



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE NAME: 19CS622-Blockchain Technology

III YEAR /VI SEMESTER

Unit 1- INTRODUCTION TO BLOCKCHAIN

Topic 7: Decentralization using Blockchain



Brain Storming



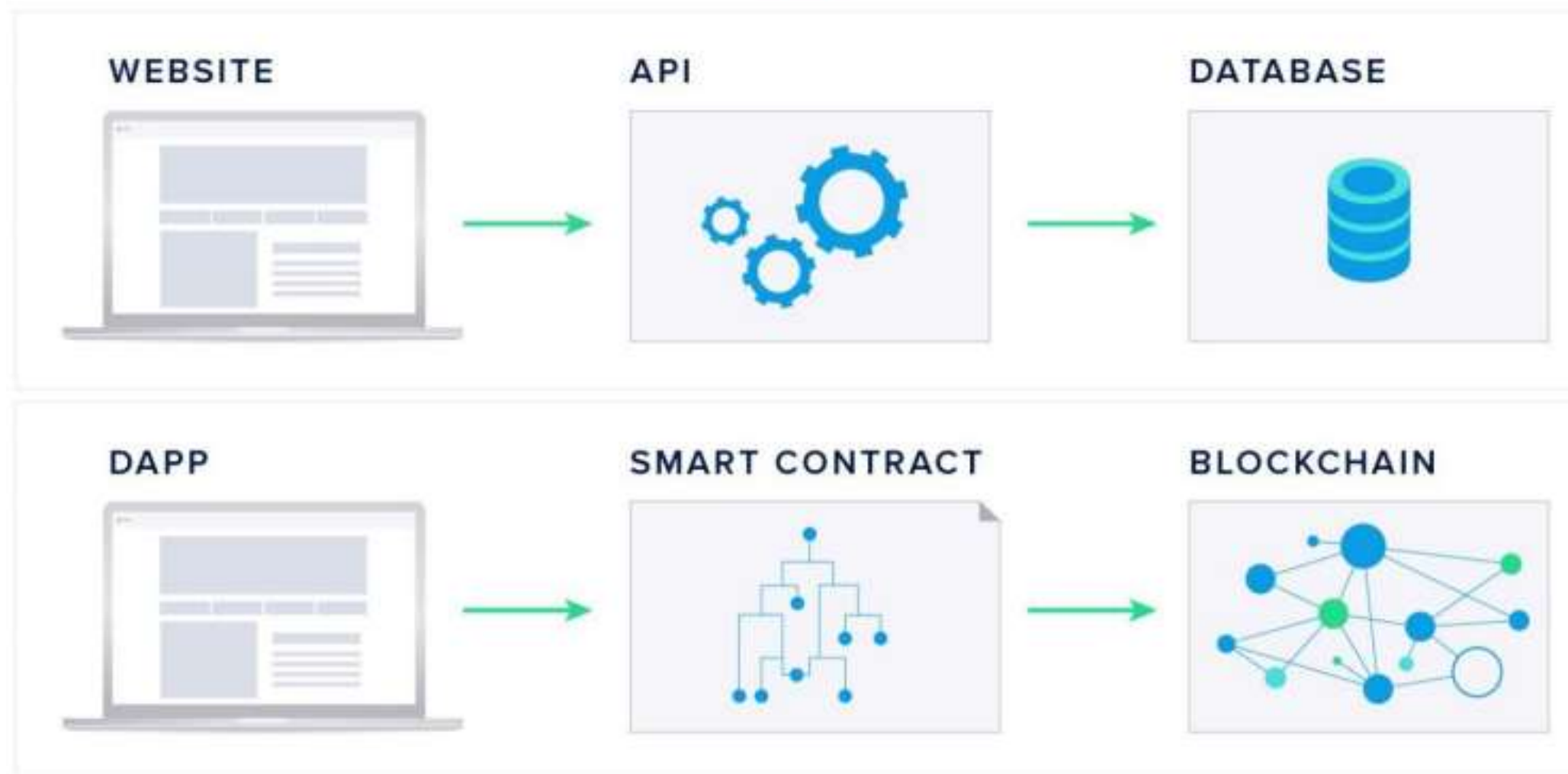
1. Blockchain terminologies
2. Define Distributed ledger.



Decentralized Apps - dApps

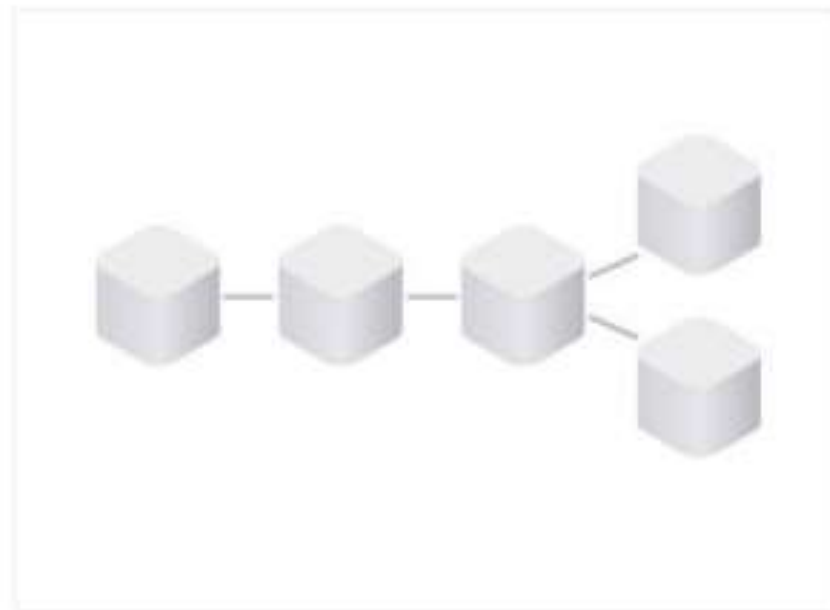


TRADITIONAL WEB VS. DECENTRALIZED APP



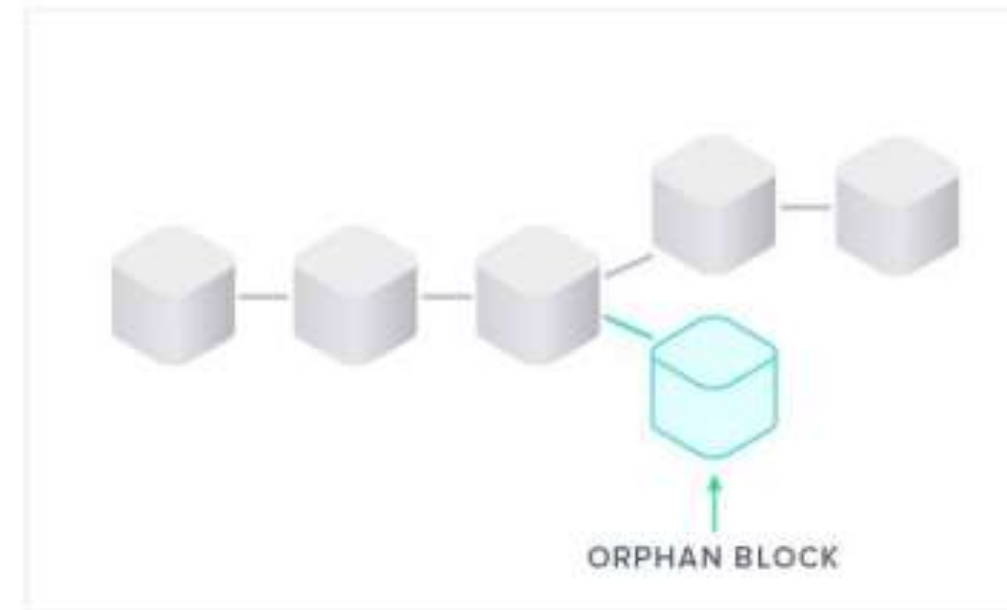
LONGEST CHAIN RULE

Two valid blocks found and broadcasted at the same time



TIE

The next block that is found breaks the tie



TIE IS BROKEN

Decentralized Apps - dApps

Decentralized Application (Dapp)

- **Dapp is an application that uses smart contracts.**
- **Dapp provides a user-friendly interface to smart contracts**
- **Dapp main components are smart contract and files for web user interface front-end/back-end**

Step 1

- Implement smart contract in a high-level language

Step 2

- Compile the contracts in a high-level language

Step 3

- Deploy the contracts on Ethereum Blockchain network using Ethereum clients

Step 4

- Build web applications that interact with the smart contracts



References



TEXT BOOKS

1. Mastering Bitcoin: Unlocking Digital Cryptocurrencies, by Andreas M Antonopoulos 2018
2. Imran Bashir, “Mastering Blockchain: Distributed Ledger Technology, Decentralization and Smart Contracts Explained”, Second Edition, Packt Publishing, 2018.
3. <https://101blockchains.com/blockchain-vs-database-the-difference/>

REFERENCES

1. William Mougayar, “Business Blockchain Promise, Practice and Application of the Next Internet Technology, John Wiley & Sons 2016.
2. Josh Thompson, ‘Blockchain: The Blockchain for Beginnings, Guild to Blockchain Technology and Blockchain Programming’, Create Space Independent Publishing Platform, 2017.
3. Arvind Narayanan, “Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction”, Princeton University Press, July 19, 2016.
4. Henning Diedrich, Ethereum: Block chains, Digital Assets, Smart Contracts, Decentralized Autonomous Organizations-2016

Thank You