Diagram

Description automatically generated

Till now what is happening without blockchain is that , w are having an server and whenever we want something we go to the server , we do our business logic in javascript , and store data in the data base

The server contains the html file , the javascript and the database

What we are building using the blockchain

Graphical user interface

Description automatically generated with medium confidence

We are not storing the data globally in the server , we are storing the data in the block of the blockchain .

We will connect the brower to client side application, but this client side application will not talk to the database or anything , but it will directly talk to the blockchain

On the blockchain we have code written with ethereum contract , that will contain business logic and the block will be stored in the blockchain

Blockchain : is the separate network , it is peer to peer not central

All the node in the network connect to contribute , all the peers have their copy of the blockchain

All the code are written in solidity and all the code is immutable , i.e whenever we put the code in the blockchain we cannot change it , i.e it is immutable ledger

Steps used

1. Truffle version
2. **Truffle init** : will create a truffle project for us
3. **Created a json file** : copies the dependencies from the github repo and install the dependencies with npm install
4. Then we tested our code is it working fine , **with truffle compile** and by this way the ABI and the bytecode file was created by this command only in the build , which is in json format
5. After we uncommented the truffle.config file for the networks i.e where to open this file in browser and compilers
6. We created a file in the migration for the migration of smart contract to the blockchain this is what , when we change the data of the database i.e we change the state , this is the same , we change the state of the blockchain
7. We use the command truffle migrate to migrate this to the blockchain
8. So we have been charged by some ethers as the program gets on the blockchain
9. We can go on terminal , the type truffle console , we will open the truffle development console and in that assign t=eg todolist = await TodoList.deployed()
10. We will get all the data in the smart contract , in the json format and then we can access it as todolist.address
11. Till now we have created smart contract , connect to blockchain , deployed it to blockchain , then interacted with our smart contract, i.e we have set our project and in next we will list the tasks