

What is Nebula Garden?

Nebula Garden is a groundbreaking new universe sandbox game that allows players to simulate the entire universe in a hyper-realistic and scientifically accurate manner. Through the use of advanced physics engines and accurate data sets, players can explore the vast expanse of space and time, discovering new celestial objects, creating and manipulating planets and stars. In addition, players will have the unique opportunity to own these celestial objects as ERC721 tokens on the Ethereum blockchain, allowing them to truly claim ownership of their creations within the game. With the ability to play in a browser and the use of on-chain technology, Nebula Garden offers a truly immersive and interactive experience that will appeal to players of all ages and backgrounds. Whether you're a seasoned astronomer or a curious novice, Nebula Garden has something to offer everyone who loves learning about the universe and the mysteries it holds.

Nebula Garden will be built on a custom in-house engine incorporating real world data and leading science on astronomy and astrophysics.

Core Concepts

Nebulae

Nebulae serve as the starting point of Nebula Garden, and are a central element of the early gameplay. A nebula in the universe is a dense, beautiful cloud of molecular gas and dust that's considered the birthplace of stars. In Nebula Garden, players will own these nebulae and generate stars within them. The stars generated by a nebula will be spread out across the game world, providing players with the raw materials they need to build their own solar systems. Nebulae will generate stars in seasons, which will allow players to plan and strategize as they build their solar systems and shape the universe to their liking. Overall, nebulae are an essential part of the game, providing players with the starting point they need to explore and shape the universe in a scientifically accurate and immersive manner.

Stars

In Nebula Garden, stars are the most prominent objects in the game and they play a central role in the gameplay. Stars in the game will have two main properties: mass and temperature, just as they do in real life. These properties will affect what kind of star the player has, with high temperature stars being blue and low temperature stars being red, for example. The properties of a star will also determine its lifespan, with more massive stars having shorter lifespans and less massive stars having longer lifespans. Players will have the opportunity to generate, mint, buy, and rent stars within the game, and owning a star will give players access to unique perks and abilities, such as the ability to extract resources from it. As stars go through their life cycle, players will be able to watch them grow and evolve over time in an interactive and fun way, eventually reaching the end of their life and collapsing into a white dwarf, neutron star, or black hole. Stars are a central element of the game, providing players with the opportunity to learn about the real-world properties and behavior of stars.

Asteroids

Asteroids are small, rocky objects that can be found throughout the universe. They are composed of a variety of materials and elements, including iron, nickel, and other

metals, as well as silicates and other minerals. Some asteroids may also contain significant amounts of ice, which can be used to create water and other resources. The specific composition of an asteroid will vary depending on where it formed and what processes it has undergone since its formation. In Nebula Garden, players will have the opportunity to explore and collect asteroids, selecting ones with the desired composition to create their own unique solar systems. By carefully selecting and utilizing the materials contained within asteroids, players can create a variety of celestial bodies, from rocky planets to gas giants, all while experiencing the interactive and scientifically accurate world of Nebula Garden.

In Nebula Garden Asteroids will be procedurally AND dynamically generated.

By exploring and collecting asteroids, players will be able to shape and customize their solar systems in a variety of ways, creating unique and realistic configurations that reflect the properties and behavior of celestial bodies in the real world. Asteroids are an important element of the game, providing players with the raw materials they need to build and customize their own solar systems in a scientifically accurate and immersive manner.

Solar System

In Nebula Garden, players will have the opportunity to collect celestial objects such as planets, asteroids, comets, and more. These objects can be used to build a solar system around a star or star systems that the player owns. As players progress through the game, they will be able to shape and customize their solar system in a variety of ways, using the objects they have collected to create unique and realistic configurations. All planets will have unique qualities like mass, size, composition, temperature, terrains etc. Determined by the players freedom of choice on how they chose to create the certain planet.

One of the key features of Nebula Garden is the ability for players to experience the full life cycle of a star. Stars in the game will go through all of the stages of their life cycle, from birth to death, just as they do in the real universe. This allows for players to see their solar system with all the planets and other celestial bodies in it evolve and change overtime as the star grows and ages. Eventually even witnessing the end of its lifespan as it collapses into a white dwarf, neutron star or a black hole. Adding a sense of true realism and authenticity to the game experience.

in-game marketplace?

How to play

Step by step details of how the whole system works ref to notion

6. How to play
 1. nebulae sale/mint 1.
 2. buying a star
 3. exploring
 - 4.
7. Technology
 1. fill in as we go