

Summary of Web3_Detailed_Notes_Final

It aims to create a more open, intelligent, and user-driven digital ecosystem powered by blockchain technology, artificial intelligence, and decentralized applications..

Unlike Web 2.0, where data is controlled by centralized platforms, Web 3.0 gives users ownership of their data and digital assets..

- Web 1.0 (The Static Web): This phase spanned from the early 1990s to the early 2000s..
- Web 3.0 (The Decentralized Web): Web 3.0 aims to shift control away from centralized entities toward decentralized networks..

It emphasizes transparency, trust, and security using blockchain, smart contracts, and cryptographic principles..

Web 3.0 is guided by several fundamental principles: - Decentralization: Instead of data being stored on centralized servers, it is distributed across multiple nodes in a blockchain network..

They can decide when, how, and with whom to share their personal information..

It ensures transparency, immutability, and security..

c) Decentralized Applications (DApps): Applications that run on blockchain networks rather than centralized servers..

- Interoperability: Cross-platform data exchange without restrictions.