



STARL

Explore
the STARL Metaverse



STARL

STARL Project Whitepaper 2.0

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INTRODUCTION



1.1 ABSTRACT

In a world where people are increasingly using the internet as their main form of connection and self-expression, the metaverse is logically the next step in the way we create, consume, and interact digitally. The popular rise of non-fungible tokens (NFTs), play-to-earn, increased interest and focus on the metaverse from Facebook and other companies, and a world driven physically apart by a pandemic all indicate a clear trend towards the need for a more comprehensive online platform than what currently exists.

Defining the metaverse can be challenging as it can encompass anything we currently do online, but in a simulated 3D digital environment, taking advantage of the digital connectivity we have rapidly developed in the last century.

The metaverse will combine online experiences in a fluid and connected way that more accurately reflects the human experience. To do this, we will use tools in the technical world to represent, and improve upon, what we encounter and experience in the physical world. Immense virtual worlds, augmented reality, virtual reality, and the internet will be used as a shared virtual 3D space connecting to all the social, gaming, shopping, research, education, and financial programs we use - all interconnected and interacting in a digital ecosystem. The metaverse will be the hub of it all, a universe in itself.

Decentralized networks (cryptocurrency) provide an unparalleled degree of assurance and security with finances in response to a decline in trust towards institutions. It appears inevitable that cryptocurrency may play the most important role in the emergence of the metaverse. STARL aims to anticipate this coming evolution revolution by combining cryptocurrency with the metaverse and building an ethical, decentralized, entertaining, and innovative project: The STARL Metaverse.



This is a virtual world that will exist as a space to host data and ideas within the blockchain, while creating new opportunities for the creation and collection of NFTs as a form of self expression, utility, or real estate in the metaverse. In addition, it will act as a hub for marketing, entertainment, socialization, gaming, and education.

The STARL token launch was very unique compared to most other cryptocurrency projects. There was no pre-sale or announcement. It was a stealth launch; released with zero notice, making it completely fair and equal. The project has no team or dev token allocations and no tokenomics such as taxes or reflections. Woof Decentra deployed STARL without notice, burning the initial liquidity to assure this would always be a project dedicated to the people that believe in its vision and community.

1.2 THE STARL METaverse

Metaverses are a relatively new concept and technology, and there are very few currently that exist beyond the research phase. None are fully developed, and most are notably underdeveloped. All of them are centralized and controlled by companies or projects with a problematic consolidation of power. The STARL Metaverse is currently the only truly decentralized metaverse project, and it is seeking to merge the concept of the metaverse with a cryptocurrency-based economy. It is based in a space-themed setting for an enhanced experience that taps into what makes humans unique; a drive and desire to explore, learn, and go beyond.

STARL will be used as the medium of exchange within the metaverse. It will be used to buy, sell, trade, and modify in-game assets. In addition, STARL will be used as points of entry for various areas of the metaverse, for accessing games, virtual concerts and clubs, media, entertainment, education, modes of travel in the metaverse, investing in virtual real estate, mining for materials in-game, paying other players for services, social experiences and programs, and really anything else that a currency can be used for in the physical world, but virtual. It is a digital currency for the virtual world.



While the STARL Metaverse is an interactive 3D universe based in space, with the freedom to explore different virtual worlds and communities, it is not necessarily a game in and of itself. It can instead best be described as a hub for virtual social interaction and expression, and trading and collecting assets within a digital economy.

The STARL Metaverse, however, will be filled with gaming. There is no limit to what can be included. The metaverse provides a portal to connect to various missions and adventures which can be embarked on alone or with others. For example, racing games on moons and extraterrestrial lands, shooting games inside abandoned spaceships and bases, spaceships to fly throughout the metaverse and other solar systems and complete missions, space stations to be captured, defended, or used for supplies. All types of games ranging from adventure, action, and education are planned to be included.

All games will be connected and accessible through the Market in the 'Play' section, which links directly to the metaverse. The user's statistics and actions can affect the environment, other users, and economy in various ways. Gameplay can affect the metaverse, and the metaverse can affect gameplay. Everything is connected.

The central space station hub in the metaverse will be the starting point for all new players. It will be a social and commercial meeting space for everyone. Inside the station, you will be able to access activities available throughout the game. Additionally, there are areas of entertainment, shops, educational facilities, and more. The station will constantly expand as new regions are made available to players. There can be multiple hubs in varying sizes across the universe.

The freedom to adventure and play as you choose will create a diverse and dynamic universe that is always interactive and interacting, allowing players to cooperate or compete for resources. You may set out on your journey as a lone wolf pilot, team up with others to achieve more meaningful goals for better rewards, or perhaps engage in player versus player battle and activities to acquire what other users have. The choice is yours.



1.3 CORE VALUES

The core philosophy of STARL believes that projects can be done fairer, more sustainably, and in a way that can benefit everyone involved. No large corporation or company is looking to extract personal data from the users for advertising or to maximize profits for yearly reports. STARL simply wants people to have fun, interact with each other freely, have access to opportunities that lead to financial freedom, and work towards the next stage in the evolution of the internet and online interaction. We have seen poor outcomes when projects are developed in greedy, unsustainable, or deceptive ways. We want to create something that rises above all these methods. STARL will be empowering, transparent, fun, healthy, and fair.

STARL believes strongly in decentralization, holding this value at the core of everything it does. Decentralization gives everyone equal opportunity to be involved and utilize their strengths to help a project grow and the freedom to decide how. There is a social responsibility to provide tools and resources in the virtual space to create a fun and adaptive environment for individuals to thrive and monetize, no matter who or where they are.



Figure 01
One of STARL Satellites



THE STARL ECOSYSTEM

2.1 STARL TOKEN

STARL is an ERC-20 token with a total supply of 10 trillion. All tokens are in circulation, with the initial liquidity and contract ownership burned. This means that no further STARL tokens can be minted into circulation. Also, as STARL was 100% fair-launched, all tokens have always been publicly tradable. Unlike most projects, there are no token unlocks for private investors to dilute the current circulating supply, which often results in more stagnant price action as increased buying power is needed after each unlock to further increase the price per token. STARL is fully transparent, completely safe, and 100% community owned and driven.

STARL will be used as the medium of exchange within the metaverse.

Contract:

0x8e6cd950ad6ba651f6dd608dc70e5886b1aa6b24

No tax, no fee

No presale or private unlocks

No dev token wallet

Total supply 100% circulating

Initial liquidity added 100%



2.2 UNIVERSE

Unity moving towards Unreal Engine

The project's initial development was by the community and started on the Unity real-time video game engine. This is the sector of the metaverse that was created right away and was what could be seen in the first gameplay images that showcased a space hub. Moving forward, development will be worked on professionally using the Unreal Engine (UE).



Creating a vast metaverse based in space with a virtual economy would usually require years of development, however, STARL has expedited the process by adapting Warp Nexus - an unreleased AAA space exploration MMO created by Scott Brown and his team, built on Unreal Engine. In addition, Shahid Ahmad, a renowned gaming developer with extensive accolades in the industry, was hired to be an adviser and producer for the transformation of Warp Nexus into the STARL Metaverse.



Figure 02
The early stage Unity metaverse

Professionally Designed and Developed on Unreal Engine

The professionally developed aspect of the metaverse will continue on Unreal Engine and is an adaptation of Scott Brown's game Warp Nexus. Warp Nexus is a near-complete AAA space exploration, action, adventure, and massively multiplayer online (MMO) game that will be transformed and adapted into the STARL Metaverse.



It will focus on space travel and mechanics, space base connections, asteroids and mining, planets, space battles, and a complex and interesting virtual gaming economy. STARL has onboarded a game design and development team with two decades of MMO game development experience and expertise crafting in-game economies. The economy will utilize the STARL token and play a prominent role across all aspects of the metaverse, with decisions and actions affecting various elements.



Figure 03

Scott Brown's Warp Nexus which will be adapted for STARL

The game development here will implement mechanics that will be utilized across the entire metaverse. Space flight will be the primary method of travel in the metaverse. While the gaming side will focus on missions, the rest of the metaverse will have the option for users to explore, collect assets, mine asteroids, trade in the STARL Market, and interact with others. The Unity progress and development will merge into the Unreal version, which will be the main engine used as development continues.



2.3 ECONOMY AND PLAY-TO-EARN

The concept of play-to-earn is quickly growing in popularity. This is significantly enhanced in places where finding access to paid work may be difficult or for people in challenging personal circumstances where opportunities are lacking. While the play-to-earn mechanism is used in several gaming projects, unfortunately, many have also abused it. We will ensure fair, balanced, and secure mechanisms in gameplay and travel in the metaverse to avoid this. Users will have abilities to play and earn various assets that are valuable in quests and to progress further in-game. These assets will be earned by playing and completing missions or battles while traveling between spaceships and hubs in the metaverse. Users can either use these assets to progress in missions and games or sell them to others for profit on the STARL Market. Assets earned can be common and valuable materials, fuel, tools, or weapons, or rare assets that are hard to find and highly sought after on the market.

We also aim to provide a vibrant virtual economy with ways to earn and trade. As we believe in community input, we will steer the direction of the project according to what the community thinks are fair and balanced ways to trade and interact in the virtual world, while also creating a fun and adventure-filled metaverse to explore. We look up to the greats of in-game economies, such as our very own Scott Brown (Jumpgate, and Warp Nexus, which is currently being reconstructed for STARL Metaverse). STARL will learn from the work of projects like these, and create a virtual economy that replicates the real world where actions bring consequences, causes create effects, and what you do not only affects yourself but the world around you.



For example, specific items and components might only be available to craft in particular locations in the metaverse. You could find that demand for features and raw resources is higher at one base or space station, while the demand for finished goods is higher at another. Both users and AI can generate missions to deliver the required products to appropriate locations. Other tasks may require users to extract minerals, deliver miscellaneous goods, and much more, contributing to a dynamic economic system based on primary supply and demand.

If missions are accepted but fail due to pirate activity or attack, then subsequent tasks will be implemented to combat the pirates in those areas. Thus, users will not only participate in the metaverse, but they will have a part in shaping, affecting, and responding to it.

2.4 MARKET

STARL will be used in the STARL Market (<https://market.starltoken.com/market>). The STARL Market will host all the NFTs and assets needed in-game. Once those NFTs are purchased, they will interact with the metaverse, or games within the metaverse, in various ways.

The Market enables participants to manage and exchange SATE NFTs, Virtual Real Estate, and other assets such as in-game wearables and tools. It will also sell customizations for modules, satellites, vehicles, and characters. Additionally, skins, clothes, furniture for the modules, and other various upgrades will be available. Other in-game assets will also be sold in our Market - weapons, health upgrades, ship upgrades, and much more. All these assets, represented as NFTs, will be bought and sold using STARL.

Metaverse travelers will have the ability to earn assets in the universe and games that can be traded on the market. These assets will give the user various properties and abilities to continue their quests and exploration depending on their goal and direction. Someone may earn an asset in



game that may not be the one they want at the specific time or suit their current needs, making the ability to trade with others on the secondary market necessary and useful.

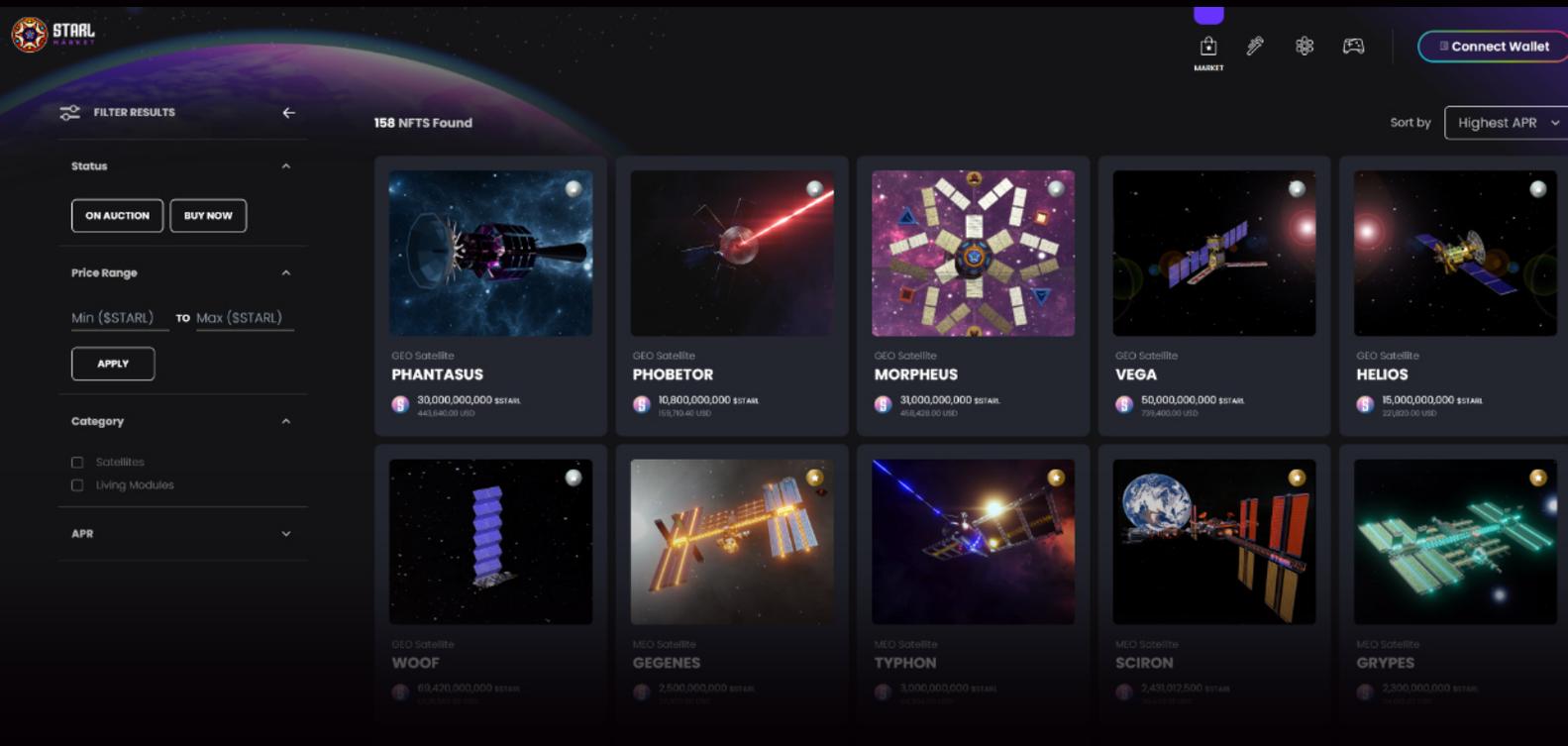


Figure 04
The STARL Market

With blockchain technology, every digital satellite and other virtual assets in the STARL ecosystem can be tokenized, giving holders the ability to trade, sell, or gift their items. Users are the perpetual owners of their digital assets. Blockchain allows them to have true ownership, with the ability to monetize and freely trade their assets.



2.5 PROFILE

Once a user signs into the Market with their wallet, they will be able to set up their 'Profile'. This is a graphical representation of users in the virtual space metaverse. It is linked to the wallet address, and will be used for the marketplace and the metaverse.

Users can link their personal information, social media profiles, personal website, and more. Messaging can be implemented through syncing Telegram in Profiles, and this will allow our STARL Telegram community to link with profiles and users in the Market and metaverse.

Users that are bidding on NFTs will have their Profile name displayed in the 'Offers' section.

Profiles can display unique NFT profile pictures. The PIXELNAUTS collection is the first volume in STARL's new 'Artist Profile Series'. Users can mint a unique, original, and limited NFT to use as their Profile picture, or trade on the marketplace. Each STARL 'Artist Profile Series' will feature a theme created and curated by one artist. Each NFT has a set of unique characteristics that can be traded and collected.

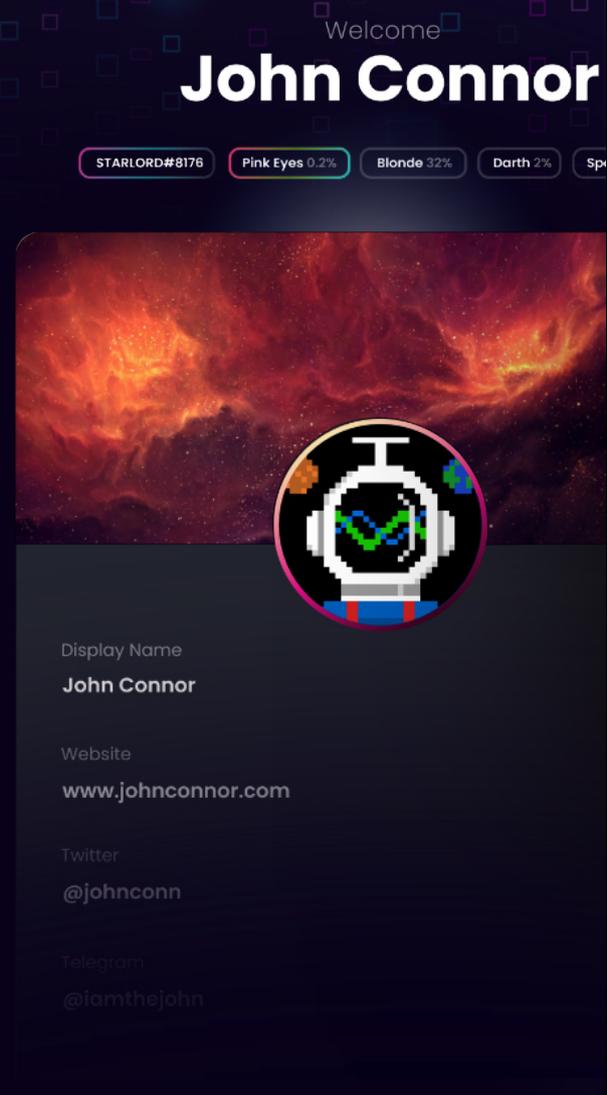


Figure 05

STARL Marketplace user profile
With Pixelnaut





Figure 06
TYPHON by JSnori

2.6 SATELLITES

Satellite NFTs can be bought through the STARL Market and have annual percentage rate (APR) rewards. SATE contracts for satellites earn interest on the amount of the STARL spent to purchase your satellite in auction. The APR rates for each satellite are different depending on which category they are in. These satellites provide a service as spaces for digitally displaying art and advertisements. They could also offer special ability increases to users who own them, or allow others to. For example, if you and your team are about to engage in a battle against other players, or an especially challenging mission, you may fly to your satellite first and boost your attack power, before leaving on your mission.

Satellites will be categorized by orbit types: Low Earth Orbit (LEO), Medium Earth Orbit (MEO), and Geostationary or Geosynchronous Orbit (GEO).

- LEO satellites are positioned at an altitude between 160 km and 1,600 km (100 and 1,000 miles) above Earth.



- MEO satellites operate from 10,000 to 20,000 km (6,300 to 12,500 miles) from Earth
- GEO satellites are positioned at 36,000 km from Earth. They match the rotation of the Earth as they travel, and so remain above the same point on the ground.

APR Rewards for Satellite orbit category is below:

- Platinum: GEO: 20%
- Gold: MEO: 15%
- Bronze: LEO: 10%

Any address with ownership of a SATE NFT will earn interest based on the amount of STARL spent on the SATE at the initial auction. For instance, in an auction that closes for 10 Billion STARL, the owner would subsequently earn a yearly APR of 20% (Class A), 15% (Class B) or 10% (Class C) based on the Satellite Class purchased. In this example, the yearly interest for a Class A Sate would be 2 Billion STARL until the payout matches amount paid for satellite. 30% of NFT sales and auctions will be used to fund this APR.



Figure 07
Morpheus satellite
by Flipacadabra



2.7 LIVING MODULES

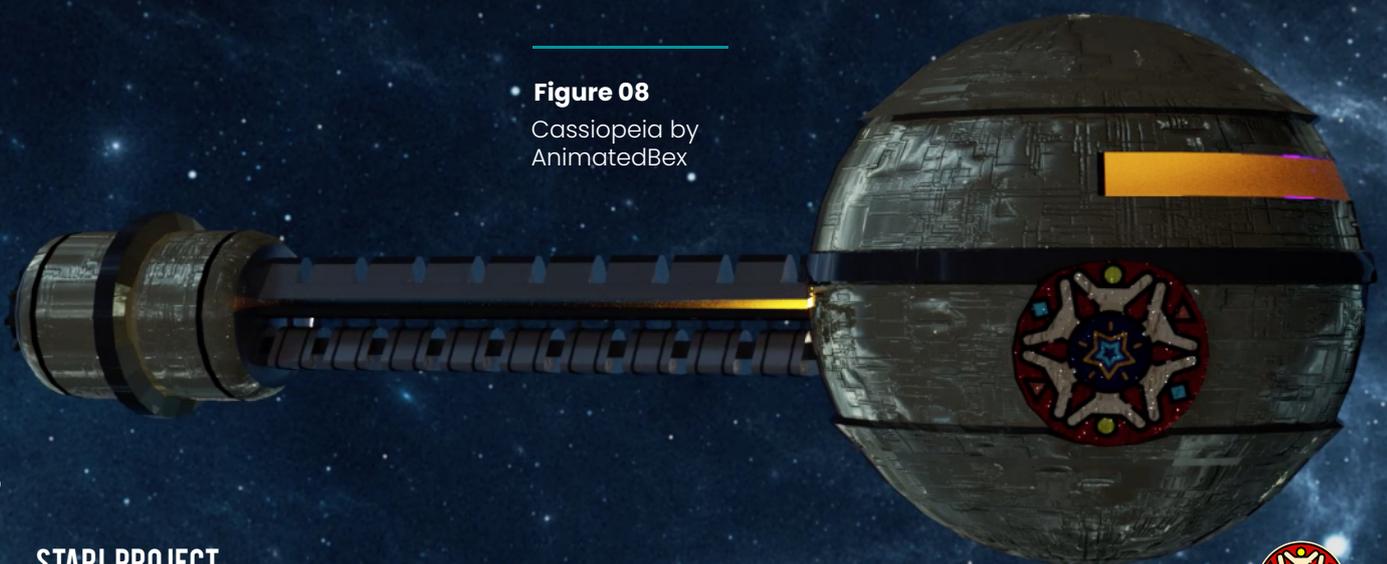
Living Modules will be one form of virtual real estate in the STARL Metaverse. They represent your personal quarters where you can store your items, customize the interior, and display your digital art and NFTs. Further utilities of living modules may include abilities to regain health, customize character outfits, and rent quarters out to other users for profit so they too can improve health and gain various power-ups for in-game usage.

Living Module NFTs act as key cards to access your home on each base in the metaverse. The first round available were 128 Limited Edition Living Modules, each an original and unique design by a 3D artist. These were available during the initial drop, and also via secondary sales when this function is implemented in the marketplace. Due to their unique design, the first Limited Editions are likely to be sought after as valuable assets. If there is high demand, more 3D Artist rendered Limited Edition Living Modules may be considered, however, standard modules will also be available for everyone further into development. While these subsequent Living Modules will not be limited edition one-off designs, they will still carry attributes, and will be available for purchase to all travellers of the metaverse.

Although the living modules do not generate APR rewards (unlike satellites) they will be highly useful and desirable as virtual real estate in the metaverse, as well as carrying special perks and boosts.

Figure 08

Cassiopeia by
AnimatedBex



2.8 STARL DAO

A decentralized autonomous organization (DAO) is an entity with no central leadership.

Instead, decisions are governed by a community and organized around a specific set of rules enforced on a blockchain. DAOs are internet-native organizations collectively owned and managed by their members.

STARL will utilize its token to eventually launch a process allowing all holders to vote on the project's future direction or changes that will be implemented as the metaverse evolves. This will ensure that the metaverse remains relevant and enjoyable for the people it serves and maintains the core tenant of decentralization.



STARL DAO



ROADMAP



MISSION 01 – COMPLETE

- STARL Token Launch
- CG & CMC Listing
- Website Launch
- Whitepaper 1.0 Release
- Metaverse Planning
- Start of Community Development of Metaverse on Unity Game Engine - AKA 'Community Sector'
- Gather Developers and Designers in Community (for Community Sector and NFT Market)
- Release first Space Station teaser - Single Player focus (i.e. Spacehub, Spacebase, etc.)
- Community Sector - Develop multiplayer connectivity in Space Station and release teaser
- Community Sector - Develop Character Customization option for Space Hub
- Minigame Research

MISSION 02 – IN PROGRESS

- SATE NFT Smart Contract
- STARL Market Launch V1
- 1st NFT Auction - 'SATE Round 1'
- TheGraph Implementation
- Profile Implementation
- Onboard Unreal Engine Metaverse Sector team leads Shahid Ahmad (producer and advisor) and Scott Brown (lead developer)
- Development on Metaverse Enhancements - Graphics improvements in Community Sector
- Minigame Development hiring and start
- Development on Metaverse Enhancements - Terrain improvements



- STARL Market Launch V2
- 2nd NFT Auction - 'SATE Round 2'
- 1st STARL Market Fixed Price Sale - Living Modules - Limited Edition 3D Designer series
- 1st Artist Profile Series - PIXELNAUTS
- STARL Market - Secondary Sales Implementation
- Onboard Unreal Engine Metaverse Sector design team
- Research and Development on Anti-Cheat tactics in Minigames, leading to Anti-Cheat strategies and tech in Metaverse Side Main Game
- Community Sector - Develop Space Station NFT gallery
- Professional Sector - Start developing meeting and event halls in spaceship for concerts/events
- Minigame Development and Anti-Cheat tactic implementation
- STARL Market - CREATE Section Implementation

MISSION 03

- Metaverse Development - Test Space Station limitations and connectivity for desktop and mobile - fix bugs, allow more users in on a tiered structure as progress continues.
- Sidegame Developments - Begin testing gameplay mechanics of Warp Nexus updates and start merge to Starl Metaverse (ongoing expansion)
- Metaverse Development - Web3 implementations
- Metaverse Development - Design upgrades
- Metaverse Development - Character Customization upgrades and expansion
- Metaverse Development - Space Station NFT gallery
- Metaverse Development- Create live audio/visual connectivity for events
- Metaverse Limited Beta release (small number of users allowed in to help test)
- STARL DAO Launch 
- Community Sector - Handover to Professional sector for future connectivity
- Minigame Development - Validate Anti-Cheat results - fix/test/validate/repeat
- Minigame Development - Continue Development on Anti-Cheat technology



- Minigame Private Beta Test on Rinkeby Network with community members (signup TBD)
- Minigame Launch and Support
- Introduce more assets in STARL Market as Metaverse and Side-game and missions expand (weapons, tools, modifications)

MISSION 04

- Professional Sector Metaverse - Unreal Engine Development (2021/2022, See Roadmap below)
- Convert Community Sector into Outer Limit Space Station (Pirate/Outlaw/No law land, run by community DAO, not under control of 'the Republic') (2022/2023)
- Desktop and Mobile apps
- Onboard more minigames for STARL Arcade (PLAY Section)



UNREAL ENGINE METAVERSE DEVELOPMENT TASKLIST AND ROADMAP (PROFESSIONAL METAVERSE SECTOR)

Phase 1 : Design

- Art Style Version 1 - Completed (Warp Nexus design will be upgraded to fit a more modern look and STARL aesthetic as we onboard more designers and artists - this is already in progress)
- Design and develop spacecraft concert hall for specialized live events (ongoing)
- Metaverse Station Rough Design - In progress
- Details and Limitations to expand on, develop, test boundaries of Space Stations:
 - A. What are all the rooms in each station, what they contain, layout and dimensions, furniture and what can be customized within modules?
 - B. What can be obtained free or upgraded via the Market?
 - C. What are the limits to customization?
 - D. Rough Visual layout of station, pods, activity rooms, spaceship access, gaming portals, etc.
 - E. Player amount limit for each station
 - F. How stations are instanced
 - G. Station hosting
 - H. Market Access locations
- Technical Design -> Unreal 4 client API for STARL Market.
- Technical Design -> Game based player information
- Unique login
- Storing player statistics and non NFT items, credits, etc
- Design on how to play, earn, and spend STARL in the metaverse Warp Nexus game



- Design on Warp Nexus ships, equipment, statistics
- New 'Design Whitepaper' - Explaining design and new art and updates to Art Style Version 2
- Design of Warp Nexus -> STARL storyline for increased player engagement, including new name for WN to be STARL focussed

Phase 2: Nexus Station (STARL Station? Name TBD)

- Players can log-in, create accounts.
- Players can walk around station
- Players can view the Market from an in-game interface.
- Testing

Phase 3: Warp Nexus - Single Player

- Players can log-in, create accounts.
- Basic storyline for new players joining the game to guide them
- Can launch missions from stations
- Can use NFT ships/living modules
- Ships can be improved by playing missions
- Basic implementation of STARL earning loop
- Fuel system for reusing ships after a mission

Phase 4: Player Owned Stations

- Players can operate their own NFT stations
- Stations can collect rare materials to construct new NFT spaceships
- Players can see other player stations out in space

Phase 5: Warp Nexus - Multiplayer

- Co-op and PvP missions with increased rewards
- Conquest mode - allows players to compete for control of special stations with additional earning possibilities



Phase 6: Customization

- Players can purchase, sell, trade NFT based skins for NFT spaceships and player outfits
- Satellites can be rented out for advertisements in metaverse

Phase 7: Non-NFT spaceship owners gameplay

- Allow players to play and earn by flying other players NFT spaceships
- Leadership board of top community pilots to hire
- Ability to hire pilots to travel through dangerous sectors.

Phase 8: Implement Community Sector into Metaverse

- Community Sector (Originally on Unity) can become outlier space base
- Community Sector is controlled via DAO and can be used for what the community wishes. First starting with NFT Gallery base, but can become something else, for example; shooter game, robot/alien attack base, underground black market (outlaw land).
- Community Sector allows connection to Unreal Sector and can join in on specific space missions or general travel.

