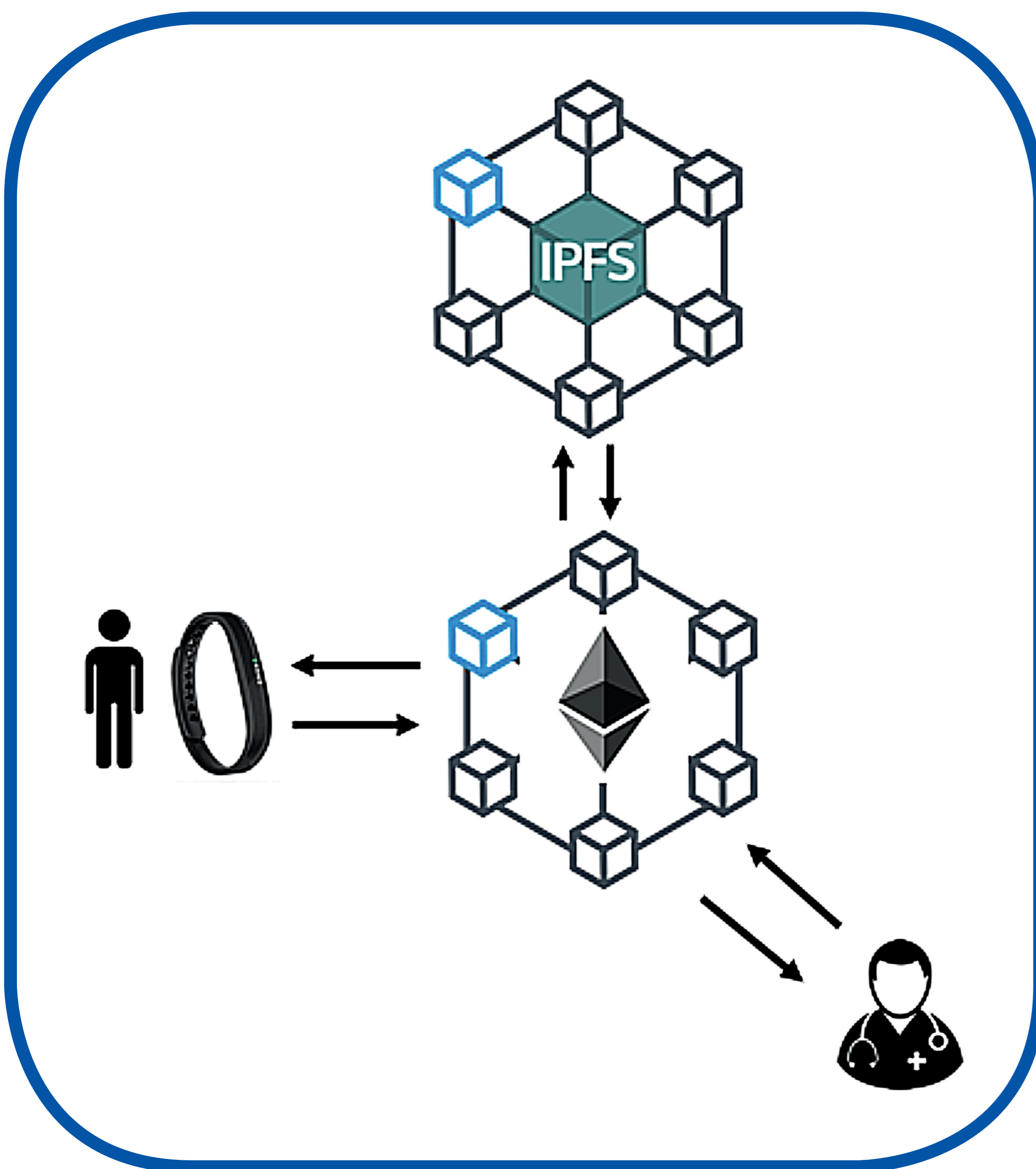


# Fitbit x Blockchain

Student: Hew Guo Wei

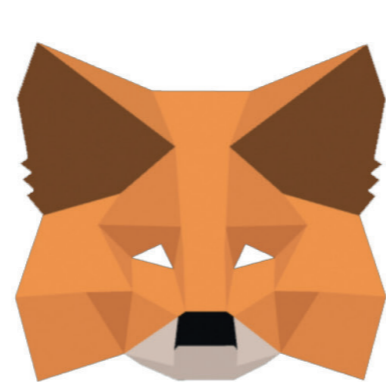
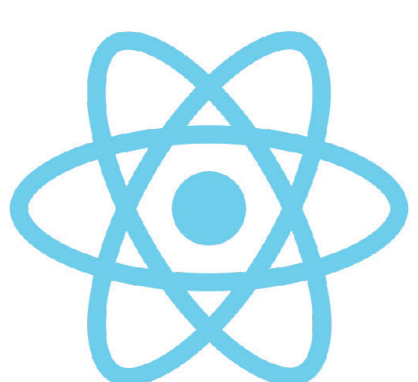
Supervisor: Professor Dusit Niyato

It is a decentralized application (Dapp) written using Smart Contract, deployed on the Ethereum blockchain. Primary functionality is to make use of the decentralized storage system, IPFS, to store health sensitive data with its content addressing hash encrypted and stored on blockchain. The Dapp also allows sharing of data with third party who might need to keep track of a user's health condition, eg. Doctor, family.



1. Sync fitbit device with mobile device
2. Upload fitbit data to IPFS network
3. Encrypt IPFS hash with public key
4. Append encrypted hash to blockchain
5. Reading of data decrypts the hash using private key and access the content on IPFS network
6. Sharing of data (with family/ doctor) encrypts data with the recipient's public key before pushing it to blockchain

## Development Tools & Platforms:



fitbit®