We are building a smart contract using solidity (prog. lang. of ethereum)

- Host videos on ethereum blockchain and IPFS.

Dependancies →

① ethereum →

② Polygon → ⓐ gas fee is high on ethereum
ⓑ Transaction time is slow because network is congested by amt. of data on network.
↓
separate blockchain (Not ethereum)
operates via proof of stake consensus mechanism

At every set interval there is a checkpoint where polygon will send all trans. to eth. Eth. will then validate all the transactions that happened on polygon.

③ Truffle → helps in building smart contracts for ethereum easily.

④ Ganache → test blockchain used to test app. before deploying it

⑤ Metamask → browser extension. that allows us to keep a wallet in browser and interact with any apps in browser as

⑥ IPFS → Storage space on ethereum blockchain is limited.
∴ IPFS → it is not a blockchain.
It is a distributed hash table. All the files uploaded to IPFS instead of being stored on server, they are split into many multiple files and spread across the network.

⑦ Fleek → to interact with IPFS. It is a hosting platform that uses IPFS on the backend.

Folders → Truffle is framework for building dApps. It has 5 folders →

① migrations → set of js files that tells eth. how to deploy solidity contract.

② public → index.html

③ src → where we store contracts & ~~ABI's~~ abis

Creating DApp →
① Truffle init
② ~~npm~~ npm i create-react-app
③ npx create-react-app client
folder structure photo in phone
④ truffle config.js →
67 → development port: 7545
59 → contracts_build_directory
: " ".
⑤ truffle migrate --reset
⑥ App.js → HTTP Provider ⇒
Ganache rpc server URL.

① npm install -g truffle
② truffle --version
③ truffle init → creates contracts, migrations versions.
④ truffle compile
⑤ truffle migrate → deploy on ganache or something etc.
↓
truffle config.js
line → 87 (development)
port: 7545

npm i dotenv.
config.js (85, 43)