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FOUNDATION ENGLISH – II

Technical Talk

Digital Assignment - 2

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by

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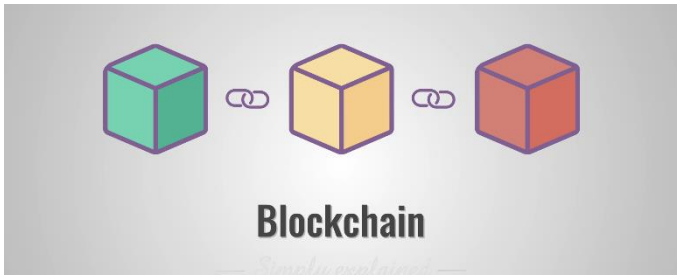
The technology likely to have the greatest impact on the next few decades has arrived. And it's not social media. It's not big data. It's not robotics. It's not even AI. You'll be surprised to learn that this technology is called the blockchain.

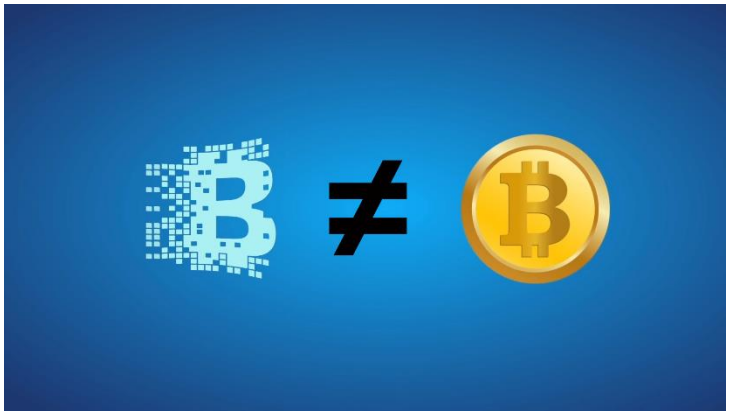


Now, it's not the most sonorous word in the world, but I believe that this is now the next generation of the internet, and that it holds vast promise for every business, every society and for all of you, individually.

Ladies & Gentlemen, Good afternoon. I'm Sharadindu Adhikari.

While researching about the blockchain technology, I've realised a few important things which I'd like to share with you:

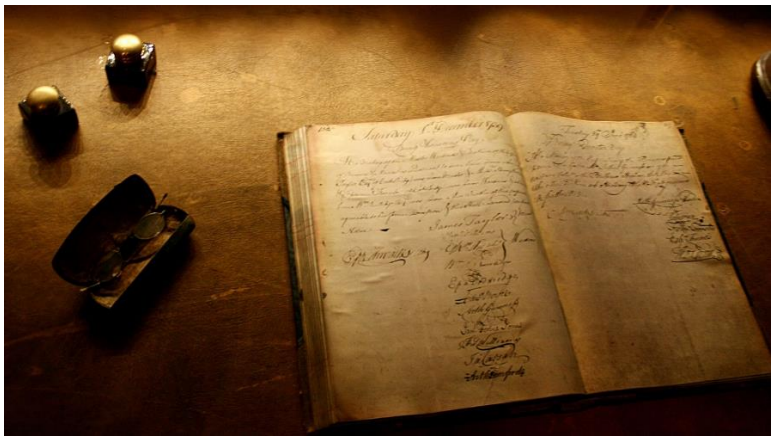
1. Currently, Blockchain is early, in its infant stage, like the internet in the 1990s. But it could be as big.
2. It isn't a use case of the internet, unlike ecommerce, or social networking, or email which are use cases of the internet. It is as fundamental as the internet itself is.
3. It sounds incredibly simple but it is very complex to understand.
4. It has the potential to change our lives in the next 20 years in the same way the internet has done in the last 20.



5. Finally and most importantly, blockchain is not spelt: B I T C O I N.

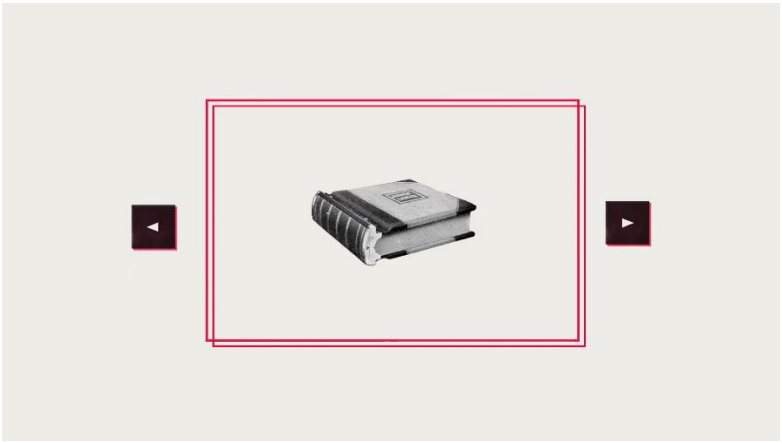
So, what is Blockchain? If I were to ask any of you this question, most of you would say that's the technology behind bitcoin, or cryptocurrency. While this was its original purpose, blockchain is capable of so much more..

There are various different ways to describe the blockchain. One of them is by thinking of one big ledger in the cloud.

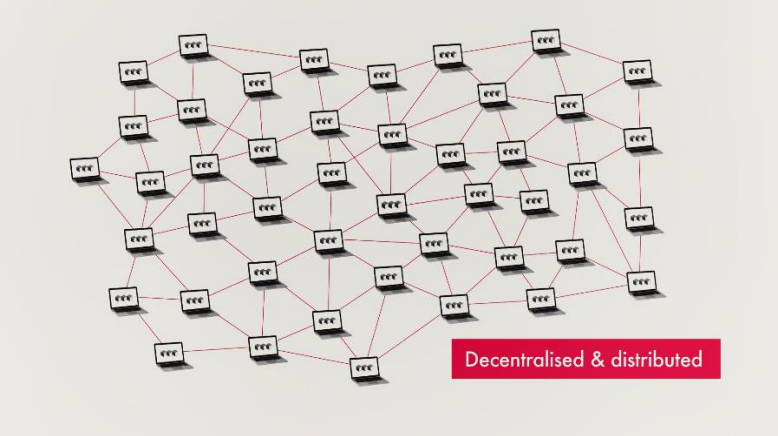


Now ledgers, despite looking like this are very important. Everything that you own including money are nothing but entries on a ledger. If I send money, for example, from India to a friend in Norway, it's not money which flies from here to there. It's an entry which happens in my ledger and another parallel entry which enters in my friend's ledger and money is transferred. Now the problem however is between my ledger and her ledger, there are a bunch of other ledgers. Many of them are owned by banks, money transferring agencies, financial institutions, insurance companies and each one of these ledgers have to be reconciled and updated and because you've to change so many of them, it creates friction. And this friction leads to time delay and cost. So the $100 which I sent to my friend, reaches her maybe 5 or 6 days later and only maybe $94 or $95 might have reached.

Now imagine, instead of this broken system, there had only ONE universal ledger.

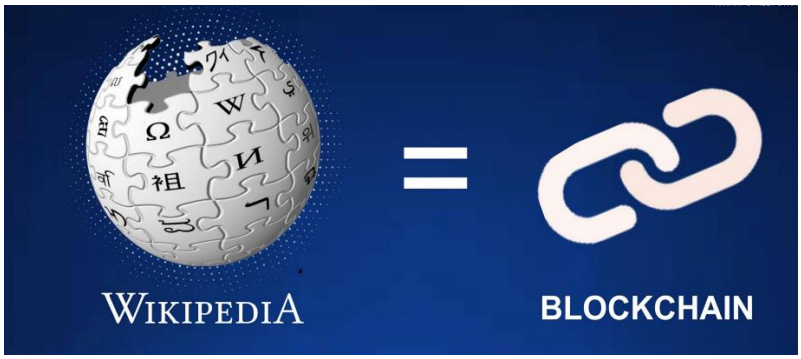


And all the people I've just spoken about: me, her, the banks, insurance companies, regulators are just participants in this ledger. Or if I use a slightly different language, NODES in that ledger. And everytime an entry had to happen, every single participant had to authenticate it.. So there is a real time authentication. Now this concept of a single universal ledger is what is the heart of a blockchain.



Also, this blockchain is protected by the best cryptographic algorithms available; so very slim chances of getting hacked. This creates an immutable, unforgeable record of all of the transactions across this network. This record is replicated on every computer that uses the network.

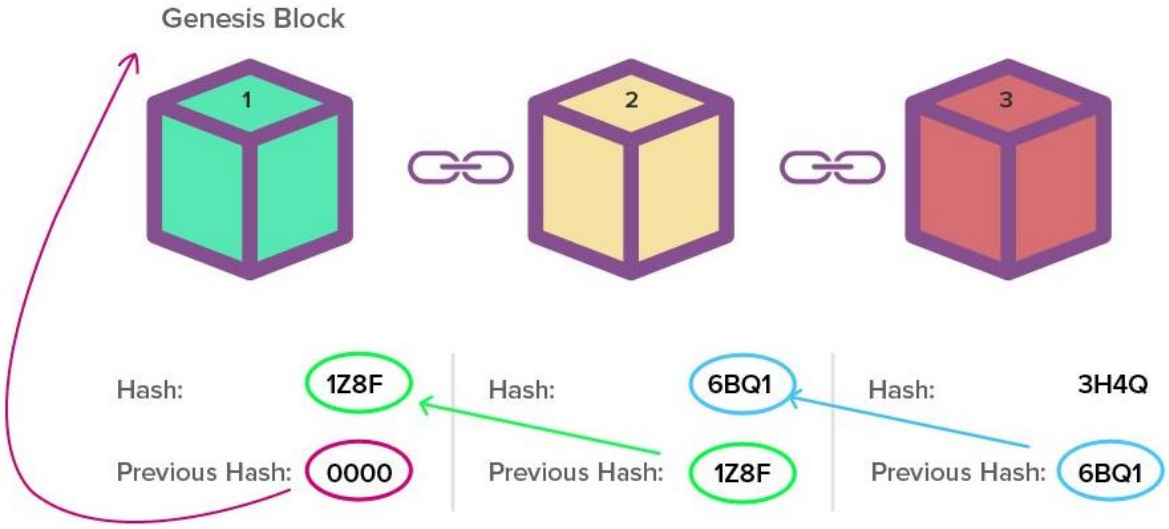
It's not an app. It's not a company. I think it's closest in description to something like Wikipedia.



We can see everything on Wikipedia, right? It's a composite view that's constantly changing and being updated.

We can also track those changes over time on Wikipedia, and we can create our own wikis, because at their core, they're just a data infrastructure.

On the blockchain, you can think of it as an open infrastructure that stores many kinds of assets. It stores the history of ownership and location for assets like the digital currency Bitcoin It could be a certificate, a contract, real world objects, even personal identifiable information. There are of course other technical details to the blockchain, but at its core, that's how it works.



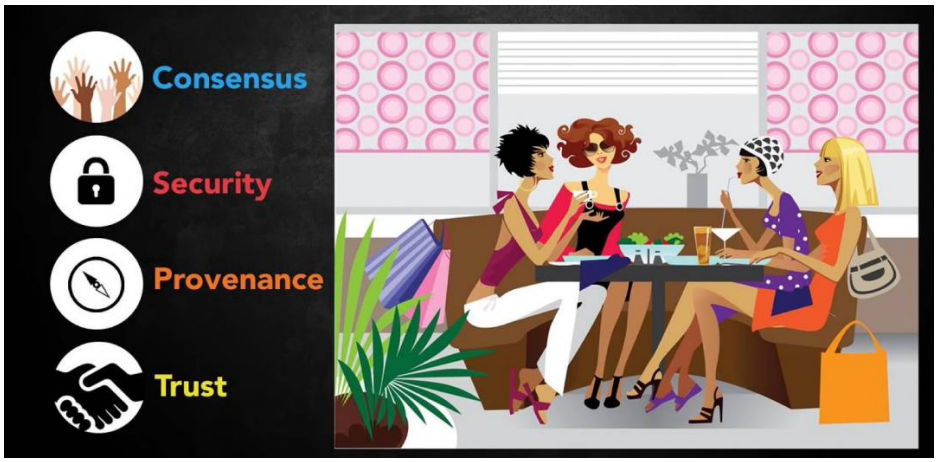
The other important thing is and so if a hacker comes and want to change a transaction details in 1 block, he/she has to simultaneously change every single block of that chain at the same time. Hence, super secured, driven by consensus, driven by immutability. The other important thing is since it is a chain, you can actually trace back any event (since it happens block by block by block, you can do that).

Finally, no one owns the chain. So, who maintains it? It's not 1 bank or single trusted authority. Infact it's the entire bunch of people. But to maintain this chain, you require resources, you require computing power, you require time and money. So after the 2008 Financial Crisis, Satoshi Nakamoto has invented this concept. He's an anonymous person; we don't even know even if he exists at all. He did a very brilliant thing and created a currency along with it and that currency was the incentive for all those people maintaining the chain. And that currency, because it was the bitcoin blockchain, was called bitcoin. And the guys who managed it were called miners – that's the word which we use today.

There's another way of thinking about it. Probably in a more 'friendly' way.

A blockchain is actually like a kitty party. You've heard of a kitty party, right? It's usually a bunch of women, getting together, having a good time and food, playing cards and 'exchanging' some money.

So, in a Kitty party, there are 12 women; everyone puts a ₹1000 each and there's a lucky draw and the lucky winner gets a ₹12,000. They put in ₹1000 each again and there's a lucky draw again and someone else will again get ₹12,000. Now as these women are putting in this money and this lucky draw is happening; if I'm one of the women, whom am I trusting? There's no superwoman there, there's no bank; I'm trusting all of them. I'm also trusting the fact that if they want to defraud me, most if not all of these women will have to be influenced. And therefore, I'm changing the concept of trust from centralised trust to distributed trust. It's this decentralised distributed trust which is actually the heart and soul of a blockchain.



Think of these women as nodes, the money as cryptocurrency and obviously there's this distributed decentralised trust around it. And so, the block chain really is useful when you've these four things: consensus, security because of the non-hacking possibilities, there's provenance as I said you can trace an event back, & obviously there's trust.

Now, I hope we'll have understood the basics of how this unique technology works and comes into play.

But before concluding the topic, I want to instil some insights to you guys: Technology doesn't create prosperity. People do.

But my case to you is that, once again, the technology genie has escaped from the bottle, and it's giving us another kick at the can, another opportunity to rewrite the economic power grid and the old order of things, and solve some of the world's most difficult problems, if we will it.

Thank you.
