From there, you will get up close and personal with the Ethereum blockchain, learning how to use an Ethereum client (geth) to create a private Ethereum blockchain to perform transactions such as sending Ethers to another account on another node. You will learn about smart contracts without having to wade through tons of documentation. Author Lee's "learn-by-doing" approach will allow you to be productive and feel confident in your ability in no time. The last part of this book covers tokens, a topic that has taken the cryptocurrency market by storm. Sample code in Python, Solidity, and JavaScript is provided in the book and online.

**What You'll Learn**

- Understand the basic premise of blockchain and "record keeping" in a peer-to-peer network
- Experience blockchain in action by creating your own blockchain using Python
- Know the foundation of smart contracts programming and how to deploy and test smart contracts
- Work on a case study to illustrate the use of blockchain
- Be familiar with tokens, and how to create and launch your own ICO digital token
- Write smart contracts that transact using tokens.

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