Project Design Phase-I

Solution Architecture

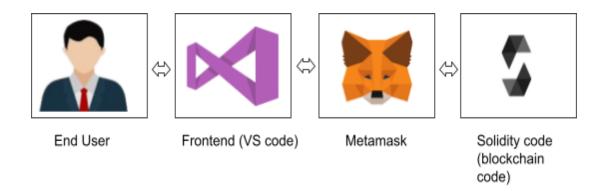
Date	19 October 2023
Project Name	IP Collectible Hub
Maximum Marks	4 Marks

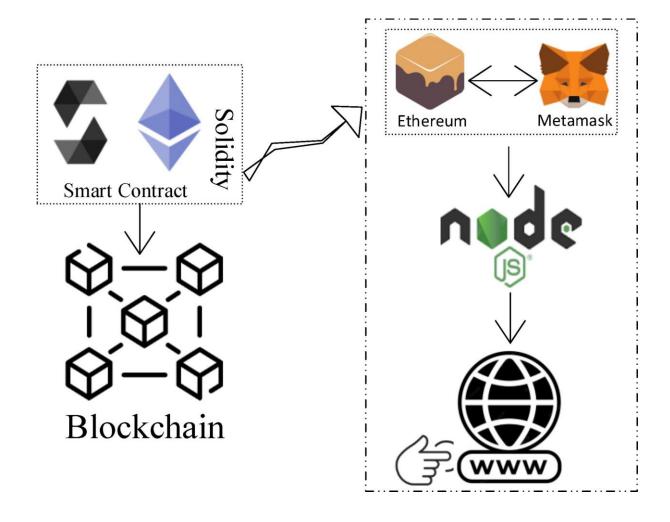
Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Example - Solution Architecture Diagram:





Prerequisite

1 download node.js: Node.js

2 download vs code: Li4nk

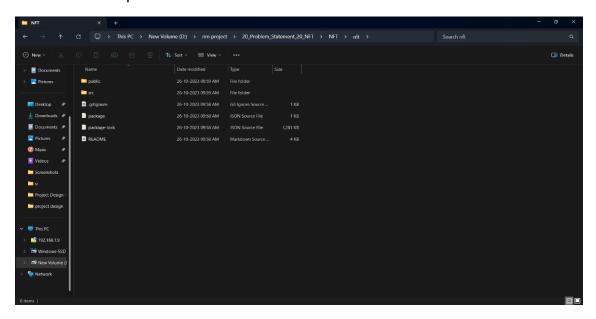
3 download metamask: https://metamask.io/

Steps to complete the project

Step 1:-

1. Open the Zip file and download the zip

file.Extract all zip files

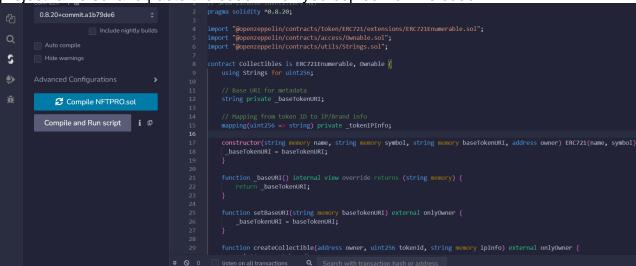


Step 2:

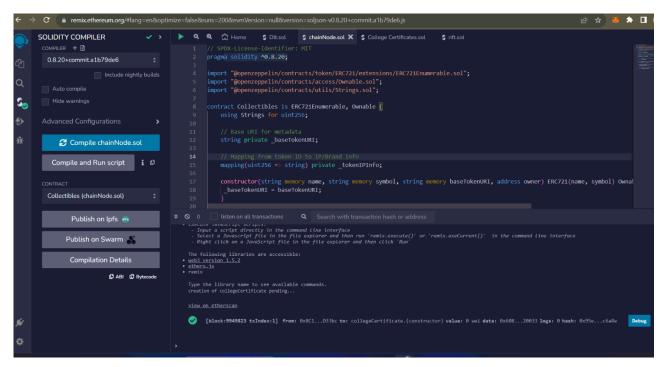
- 1. Open vs code in the left top select open folder. Select extracted file and open .
- 2. Select the projectname.sol file and copy the code.

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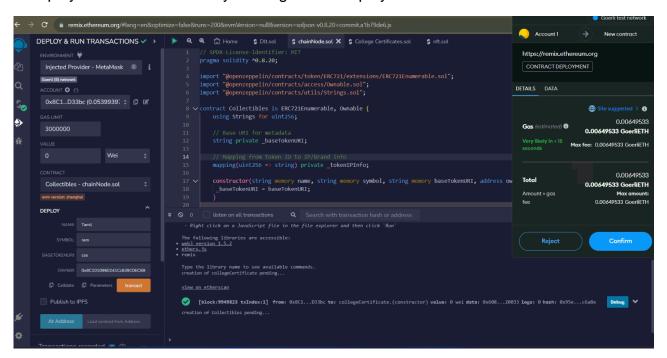
3. Open the remix ide platform and create a new file by giving the name of projectname.sol and paste the code which you copied from vs code.



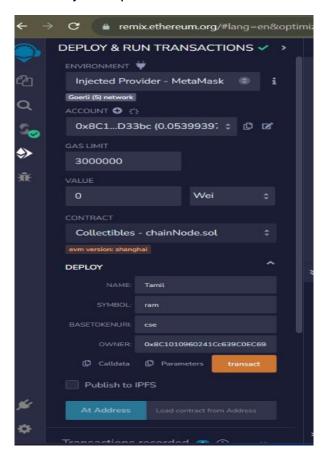
4. Click on solidity compiler and click compile the projectname.sol



5. Deploy the smart contract by clicking on the deploy and run transaction.



5. select injected provider - MetaMask. In environment



6. Click on deploy. Automatically MetaMask will open and give confirmation. You will get a pop up click on ok.



7. In the Deployed contract you can see one address copy the address.

0x145db85d12e4edfecd4142ecef0397aeced4e96f

- 8. Open vs code and search for the connector.js. In contract.js you can paste the address at the bottom of the code. In export const address.
- 9. Save the code.

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import CollectiblesJSON from './collectibles.json'

tescPa... 2 import { ethers } from "ethers";

lethco... 3 import web3wodal from "web3modal";
          V OPEN EDITORS

    JS connector.js nft\src\Pa...
    Collectibles.sol nft\co...

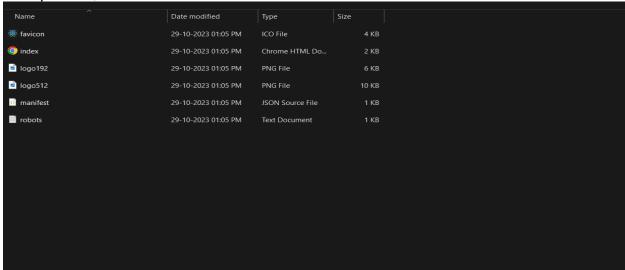
                JS hardhat.config.is nft
                                                                  export const CollectiblesABI = CollectiblesJSON.abi;
             * Collectibles.sol
                                                                if (!window.ethereum) {
   alert('Meta Mask Not Found')
   window.open("https://metamask.io/download/")
             > node_modules
              JS deploy.is
              > artifacts
              ∨ Page

{} Collectibles.json
                                                                 const web3modal = new Web3modal();
const connection = await web3modal.connect();
const provider = new ethers.providers.Web3Provider(connection);
// export const provider = new ethers.providers.Web3Provider(window.ethereum);
              # App.css
              JS App.test.js
# index.css
          > test
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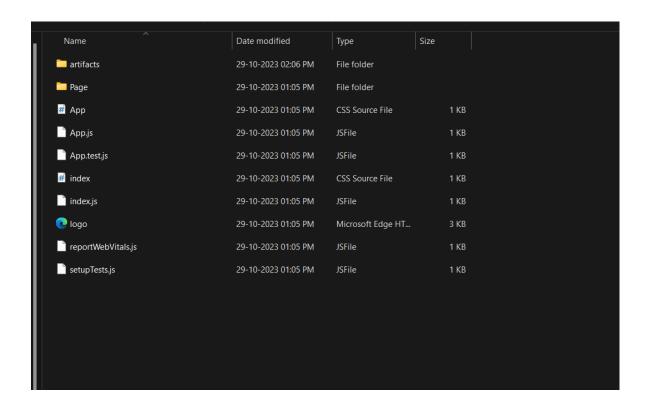
open file explorer

1. Open the extracted file and click on the folder.

2. Open src, and search for utiles.



3 . You can see the frontend files. Select all the things at the top in the search bar by clicking alt+ A. Search for cmd



Open cmd enter

commandsnpm install

npm bootstrap

npm start

```
Tile Edit Selection View Go Run Terminal Help
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       V OPEN EDITORS
            JS deploy.js nft\scripts
         × JS connector.js nft\src\Pa...
                                                 import { ethers } from "ethers";
import Web3Modal from "web3modal";
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                                                 if (!window.ethereum) {
   alert('Meta Mask Not Found')
   window.open("https://metamask.io/download/")
          ∨ Page
{} Collectibles.json
                                         22 const web3modal = new Web3Modal();
23 const compaction = musit web3modal compact();
PROBLEMS QUIPUT DEBUGCONSQUE TERMINAL PORTS
            JS Home.is

    □ node - nft + ∨ □ û ··· ^ ×

           JS App.test.js
# index.css
                                           Local: http://localhost:3000
On Your Network: http://192.168.49.199:3000
          JS reportWebVitals.js
JS setupTests.js
                                          Note that the development build is not optimized. To create a production build, use npm run build.
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4. It will install all the packages and after completing it will open {LOCALHOST IP ADDRESS} copy the address and open it to chrome so you can see the frontend of your project.

