

Wonder Garden

International

Back End

- Cards are ALL generated when model is init (but defaulted to not assigned). This is to ensure that the rarity is correctly preserved.
- In the model, there will be only 10.000 cards.
- 6000 common, 3000 uncommon, 1000 rare.

Card Rarity

- Commons: 6000 cards / 20 different types = 1200 cards per type
- Uncommons: 4000 cards / 10 different types = 400 cards per type
- Rare3: 600 cards / 5 different types = 120 cards per type
- Rare2: 300 cards / 5 different types = 60 cards per type
- Rare1: 100 cards / 10 different types = 10 cards per type
- Uniques: 10 cards, 1 card per type

Common Cards

ROSE	PERIWINKLE	LILY	SNOWDROP	DAISY
LOTUS	GERBERA	SUNFLOWER	IRIS	TULIP
MORNING GLORY	LAVENDER	CALENDULA	PETUNIA	PANSY
DANDELION	POPPY	DAFFODIL	ROSEMARY	CLOVER

Uncommon Cards

HIBISCUS	WATER LILY	PLUMERIA	SNAPDRAGON	FOXGLOVE
BLEEDING HEART	CALLA LILY			

Rare3 (rare) Cards

BIRD OF
PARADISE

ANTHURIUM

EDELWEISS

PHALENOPSIS
ORCHID

FLAME LILY

Rare2 (very rare) Cards

CORPSE
FLOWER

KADUPUL
FLOWER

JULIET ROSE

Rare1 (ultra rare) Cards

BLACK BAT FLOWER	RAFLESIA	CHOCOLATE COSMOS	GHOST ORCHID	FLYING DUCK ORCHID
NIGHT BLOOMING CEREUS	ROTHSCHILD' S SLIPPER ORCHID	GIBRALTAR CAMPION	PARROT'S BEAK	MONKEY ORCHID

Unique Cards

CAT	MOUSE			

Card Features Overview

Every card represents a sprite-like plant. It has the following metadata:

- **Plant Species.** Species have different rarity, as stated before. Some are rare, some very common. Even plants belonging to the same species, however, are different (see next).
- An **illustration**, driven by **genetic attributes**. This is what makes the NFT look (almost) unique. For example the same dandelion may come in night or day mode, and with a random set of companion creatures. The fun part of this comes when mating the plants, since this has to be done carefully.
- **Static attributes.** They depend on the plant species and they never change. They are basically used to describe what the species generally likes (weather, water levels and soil types, etc.). In a phase when the gardener has to take care of the garden, he/she must take in account these parameters to keep plants healthy.
- **Dynamic attributes.** They depend on the plant individual and they change with time. They represent the plant age, health and overall happiness.

Plants Genome & Plant Mating

- Every plant has a genome with a couple of genes for each feature: Expressed Gene/Backup Gene. Genes can be dominant (D) or recessive (R).
- When a plant reproduces (Plant A + Plant B = Plant C), a random gene for each feature (expressed/backup) is transferred to the offspring.
- If the offspring inherits DD or RR, its expressed gene and backup gene are decided randomly.
- If the offspring inherits DR/RD, the expressed gene is the dominant one, while the backup gene is the recessive one.

Card Genetic Attributes

- Each plant is born in day or night mode (50% chance)
- Day or night influences the features. Each feature is bound to dominant and/or recessive genes. Every plant has two pair of genes for each feature, and one of them shows up, the other one remains silent (but can be passed to offsprings)
- These features **define the image on the card**, so they are immediately visible to others

Genetic Attribute	D=Dominant; R=Recessive
Weather	DAY: Sunny/Cloduy(D) Rainy/Snowy(R) NIGHT: Moon/Stars(D) Cloudy Moon(R)
Upper pal	DAY: Bee/Wasp/Bumblebee (D) Butterfly/Fly (R) NIGHT: Moth/Firefly (R) Spider(D)
Lower pal	DAY: Ladybug (D) Beetle/Worm (R) NIGHT: Frog/Mole (D) Gnome with lantern (R)
Soil	Type A/Type B/Type C (D)
Glow	DAY / NIGHT (D)
Flower Color	Red/Orange/Yellow/Green/Light Blue/Blue/Purple/Black/Gold (Left One always wins)

Card Genetic Attributes (continued)

Genetic Attribute	D=Dominant; R=Recessive
Flower Type	Random among those available for the plant species
Body Type	Random among those available for the plant species

Card Static Attributes

These plant features depend on the species, therefore are not influenced by mating. We call them «attributes» merely to distinguish them from inheritable features. Attributes can be static or dynamic. These are the static ones, e.g. they are immutable.

Attribute	Explanation
Soil Type	Soil type the plant likes. Acid / Alkaline
Soil Composition	Soil composition the plant likes. Chalky/Sandy/Silty
Ambience Light	Does the plant like sun? Full sun/Light/Shadow
Water Need	Does it like a lot of water? Or a little? Or medium? (1-100)
Growth Speed	Very Slow/Slow/Medium/Fast/Very Fast
Climate Type	Climate the plant favors. Tropical/Dry/Temperate/ Continental/Polar

Card Dynamic Attributes

These plant features are also not inherited, but depend on the individual. They represent features that may change with time, thus they are named «dynamic attributes»

Attribute	Explanation
Age	Overall age since minting, in days
Water level	0-100% Water quantity the plant has in store. Different water level may influence plant's health (0 water generally means that the plant will begin to loose health. But also too much water can be unhealthy for plants who don't like it.
Health	0-100% Overall health. A plant may die and transformed into an almost useless pile of compost if its health reaches 0.
Generation	Whenever a plant reproduces, the offspring has generation count incremented