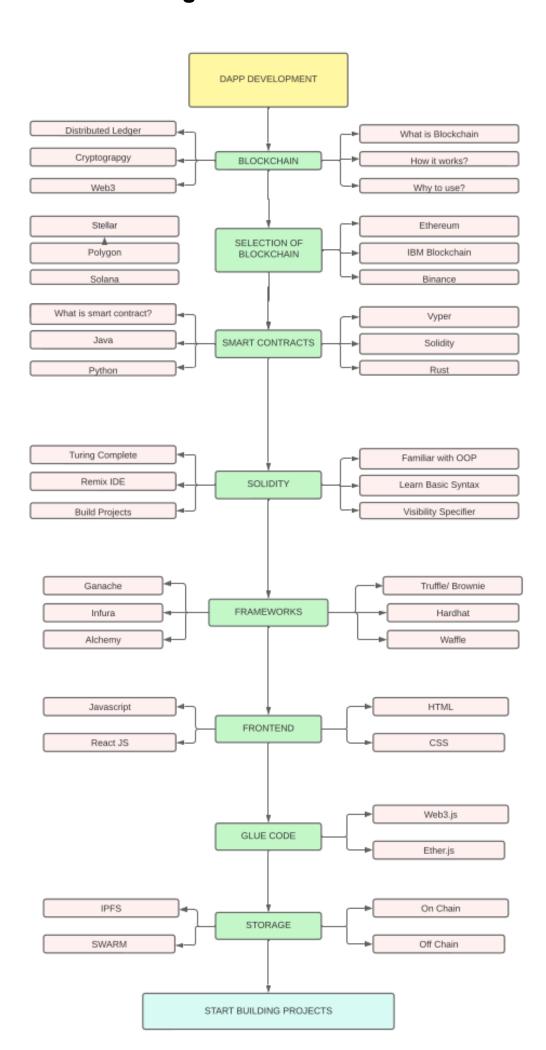
# **Getting Started With Blockchain**



#### Basic things you need to know

- 1. General Development Skills
  - Learn <u>GIT</u>, create a few repositories on <u>GitHub</u> / <u>GitLab</u>, share your code with other people.
  - Remember! Google won't judge you. So start with googling "How to google?"
  - Read a few books about algorithms and data structures, blockchain, Ethereum, Solidity
  - Web Development Concepts
  - Basic Mathematics
- 2. Cryptography and Encryption knowledge
  - <u>Basic concepts</u> Asymmetric encryption, Digital signature, Certificate
  - Public Key Cryptography
  - What is Hashing on the Blockchain?
  - <u>Digital signature extension</u> Multi-signature, Blind signature, Group signature, Ring signature
  - Merkle tree
- 3. Basic Concept of Blockchain
  - Exploring the Basic Concept of Blockchain
  - Bitcoin Whitepaper
  - Bitcoin protocol Explained
  - <u>Proof of Work</u>
  - Proof of Stake
  - <u>Delegated Proof of Stake</u>

#### 4. Learn Solidity

- Start with Documentation
- Remix IDE Learn about Remix IDE
- Master Solidity Playlist
- Solidity Tutorial : <u>CryptoZombies</u>
- <u>awesome-solidity</u> A curated list of awesome Solidity Resources

### 5. Web3 and Dapp

- <u>DAPP Development</u>
- Web3.js
- Web3.py

#### 6. Frameworks

- <u>Truffle</u> A world class development environment, testing framework and asset pipeline for blockchains using the Ethereum Virtual Machine (EVM), aiming to make life as a developer easier.
- <u>HardHat</u> Ethereum development environment for professionals.
- <u>Brownie</u> Brownie is a Python-based development and testing framework for smart contracts targeting the Ethereum Virtual Machine.

## 7. Storage

- Introduction to Distributed Storage
- <u>IPFS</u> A peer-to-peer hypermedia protocol designed to preserve and grow humanity's knowledge by making the web upgradeable, resilient, and more open.
- <u>SWARM</u> Swarm is a decentralized storage and communication system for a sovereign digital society.