*Showing my World to a 9 year Old*

ClearText.

Pendown.

Turtle move Forward.

Remember these commands from the elementary class “programming” language that you learned in your school? For me, it was always a moment of delight to be able to use LOGO for developing programs. A feeling of superiority filled me in as if I have gained exceptional intellect. But, that was a decade ago. Now when I look back and compare it to what students are learning today, I am amazed. I came across this marvelous web-based teaching curriculum developed by two Stanfordian Jeremy and Zach, known as CodeHS. They have planned out various courses for the young generation based on Python, JavaScript and Augmented Reality(AR).

Days are not far when a 9-year-old child would have chapters about machine learning and artificial intelligence and data mining etc. So here is a list of a few terms, children can be taught using simplistic examples. To be precise this is how a one can explain a 9-year-old the world of computer science.

1. Machine Learning / Artificial Intelligence :

If you were a pokemon fan, you definitely remember the pokemon detection device used by Pikachu's trainer Ashley. He used to click a picture and the device would instantaneously recognize the Pikachu and layout details about it. The device is the best example of machine learning.

How do you recognize a thing or a person every time you see them? Maybe you remember their names, complexion, eyes, height or some other feature, so that the next time you see them, you can recognize them immediately from your past knowledge. Machine Learning is the same concept. But this time, the machines are trying to remember and recognize things. And that is how our pokemon detection device worked.

The Machine remembers the yellow color, two ears, black stripes, big oval black eyes and red dots on the cheek, and promptly recognizes the Pikachu. Not only the Pikachu, it can remember and recognize each one of them by learning on the features.

1. Blockchain Technology :

Chit Games are always the best part of the recess. But recalling the scores of the previous day is the worst part of it. However we all had this reliable sweet person in our group who would keep track of all the scores in the back of his/her notebook. Yet there was always this one person in the group who would never agree to his or her score. He/She would blame all of us for cheating him/her.   
  
So some of us started keeping track of the scores. But then on some occasion the Gang Leader would demand changing scores because it's his/her best friend’s birthday. We all faced this unfair scenario. Haven’t we ? Result, we all had to waste the last page of our notebook keeping track of scores. And hence no change in the scores would go undetected.

Coming back to the actual scenario, imagine if someone changes your crucial data, like bank balance. Blockchain technology uses the same concept as above. Everyone has a copy of all the transactions. Hence, no one can hack and change the balance of any one person. It cannot be reflected back to so many people.

1. Open Source

And if I ask a kid, “do you like maggi?”. My question might offend them. Who doesn't like maggi? Some people likes to add ketchup to it, while some people add cheese to it. Infact, Maggi had once launched a campaign of “Me and Meri Maggi”. In this campaign, people were asked to share their story of how they cook their maggi.

This campaign is the best example of the term “open source”. Nestle Maggi made their noodles and spices publicly available to all. Now it's totally up to you, how you want to modify your recipe. The result would always be something that suits your taste bud.

This is what open-sourcing is all about. The programmers and developers make their codes available to us and we can modify it according to our needs and demands. The resulting software and code can be shared with anyone we want just like the delicious maggi.

1. Immersive Experience

Daydreaming, a common experience we all had. We all had fantasies of being in situations like getting an award, getting our favourite toy, going to a place we always wanted to visit. And a moment comes when we almost forget about what all is going around us. Our imaginative brain has so much potential, that it can partially detach us from our actual environment and take us to world which never really existed.

Immersive experience, is much like daydreaming, but this time it's not our brain, it is the computer which creates highly evident simulations. This experience is so authentic, that our brain partially forgets what part of it is real.