

Project Design Phase-I

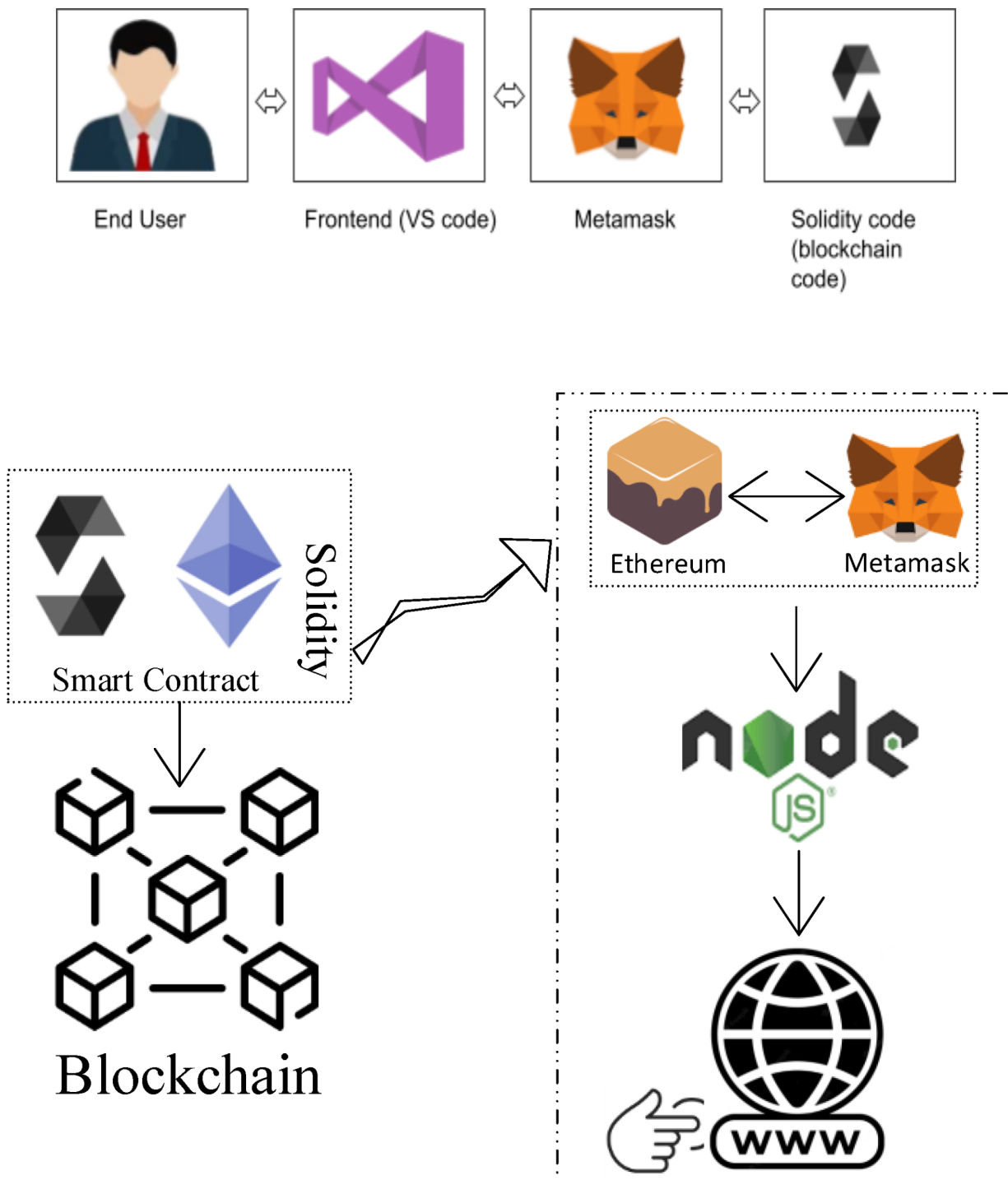
Solution Architecture

Date	27 october 2023
Team ID	NM2023TMID01883
Project Name	Powered Library management
Maximum Marks	4 Marks

Solution Architecture:

As information providers, libraries select, acquire, process, store, preserve and distribute information resources to customers. Innovative technologies like the blockchain have posed major challenges to education and library services. The main goal of the application of blockchain technology (BT) in libraries and information centers is to give all possible users in participating library systems unrestricted access to digital content and print collections while minimizing risk to protect each user's privacy and identification. A fresh and dependable technology called blockchain aids in the security, reliability and preservation of information. The 21st century's change agents' libraries are implementing new technologies to deliver the most knowledge possible in the shortest amount of time. It cannot be overstated how this technology has the potential to transform library services, operations and functions

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.
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.
6. select injected provider - MetaMask. In environment
7. Click on deploy. Automatically MetaMask will open and give confirmation. You will get a pop up click on ok.
8. In the Deployed contract you can see one address copy the address.
9. 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.
10. Save the code.

Step 3:

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

4. Open cmd enter commands

```
npm install
```

```
npm bootstrap
```

```
npm start
```

5. 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.

