**Emerging trends document – Calvin Hong**

**Research Topic: Blockchain**

The blockchain is a relatively new concept published in 1991 by Stuart Haber and W. Scott Stornetta. It uses a distributed ledger technology. This technology allows data to be extended but prevents alterations in past entries. This makes the blockchain transparent and more trustworthy. The first implementation of the blockchain was Bitcoin in 2008, created by a person or group with the alias Satoshi Nakamoto.

Just like crypto currency, Non Fungible Tokens (NFTs) are also stored on a blockchain. But unlike crypto currency, each token is Non Fungible like the name suggests. This means that each NFT is unique and different, but all bitcoins are the same. If you trade one bitcoin with another bitcoin, you will still end up having the same thing. NFTs are typically deployed on the Ethereum network, but other blockchains like polygon and solana also support NFTs.

The first NFT was called “Quantum” and was created by Kevin McCoy in 2014. The NFT was a GIF of a pixelated octagon with many circled in them pulsating in different colors. There was no interaction for holders of the Quantum NFT compared to more recent NFT projects. Current projects let their holders make use/interact with their NFT by letting them enter giveaways, breed their NFTs, or stake them to gain currency or items.

There are many factors involved in making an NFT project successful. A good minting start and community management are a couple examples. Arguably, interactivity plays just as big of a role, as it keeps the holders active in the project even after the minting phase. A method of keeping holders active is letting them use the NFT in a game. Adding a game element can also make the project more unique and in turn more successful.

This all resulted in the following main research question:

**How can an NFT project increase its holders interactivity by adding a game element?**

To answer this questions, sub-questions have been made:

* What is the blockchain?
* What is an Non Fungible Token (NFT)?
* What are smart contracts?
* What is important for creating and managing an NFT project?
* What blockchain is most suitable for a game oriented NFT project?
* What type of game are most suitable with using NFTs?

Alongside the research questions, an example project will be created as suggested in canvas.

The intended deliveries with this research is the answer to the main research question: how can NFT project can increase holders interactivity by adding a game element.

Alongside the research questions, an example project will be created as suggested in canvas. This project will be focussed on NFTs with the goal of understanding the basics of the blockchain and NFTs.