

blockchain modus = gamer's zenith



arcade

Project Paper

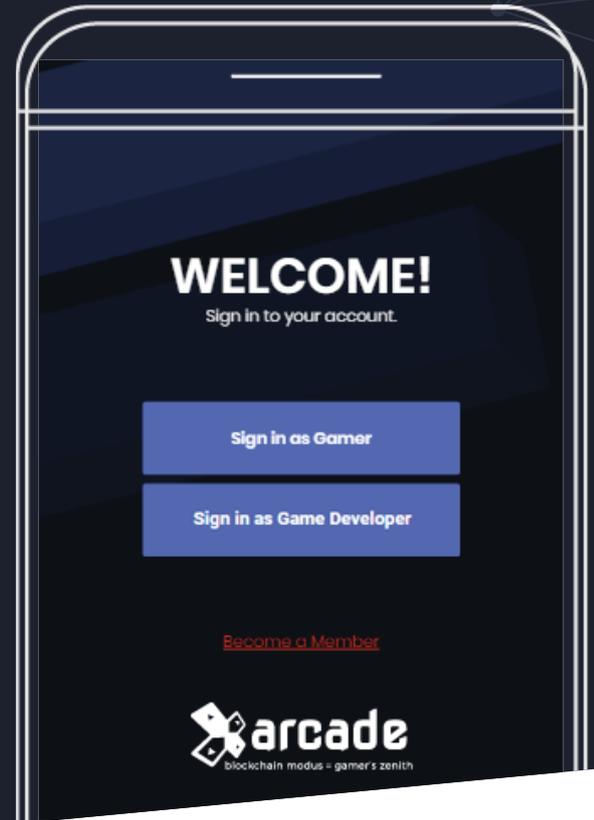
Visit <https://xarcade.io>

Introduction



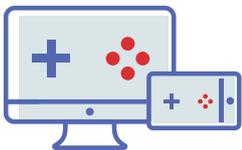
At present, video gamers and video game developers face many challenges concerning the maintenance of their various in-game balances. These challenges include the two-way exchange of their in-game credits (the currency/points in a game), the transfer of the in-game credits from one game to another, the requirement for linked credit cards for in-application purchases, accessibility to digital wallets such as through Google or iTunes and excessive revenue sharing with digital wallet providers.

To solve this issue, we are building Xarcade: a NEM and ProximaX-powered exchange platform for video game in-game credits, and functions as a cryptocurrency video game applications store (the platform and its services). The objective of Xarcade is to offer a new method of exchanging and handling in-game credits to benefit our users.



Document Definitions

In this Project Paper, the following definitions apply unless the context otherwise admits:



AAA Video Game

AAA (“triple-A”) refers to a video game produced and distributed by a mid-sized or major publisher, who typically has a higher development and marketing budget. It is considered a “blockbuster” with marketing budgets in the millions.

AAA+ describes games that generate additional revenue over time-as do MMOs, by using software as a service (SaaS) such as season’s passes or expansion packs. Xbox 360 or PlayStation 3 game consoles such as Halo 3 had a development cost of around \$30m and a marketing budget of around \$40m. Now games such as Grand Theft Auto V cost around \$265m.

Due to these high costs, indie gaming was a reaction to provide choices in game tier, pricing and availability.



API

An application programming interface.



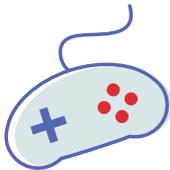
Blockchain

A publicly accessible ledger of all cryptocurrency transactions that have ever been executed.



Cryptocurrency

Any digital currency, including but not limited to XAR, in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.



Indie Video Game

An independent video game (indie game) is created without the financial support of a publisher. An indie game characteristically focuses on innovation and relies on digital distribution. The ability to utilize online distribution and development tools accounts for indie gaming growing in popularity since the mid 2000s. Lower costs and less available resources have enabled developers to be very innovative and take risks with unusual game designs. Examples of very successful indie games are: Undertale, Braid, World of Goo and Minecraft.



NEM

The NEM Smart Asset Blockchain peer-to-peer crypto platform, more particularly described at <https://nem.io/about/> and subject to those terms and conditions.



ProximaX

A next generation platform solution with an Integrated and Distributed Ledger Technology (IaDLT). The ProximaX Sirius platform is an integrated assembly of proven technologies for enterprises to develop applications with superior design while substantially reducing the total cost of ownership and time to market.



XAR

The Xarcade in-platform token or in-game token or “gateway” token. Normally, each XAR is worth the equivalent to the cryptocurrency valued at EUR 1.00.

Xarcade Platform Objectives and Roadmap

The platform is expected to offer the following:

- 1 Having available on the platform indie video games to AAA video games.
- 2 Software Developer Kit (SDK) available for download on the Xarcade platform for game developers to integrate with their non-blockchained games.
- 3 An Android application will be released whereby both APK-based and web-based Android games will be available for accessing in-game credits, sending and receiving in-game credits from gamers and game developers for exchanging into XAR and selling that XAR for BTC. On the mobile front, it is important to note that at present only Android-based games can be published on Xarcade due to the strict Apple policy of anything resembling the Apple App Store.
- 4 After launching on mobile, we plan on applying the SDK to the console, the Personal Computer (PC) via www.xarcade.io and Virtual Reality platforms.

Leveraging The NEM Blockchain

According to www.nem.io, NEM's features include:

- 1 API-call access to NEM through any blockchain node.
- 2 NEM's Mosaic feature, which creates individual tokens on the NEM chain and are customizable by amount in either a fixed or a mutable quantity. Each Mosaic is assigned a name that is under a unique domain in the namespace system in the format of "subdomain.domain" Mosaic.
- 3 NEM uses a Node Reputation System to ensure the blockchain's security and function by monitoring a past node's behaviour.
- 4 The Namespace feature which leases names for blockchain accounts.

Platform Features

Game Developer

1. Profile

- 1.1 Profile Information
- 1.2 Publisher Information
- 1.3 Social Network Accounts (community +)
- 1.4 Friends Invitations
- 1.5 Social Account Notifications

2. My Games

- 2.1 Game Developer Dashboard
- 2.2 Xarcade Wallet
- 2.3 Easy per-Game View
- 2.4 Read-only NEM Mosaic Xarcade Wallet
- 2.3 Game Details View
- 2.4 Game Analytics
- 2.5 XAR Donation Feature

3. Publish Game

- 3.1 Game Publishing Platform
 - Step 1 (only once):** Profile + Publisher Informations
 - Step 2:** Configure new Game on Xarcade
 - Step 3:** Review & Submit Game for Listing Approval
- 3.2 Publisher Review Center

4. Game Developer Community

- 4.1 Game developer Social Accounts (1.3)
- 4.2 developers.xarcade.io
- 4.3 Portal for Game Publishing
- 4.4 Game Development Resources

Gamer

1. Profile

- 1.1 Profile Information
- 1.2 Achievements Overview

2. Buy Games

- 2.1 Games Marketplace
- 2.2 Game Details View

3. My Purchases

- 3.1 My Games

4. My Xarcade Wallet

5. Buy XAR

6. Social networking integration.

User Flow For Both Gamer and Game Developer

The platform is intended to allow game developers to maintain their own in-game credits on the NEM blockchain.

The platform enables users to exchange, purchase and transfer the in-game credits from the games published on the platform. The platform facilitates the buying of in-game credits and in-game products with XAR, enabling users to purchase "outside" of the game too. Xarcade is also not only just an exchange/marketplace for in-game credits, in-game products and XAR, there will also be a Software Developer Kit (SDK) which game developers can use after downloading it and integrating it into their games to handle the purchases made by other users on the platform of their in-game credits or in-game products using XAR.

Game developers can publish two different asset types on the platform. Those will be listed along with the game details in the platform: firstly, the game developer publishes his in-game credits (as NEM Mosaics) to sell on the platform (price rate in relation with XAR). The game developer can consult with the Xarcade team to determine the best challenging in-game credit to XAR conversion rate. Secondly, the game developer publishes in-game products to sell on the platform and the price will be expressed via XAR.

The platform will allow users to buy XAR with BTC, ETH, XAR and XEM. Furthermore, in-game credits can only be converted from XAR and to XAR. Xarcade users will be able to sell their XAR for BTC on various listed exchanges. There will be no fiat money involved for the buying of XAR. Gamers will be able to make in-game purchases and convert in-game credits into XAR on the platform.

In-game credits can only be exchanged for BTC through the use of XAR, which is effectively the "gateway token", for all users on the platform. XAR can also be purchased on designated exchanges or purchased directly from the platform. Users must purchase XAR for in-game purchases from the platform. Accumulated in-game credits can be exchanged for XAR.

The platform supports game developers to create an ecosystem of spending and earning by paying through a two-way exchange ability model, and circumvents the requirement of in-app purchases for game points, so that game developers do not need to rely on payment solutions such as Google/Apple in-app payment solutions.

A gamer and game developer must register on the platform in order to upload and manage their games. Xarcade reserves the right to decline or cancel the registrations of any game developer or gamer at its discretion.

Game developers can directly distribute their games to gamers on the platform with no middlemen thanks to blockchain technology—all platform transactions will be verified and processed using NEM blockchain technology.

Xarcade's XAR is to be published on the NEM blockchain as a NEM Mosaic for which we have developed a wrapper to integrate features in your games more easily. In addition to exchanging, game developers will have access to a back-office to see their Xarcade Wallet, their sales and other details about their games published on the platform.

Withdrawals from the platform will be managed with daily and weekly limits. The process of withdrawals will be automated with future releases.

User Accounts and Xarcade Wallet Security

User accounts will keep Xarcade users informed about latest games, products, etc...The user account functionality should also provide the user with a Xarcade Wallet where users can store their XAR in a safe and secure manner. Furthermore, Xarcade user accounts provides players with a history of purchases on the platform. In addition, for added security the SDK will allow in-game credits to XAR conversion only when the user taps/clicks on a tap-to-confirm notification that would appear on the platform. It will be similar to two-factor authentication apps.

Advantages of Using Xarcade

- It is free to sign up to Xarcade and there is not even a one-time fee.
- Takes 0% of all transactions on the platform from the users.
- The speed of the NEM blockchain will allow the game developer to receive their revenue within minutes as opposed to waiting for weeks.
- The user has the financial transaction security that comes with using blockchain technology.
- Pursuant to the above financial points, the game developer can have more cushioning for his budget and accrue XAR in addition to fiat money accrued.

TEAM



Otto von Nostit

CO-FOUNDER AND CEO



Otto has a Hon. BA from the University of Toronto and an MA from the Australian National University. He is a partner in the Malaysia-based Corporate Council Consultancy that brings technology businesses to the Asia Pacific region and has been an active NEM blockchain promoter. He has diverse experience in the IT field, including the establishment of a Malaysian video game company Xhai Studios, the creation of the ThreadZ fashion App and the successful launching of an Asian online karaoke company Rising Stars in the Philippines. In Singapore, he works with AlpsSocial a digital financial network company. He is a Director of Eco Premium Packaging Sdn Bhd and a Listing Agent for the Initial License Offering Contract Exchange (ILOCX).



Lon Wong

CO-FOUNDER AND HEAD OF STRATEGY

Lon is the Founder and CEO of ProximaX a next generation blockchain company. Widely recognised as a leading proponent of blockchain globally, as well as having helmed the NEM.io Foundation as its Founder and first President, Lon brings with him over three decades of entrepreneurial experience in electrical engineering, software application development, network technology, and internet service provisioning. Where humanitarian and technology converge, he funded and established an autism centre in Malaysia providing Applied Behaviour Analysis therapy for children with Autism Spectrum Disorder. Lon holds a Bachelor of Engineering (Honours) in Electrical Engineering from the University of New South Wales, Australia.



Galileo Lajara

SYSTEM ARCHITECT AND LEAD SOFTWARE ENGINEER



With more than 16 years of experience in programming, he has a wide range of experience in Web and 3D graphics. He is a video game developer who specializes on development of tools, servers and programming language.





Meynard Collado

BACKEND DEVELOPER AND SOFTWARE DESIGNER

Programmer of 9 years. Specialized in creating customized business applications, particularly database management. Now handling backend development and the database structure of Xarcade. Joined the team to master blockchain technology, add it to his arsenal of skills, and beat the next stage of the game.



Donnie Ray Gianchand

FRONTEND DEVELOPER AND QUALITY ASSURANCE

A gamer, game designer, story writer, game music composer and programmer for 8 years. In 2010, he helped developed one of the first MMORPGs on Facebook. His interest in game-related technologies brought him into exploring the association of blockchain in the gaming industry.



Sabrina Umali

UX/UI DESIGNER, WEBSITE AND MOBILE DEVELOPER

Worked with various projects as a Designer and Developer of Websites for 11 years and Mobile for 8 years. She transformed her skills by focusing more on User-Interface and User-Experience design of the different projects. Diving to work on Front-End Development as well to ensure that every details are properly arranged because she always believed that a great detailed design can result to a successful business.

