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Summery:

Ethereum is this crypto-currency you can use to build “smart contracts”. To understand “smart contracts”, understanding the words “Trust” and “Contract” is the secret.

Mostly when we think of Bitcoin, we have a mental image of coins. In our minds, we see objects like digital gold or silver. Because these images are easy to understand, we forget about the thing that’s underneath it all. So, we should think of them as Digital Stone. We have this idiom: “set it in stone.” This means, when you carve something on a stone, there is a physical finality and permanence to it. You can’t make changes just like that. If you try to “erase” something later, it’ll be obvious. Any changes you make to it are pretty transparent and tamper-proof (provable). Because of this, we have a high level of trust in stone. A blockchain is just the above: a kind of material that, through a special mix of cryptography and decentralization, has the properties of permanence, transparency, and neutrality.

When we hear the word “contract”, we think of legal documents and lawyers. However, the go-to description is things that self-execute or execute automatically. Take a Diet Coke vending machine, for example. You feed in the money, Press the button and you have a bottle in hand. This whole thing was a small program (“contract”) coded (“written”) into the machine beforehand that ran when you hit the button (“signed off on it”). Computer code is kind of like a contract. It’s making statements and declarations. There are terms (if you do this… then…). and as soon as we meet the terms, it fulfils its end of the bargain.

Now, imagine there is a vending machine which says: “If you put in $1000, this machine will give you $5000.” This is exactly like the Diet Coke machine. The Same logic and the Same if-then process. Except now the stakes are different. You feel hesitant. You think about trust. “How do we know it has enough funds to spit out the promised $5,000? How do we know the code is going to run? Is there any way to publicly and transparently verify this code?” these questions pop into your head.

In the digital world where people can connect anonymously, trust becomes a tricky thing. So, to resolve this, we usually rely on third parties and other middlemen for that reason. If only you could marry the automation of traditional programming and the trustworthy properties of the digital stone. Well, that is exactly what a smart contract is. It’s just a code with exceptional backing to provide validity that your work will get completed safely.