BLOOD DONATION – DESIGN DECISIONS

The dApp is created to make the blood donation transparent and decentralised. It helps us to know whether the blood donated reaches the needed and also donate blood as per request so that there is no blood wastage and spoilage. ejs template is used to implement the frontend and ethereum solidity contract is used in the backend. ejs template is very similar to HTML which makes it easy to design the user interface and ethereum as a backend will make entire app decentralised and transparent.

1. Donor registration

    Here the donor register his details to an authority who is registered as superadmin through the contract deployed by the authority. The details enrolled into dApp are

    - Name
    - Age
    - Location
    - Blood group
    - Medical condition
    - Mobile number

    These details would be mapped to an address which is given to user. The function 'setDonor()' will write these details to the chain.

2. Requesting blood

    The member of the network/ hospital can request the blood by providing details such as:

    - Blood group
    - Location

    These details are written to chain by mapping the details to the address of requetee. Function ' setReq()' write these details to chain.

3. Accepting request

    The registered donor can accept the request. Function 'requestAccpt()' is used in order to accept the requests by the potential donors.

4. transfer of blood donor coin

    the accepted donor is rewarded with blood donor coins to promote and encourage future blood donations. Function 'transfer()' sends the bdc coins to the donors account.