

## **Blockchain Fundamentals**

Start with understanding blockchain technology, its core concepts like distributed ledgers, consensus mechanisms (e.g., Proof-of-Work, Proof-of-Stake), and key differences from traditional databases.

- Webpage: <https://www.investopedia.com/blockchain-4689765>
- Documentation: <https://ethereum.org/en/developers/docs/> (Get started with Ethereum)
- Youtube Video: "<https://youtu.be/yubzJw0uiE4> (Understand the concept of Blockchain with this short-informative video)

## **Solidity Programming:**

Solidity is the primary language for writing smart contracts on the Ethereum blockchain. Beginners can learn basic syntax, data types, control flow statements, and functions.

- Webpage: <https://docs.soliditylang.org/en/latest/introduction-to-smart-contracts.html> (Solidity Documentation)
- Online Course: <https://cryptozombies.io/> (Interactive course with gamified learning)
- Youtube Video: "<https://m.youtube.com/watch?v=ooN6kZ9vqNQ>" (FreeCodeCamp - Create a Simple Ethereum Smart Contract)

## **MetaMask Introduction:**

MetaMask is a popular crypto wallet used to interact with decentralized applications (dApps). Beginners can learn how to install, set up, and use MetaMask for basic transactions.

- Webpage: <https://metamask.io/> (MetaMask Official Website)
- Documentation: <https://docs.metamask.io/> (MetaMask Documentation)
- Youtube Video: "[https://www.youtube.com/watch?v=Af\\_IQ1zUnoM](https://www.youtube.com/watch?v=Af_IQ1zUnoM)" (Coinbureau - How To Use MetaMask Wallet (2023 Beginner Tutorial))

## **Decentralized Applications (dApps):**

Introduce the concept of dApps and their key features like transparency, censorship resistance, and user ownership. Explore some popular dApp examples.

- Webpage: <https://dappradar.com/> (DappRadar - What is a DApp?)
- Documentation: <https://consensys.io/academy> (ConsenSys Academy - Introduction to dApps)
- Youtube Video: "[https://www.youtube.com/watch?v=btB\\_oHQ0sU](https://www.youtube.com/watch?v=btB_oHQ0sU)" (FinTech with Kev - What are dApps? (Decentralized Applications Explained Simply))