Documentation

There are mainly two clients:-

1. Uploader-client

   It is to upload the details of voter and candidate.
2. Voter-client

   It is to do the voting.

Uploader-Client

In this client , the transcations are done using a private key.Here it is hardcoded with the client but, in a working environment it should be given externally from a read only device.

Uploader client is divided into two sub parts:-

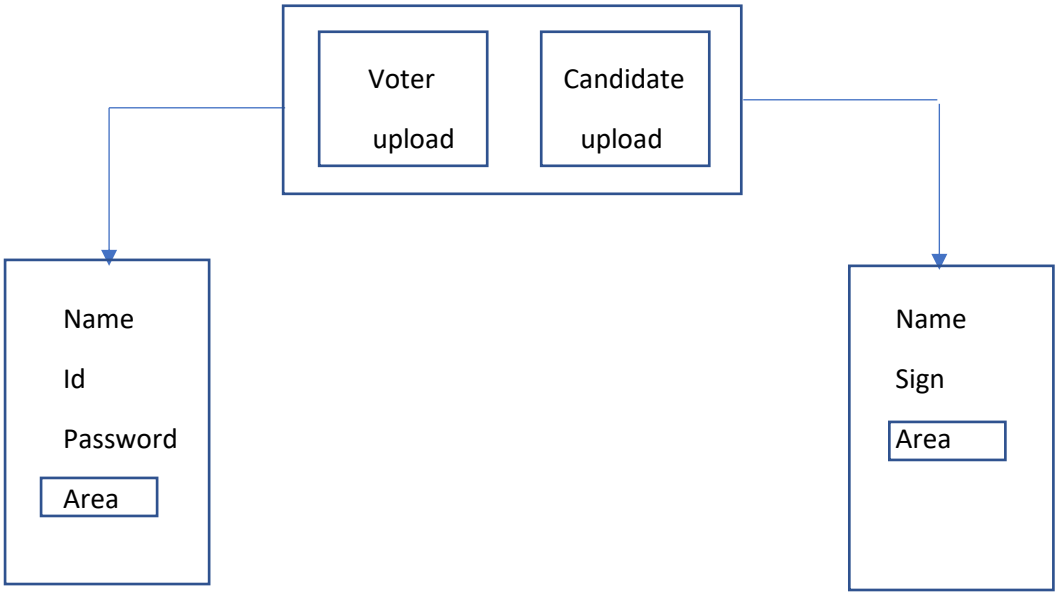
a) To upload the details of the voters

   The details of the voters specific to the respective voting stations are uploaded. The name , id, password and polling station are given as the inputs. The polling station can be selected from the dropdown list. Each polling staion has a unique identifying value.

b) To upload the details of the candidates

   The candidate name , Representational sign and the election area are given as the inputs. The Election area can be selected from the drop down list which is identical to the one in the voters.

Diagram:-


Voter
upload
Candidate
upload
Name
Id
Password
Area
Name
Sign
Area

Voter-client

In Voter-client, first the authentication takes place by checking the voters id and password.

- If the id is not valid, it will pop up a message a error showing invalid id.
- If the password does not matches, it will show an authentication error.
- If the user id and passwords matches, the voter is navigated to the next page.
- Then it is checked whether the voter has done a voting or not, if he/she has voted the page is redirected to the login page or else to the voting page. By default it is always false.
- In the Voting page,
    - The data is fetched from the state. The voter can vote to one candidate. All the buttons will be disabled after voting, so that the voter cannot change the candidate after voting.
- The option is directly send into the validator and the voting status of voter will be changed to true.

The /admin is used to publish the total number of votes acquired by the candidates. The data is fetched from the state.

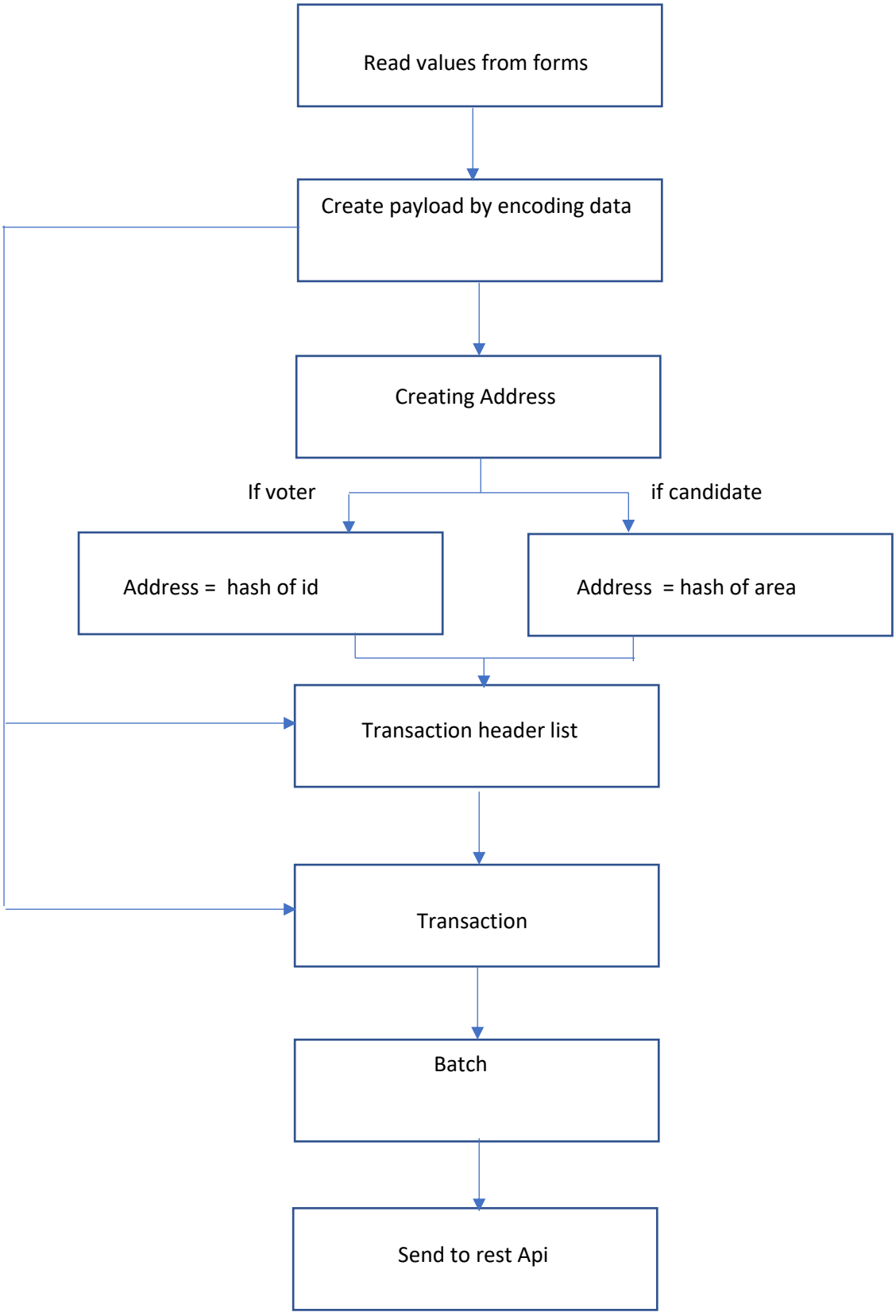
Diagram:

CodeFlow

On button click,

- The values are read from the fields and passed in through the SendData function by specifying the action.
- The payload is set with the passed values which are encoded.
- The Address is set for voter according to the voter id.
- The Address is set for the candidate according to the area of the candidate.
- Then the addres is sent to TranscationHeader which includes the family name, family version , batcher Publickey ,signer public key, Inputs, Outputs , Dependancies ,Nonce and Payloadsha512 string.
- Then the Transaction is signed with Transaction headerbyte.
- The batch is passed with the publickey.
- Then it is sent into the RestAPI

Diagram:


Read values from forms
Create payload by encoding data
Creating Address
If voter
if candidate
Address = hash of id
Address = hash of area
Transaction header list
Transaction
Batch
Send to rest Api