No, not Ethereum. Rather, Ethereum Classic. That is what we’ll be discussing in this lecture.

So getting started with cryptocurrencies is often complex for beginners as it is, but, when those getting started find out one cryptocurrency essentially has two versions, it starts putting doubt into their mind on how to get started. That’s the case we have with Ethereum, and Ethereum Classic. Many people are confused by the two; how do they differ? Which should we actually be getting involved in? I’m going to break Ethereum Classic down for you, so you know exactly what it is, as well as how it differs from Ethereum.

Before we get started I want you to be aware that, if you weren’t already, that the Ethereum ecosystem works on the basis of Smart Contracts. These are automated contracts that enforce and facilitate the terms of the contract itself. Now that’s cleared up, lets move on.

So before delving into what Ethereum Classic actually is, it’d be useful if you understood how it actually came about. Let me take you back a few steps, and first mention The DAO, which stands for The Decentralized Autonomous Organization. The vision for The DAO was to become the middle organisation between the Ethereum network, and DApps that wanted to be deployed upon the Ethereum ecosystem. DApps simply means Decentralised Application. By purchasing The DAO tokens, you’d then be entitled to voice your opinion on the direction of DApps.

Lets say you had a DApp that you wanted to publish, if The DAO went ahead as planned, this how the process would’ve worked:

1. Get your stamp of approval by the curators, basically known figure heads in Ethereum.

2. Get your DApp voted on, by The DAO token holders.

3. If your DApp proposal get a 20% approval vote, then you can get the funds to start.

The potential this project had was incredible, its key value propositions were that it offered flexibility, control and complete transparency when it came to deploying DApps. The crowd-sale for The DAO raised over $150 Million in just 28 days, people were hungry to get involved in this!

I won’t get too in-depth into The DAO, that’ll be for another episode, as it opens up a whole new can of worms. But in short, there was a condition in the smart contract where you could exit from a DApp you pledged your tokens into, but, you’d have to hold that Ether for about 28 days before you could re-use it. So all sounds great at the moment? But that in itself, was a loophole which was pointed out to the creators of The DAO, who re-assured the whole community it wasn’t an issue. However, as time shows now, this was the exact thing that caused the Ethereum split.

Now if you as a token holder of The DAO wanted to exit, you’d simply do so by sending a request. The splitting function, which was designed into The DAO - but is a little more complete, would then take the following two steps:

1. Give you back Ether in exchange for your DAO tokens.

2. Register the transaction int he ledger, and update the internal token balance.

Moving forward now, during June 2016, someone exploited that exact loophole with The DAO - where you’d have to hold that Ether for about 28 days before you could re-use it, and managed to take approximately $50 Million Dollars worth out it. An obscene amount!

What the hacker did was alter the process we just mentioned, in regards to how you’d exit a DApp if you were holding a token. So this is the step the hacker took:

1. Took The DAO tokens from them, and gave them the Ether requested.

2. Before the transaction registered, the code went back to transfer more Ether for same tokens.

3. Carried on until $50M worth of Ether was taken out, and stored in a Child DAO.

So that’s how the hacker worked on trying to get this obscene amount of money out, but, remember where I mentioned that the funds had to essentially sit there for 28 Days before they could be used again? Well this is where the Ethereum community jumped in!

Soon after this, the Ethereum community decided they had three approaches to take. One, they don’t do anything at all. Two, implement a soft fork. Three, implement a hard fork.

The initial plan was to go with a soft fork, but, they realised that implementing this would result in a Denial Of Service attack. So the only other option, was to go with a hard fork. A hard fork is different from a soft fork in that, once it has been implemented, there is no going back, and all users must upgrade to continue interacting with it.

This split which was aimed at refunding all the money that had been taken from everyone during The DAO, caused huge controversy. This eventually led to those who were ‘anti hard fork’ refusing to upgrade, hence renaming the old blockchain Ethereum Classic. Whilst the new chain moved forward with the original name, Ethereum. So that’s how, and why, Ethereum Classic was formed.

You might be wondering, why did people oppose this decision? Especially as the founders of Ethereum such as Vitalik Buterin, were moving to the new chain? You see the answer to that, is a lot more complicated than it seems. It’s based on the fact that blockchain technology, the likes Ethereum, are supposed to be resilient against human whims, so by hard forking, you’re defeating its purpose which is to be a stance against financial corruption.

Remember, as ETC is running on the older chain, it isn’t able to gain access to the updates that are rolled out to ETH. One of which will be the switch from Proof Of Work, to Proof Of Stake. It gets a lot more political within the ecosystem in regards to this whole debate, but, for this lecture it’s not what we’re discussing. It really does open up a whole new spectrum.

But just before we end on this lecture I want to run over one key pro and con of Ethereum, and Ethereum Classic with you.

Lets start with the pro for Ethereum Classic first: follows the core purpose of this technology, which is immutability.

The con for Ethereum Classic is: doesn’t get access to all of the new updates made on the Ethereum chain.

Lets now cover a pro of Ethereum, so a pro here is: ethereum is constantly updating, with a growing group of partners such as the Ethereum Enterprise Alliance.

Then the con for Ethereum is: goes against the policy of immutability.

So that’s everything for this lecture, but it does bring into question, where do we see Ethereum Classic going. No one really knows for sure, one thing we’re certain of is that the value in cryptocurrencies come from the trust that is placed within it. Ethereum has a huge advantage here with the formation of the Ethereum Enterprise Alliance. But that’s everything on what Ethereum Classic is, and more importantly, how it was formed.

See you in the next lecture where we’ll be talking about Monero!