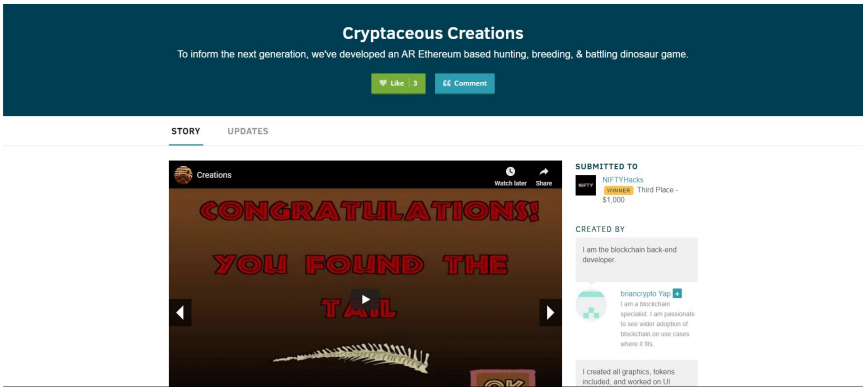
Cryptaceous Creations

An Educational Tool for Blockchain Comprehension.



Opportunity

Brief

July 2018 to August 2018

Position : Product / User Interface Developer

Sponsor : NIFTY (Hong Kong Organization)

Industries : User Experience, Computer Science

Need Statement : Your hack should either be focused on: a) a blockchain based game, b) incorporating the use of Non-Fungible Tokens (e.g. ERC721 Standard), or c) tooling to enable the crypto asset ecosystem.

Timeframe:

July 2018 to August 2018

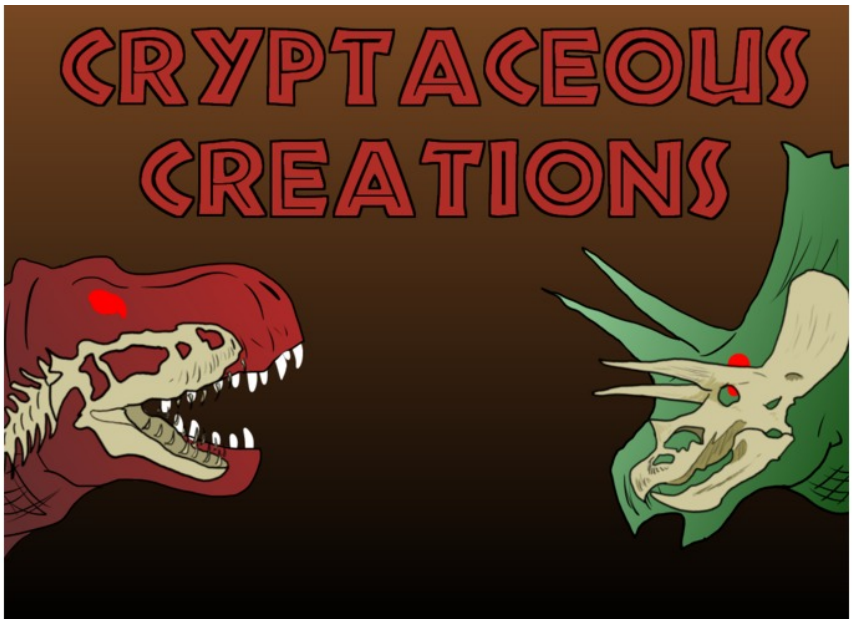
Goals!

- Develop the rough prototype in 20 hours

- Make it user friendly to the target audience (i.e. 5 to 15 year olds)

- Make it usable in China, Russia, and America

- Implement Blockchain into the system to enhance its capablitieties. (i.e. make an app that works with or without blockchain)



Inspiration

Me and my teammates, despite being collegiate students, all agree that we are very childish. We love watching childish shows, playing novel games, and randomly singing Disney songs. So when we saw a hackathon with an open ended need statement, we knew this was a perfect time to appeal to kids around our age. . . or at least . . . our mental age. So we decided that we would make a dinosaur game because a lot of kids where we are from all seem to like dinosaur related games and toys. That way, by using a pre-existing icon that kids enjoy, we knew if we made a dinosaur centric blockchain game, we could inform members of the next generation about the basic concepts of Ethereum by giving them a chance to use NFT Tokens early on.

What is it?

This is a mobile game that implements blockchain systematic to create a collecting, trading, and battling environment with Unity and Remix software. The game focuses on hunting for fossils in AR, collecting them, synthesizing dinosaurs from the fossils, and battling, selling, and trading the synthesized creatures. Dinosaurs and fossils will be kept track of using blockchain system in a characters inventory as well as purchase other dinosaurs and fossils with tokens earned though the game.

How did we build it?

Since this game is targeted toward the next generation of mobile gamer, our project needed to have a strong, modern user interface. So, by using Unity and Vuforia, we developed an Augmented Reality mobile game that would work off of cameras of the user. In order to make an

interactive program like this, we had to use C# scripts in addition to 3D Modeling (like with Blender) to develop our 3D Parts

What challenges did we overcome?

From the back-end development, the main challenge is integrating between unity and block chain. This is due to lack of knowledge of developer on writing C# and NEthereum. At the end, back-end we only build the marketplace with the integration of unity and block chain for the future.

What did we learn?

We are proud of how, despite the issues, we encountered within the 20 hours, we were still able to produce a cool working AR game! We we able to complete a functional prototype of our app as well as learn to over common communication issues to complete a common goal.

During this project, we learned not only about how difficult it is to connect Blockchain to Unity and mobile apps, but also how difficult it is to work with Augmented reality as well. A prerequisite for our project seemed to have been an extensive understanding of how to write C# scripts and model special tokens with variable changing colors. While their was a steep learning curve for the past 18 hours, we learned how to control 3D objects, use C# logic in practice, and apply the engineering design process to a very vague problem.

From the front-end, we knew we needed to focus on the User Interface and simplifying the User Experience in order to get kids to not only be interested int he game, but also keep playing it. Developing the unique color schemes and C# scripts needed for Unity and Affinity Photo was more time consuming then we planned for . Fortunately, by simplifying our C# scripts, we saved a lot of debugging time the Unity Objects.

But from a personal perspective, we mainly struggled with our lives outside of the hackathon. Two of our members had exams the next morning, so we had to finish the project before they had to go to class. And three of our

members were all first year university students, each from different countries, with common misunderstands that came from speaking English with working together.

What have we been doing to upgrade Cryptaceous Creations?

-Full integration of unity with Ethereum specifically on digital asset i.e. dinosaurs and gems.

-Digital assets on market place utilizing maybe 0x.

-GPS based on the user interface.

-Complete the Battle Game Play.