Meeting #1 Review
February 28, 2021

- Limited knowledge of blockchain and NFTs

Micheal states he is “not an uber expert on blockchain or NFTs, they are new technologies [he] is getting his head around”

- Determining what is realistic vs unrealistic

Micheal may ask us to do things that are completely not capable of being done, which is where we will need to do research to see if something is feasible or not.

- General description of our job by the professor

Professor states we will need to “gather requirements, do research, to start building something for [Micheal] so by the end of 13 weeks [the team] will have something to show that we have started down the path to get [Micheal] something engineered”

- Stakeholders’ expectation

Stakeholder is “not anticipating [us] to have the entire app done” he is “looking to have more of the design discussion done than something physical but [he] is looking for something like a prototype of some sort at the end”

Stakeholder discussing the virtual university

- What is a virtual university?

“It is a virtual university/meta university where it’s mostly online but the difference is we will be using NFTs (non-fungible tokens) as our methodology for having people certified in certain things/topics. For instance, computer science, designed technologies, physics. [Stakeholder] does not care what the subject is. The goal at the end is we have both educators and students. The students will belong to each virtual university, they can belong to multiple. Based on who the virtual university has as their professors will indicate which courses can be taught at that virtual university.”

- How does that happen?

“A teacher or a professor or an educator is going to be certified in different topic areas or skills. When they go past those skill areas and when they’ve taken a test, been interviewed in so forth and are not capable of doing the training themselves. They will be given an NFT for that skill, that is non-transferable, non-expiration, or it can also have an expiration meaning that this is good for three years and that when this expires you have to get your skill recertified.”

- The actors in the system

1. A university
    a. It's either a single person, a group of people, an organization or a real university (it doesn't matter) that will be opening up a university.
2. Students

    a. They want to come into this metaverse because they want to get an education of some sort whether that's on a skill or a full education (it doesn't matter).
3. Educator/Professor
4. UNKNOWN ROLE?
    a. We need to brainstorm what the fourth role could be. Micheal said it is not a school administrator but close.

☐ TO DO: Figure out the fourth role in this metaverse

When a university is starting off, they have an empty building. They have no students because they can't teach anything because they haven't hired any professors. Their first task is to hire professors so they'll put jobs out there in the bidding market. Specifying the topic they need a professor in, the amount they will be paid, the currency and a bonus may even be included based on the amount of students taking the class.

- What happens when a virtual university opens/created?

General summary: When a university is created the only way for them to have any courses that other people can take (meaning: make money) they need to have the proper professors/educators with the proper credentials for that set of classes.

For instance, lets say its a university and they want to teach calculus:

1. They will go out in the market within our metaverse, place a bid for someone with credentials for calculus.
2. That bid will go out there
3. [Stakeholders] want to have a way to match up people with credentials with bids
4. Once a professor accepts said bid they can't take that credential and use it anywhere else until they are released from that university.
    - [Stakeholder needs a way for that credential to get attached to that university]
    - Meaning: an educator can be a calculus professor for one university with the calculus credentials and another university teach physics with the physics credentials. The credential will dictate the subject and university.

"The document is something to look at. [Stakeholder] is not concerned with how it all flows, it is simple enough to add to. For instance, how big a virtual university can be, how many professors they can have and so forth."

The virtual university will be courting different professors to fill in what kind of course they want to offer.

★ We will not worry about where the platform is, that is going to be doing the actual online or the self-paced learning. There are a million of them out there, not worried about that side.

They will basically be bidding for these professors in some sort of currency. They can be providing a fee based on:

1. Who they are
2. How many classes they teach
3. How many students sign up for a class

- [ ] TO DO: Decided on the bidding system we will want to employ. (Goal is to create something with the blockchain to keep track of the ledger of what the bidding is until something gets accepted). We want each university to have a **blind bidding system**. Meaning that each university will put in what they want to offer. They will not get to see what the other university is offering.

Each student that signs up for a class will be paying some sort of tuition and each professor will be required to provide office hours or questions/ answers. Even if it's a self-paced class we do want to have some level of proctoring so the students have a way to go if they have questions. Students can take as many classes as a university were to have. They could also be part of multiple universities in this metaverse. We could have multiple universities set up in the metaverse.

“In the document there is a concept about small, medium and large universities. How is a metaverse going to pay for itself? Each university will have to pay money to be part of this metaverse. They will need to pay their professors as well as any ancillary thing they need to give out. For instance, giving out an NFT cost money. If you were to go on to any of the different blockchains that support NFTs, basically creating an NFT could cost you $1,000. So, we are going to have our own private blockchain that we can set up.”

- Research: how to set up a private blockchain
- [ ] TO DO: The team will need to do some research on how to set up a private (internal) blockchain and decide what language to use.

The stakeholder “has some stuff [he] can provide to [us] later but is looking for [us] to do the research on creating our own private blockchain so there will be no cost associated with us creating any NFTs for certifications.”

“We will be creating our own internal blockchain for this semester and it can be run on one machine so its node is 1. It makes it easier and free for us. We just need to have someone's computer that we utilize as a mechanism. There are multiple ways of doing it.”

- The biggest obstacle

“Right now professionals have to get certifications. For example, teachers have to get certifications, they have to have continual education and it’s very informal. One of the things Micheal and Marco would love to do is whatever idea we come up with, we make it a standard.”

“For example, if company X has an accredited credit system NFT and they give it to a teacher within this organization that all these other organizations are tied to, the certificate will be recognized as a valid set of credentials.”

- Power of NFTs

“The power of the NFT is the fact that it can be tracked through the blockchain and there is a lot that can happen within the blockchain to validate it.”

- The issue with blockchains

“The biggest problem with blockchain is it is resource intensive and power hungry. The ledger that it keeps track of requires a lot of distributed computing and to redo some of these hashes. It is not the most efficient way of doing things.”

- What Micheal expects from us

Micheal is “not going to divulge every little thing [he] is looking for the team to ask questions on a lot of the different topics to pull the ideas from Micheal and Marcos.”

“Looking for a lot of feedback from the team on what [Micheal] is doing/wants”

- “Normally what is done when someone is a system analyst designer. The stakeholder has an idea but doesn’t know the details or what needs to get done. They may only know a very small piece but don't understand how a system has to integrate into other things that are there. Whether it’s something in house or something that is currently out in the market.”

Minutes

- Figure out the fourth role in this metaverse
- Decide on a blind bidding system
- Research how to set up a private blockchain
- Discuss the language that will be implemented