

## PROJECT DESIGN PHASE I

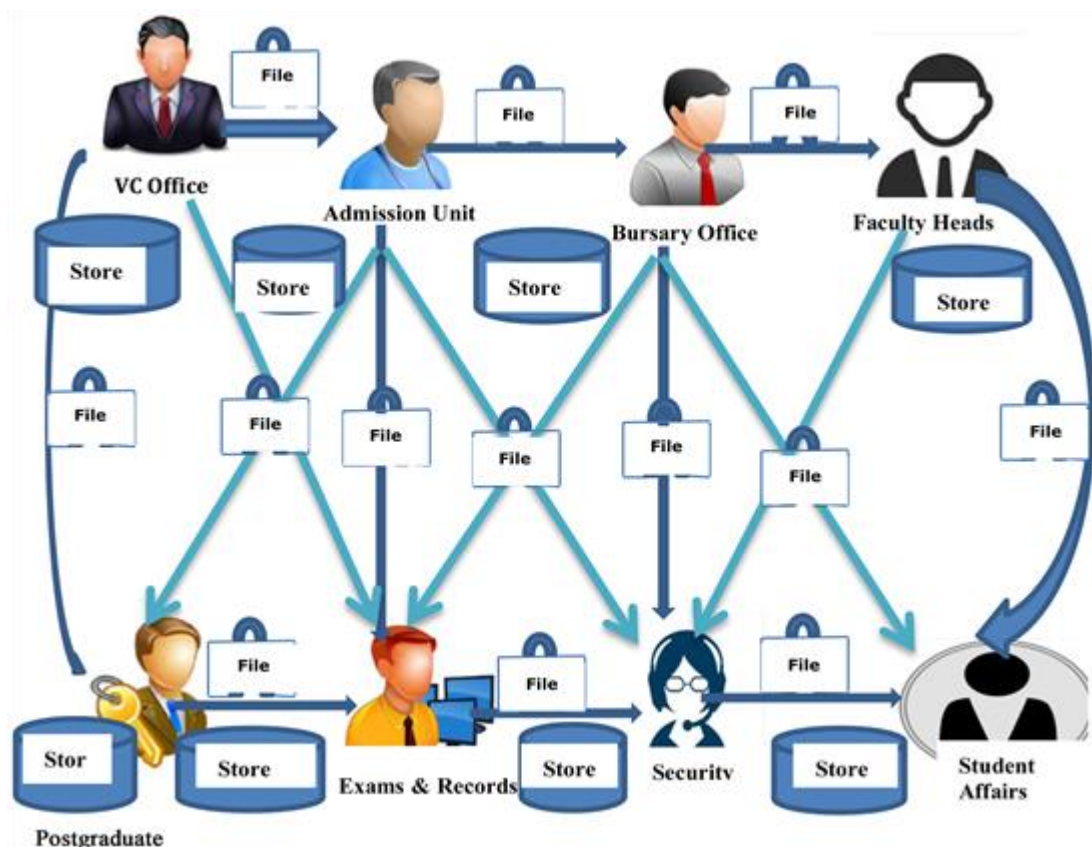
TEAM ID	NM2023TMID04391
PROJECT TITTLE	BLOCKCHAIN POWERED LIBRARY MANAGEMENT

### Solution Architecture:

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

- Blockchain architecture is the design structure peer-to-peer (P2P) network of computers that serves as a backend for applications and systems.
- This network is built to function as a unit (virtual machine) even though there is no central authority to manage the interaction among the nodes.

### 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

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### **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.