Discussion on Web 3.0

Nowadays with the technology developing, we more and more often here the term "Web 3.0", it seems that anything new in the field of internet can be called an application of web 3.0. But what is the actual and precise definition of it, and what are its features and principles that makes it different from web 2.0? Well, that is exactly what this discussion is about.

The definition of Web 3.0

Firstly, what we have to know is that actually there isn't a well-accepted definition of web 3.0 so far. Just like Elon Musk's concern about web 3.0 to be only a buzzword or marketing term, I think it is more than an advertising concept than an actual new webwork technology. [1] However, it doesn't mean that the term is useless. We can just see web 3.0 as an umbrella name of the next generation of world wide web.

The evolution from 2.0 to 3.0

Trying to get a clearer view of the web 3.0, we should have a general understanding of the history of world wide web.

The first generation of world wide web was invented in 1989 by Tim Berners-Lee. Back then the web only consists of simple parts like web servers and web browsers and the users of the internet can only read information from it.

So around 2004, with the development of HTML and the invention of Java Script and other webwork managing tools, a more interactive internet environment has occurred. Platforms and forums that allows users to interact have merged, and people call this second generation of world wide web the "web 2.0".

However, this generation of web also has its drawbacks like lack of security, privacy leak, unintelligent searching and so on. So recent years, a group of new technologies and web applications that aim to solve these problems have emerged and that what we call the third generation of world wide web.[2]

Features and principles of web 3.0

From the discussion above we know the main problems the web 3.0 wants to solve. Apparently, it's features and principles are also related to the problems.

Decentralization is one of the most important features of web 3.0. With the invention and the development of the blockchain technology, users can rely less and less on a central controller. The concepts of cryptocurrency and NFT are typical examples.

Secondly, web 3.0 is also trustful and secure. With the features of being heavily independent, we don't have to concern about information and privacy leakage such as the online sellers get our brows histories and try to sell products we recently browsed to us.

Also, we won't this much rely on the "big Tech companies" anymore since we can build our own internet facilities like our own databases and things. This is also a feature and principle of web 3.0.[3]

Lastly, semantic web is also a feature of web 3.0. The two features above are mainly developed form the technology of block chain, while semantic web is a concept that is more related to machine learning and artificial intelligence. I think all of us have encountered situations when we try to search something on google and just can't get the correct results we want only because we haven't included a certain keyword but a similar word instead. This problem is because the terms that human see as similar may be exactly irrelevant for computers. The semantic web is just aimed to solve this inconvenience.[4]

Conclusion

In conclusion, the concept of "web 3.0" isn't that mysterious since it is just the umbrella concept of all the changes made trying to solve the problems left from the era of web 2.0. Security from decentralization and higher intelligence with the help of AI are its main features and the principles it maintains, also the differences it has compared to web 2.0. Let us wait and see how will it affect our future lives.

References

[1] Macaulay, Thomas (December 21, 2021). "Elon Musk and Jack Dorsey are right to raise concerns about Web3". TNW | Hardfork. Archived from the original on April 18, 2022. Retrieved April 18, 2022.

[2] Wikipedia contributors. (2022, November 16). History of the World Wide Web. In Wikipedia, The Free Encyclopedia. Retrieved 03:53, November 27, 2022,
from https://en.wikipedia.org/w/index.php?title=History_of_the_World_Wide_Web&oldid=1122195076

[3] Liu, Zhuotao; Xiang, Yangxi; Shi, Jian; Gao, Peng; Wang, Haoyu; Xiao, Xusheng; Wen, Bihan; Li, Qi; Hu, Yih-Chun (2021). "Make Web3.0 Connected". IEEE Transactions on Dependable and Secure Computing. 19 (5): 2965–2981.

[4] Wikipedia contributors. (2022, October 21). Semantic Web. In Wikipedia, The Free Encyclopedia. Retrieved 03:56, November 27, 2022,
from https://en.wikipedia.org/w/index.php?title=Semantic_Web&oldid=1117301382