The Game (as of yet unnamed)

**Basic Gist:**

Control a species’ evolution unto the point of \*something but don’t copy spore\*. It all starts from the player’s first decisions, randomly species will evolve off of yours each turn. You battle with these procedurally generated species for resources. Eventually they become your food source.

Each turn will last one year. In each year, the player can evolve as a species using evolution points. Devolving is possible but requires all child branches be removed and costs the original EP again. This is the only input they have on the progress of their species. Evolution is a tree system, with lower upgrades needed to gain higher ones.

**The player (and other species).**

All species will be separate objects per world square. Each will start out as a base species with one cell and upgrade via evolutionary paths, until they reach milestones (e.g. multicellular) in which the base stats will react accordingly. Base species determines who can/cannot eat you. (e.g. herbivore digestive path can only eat plant)

Per organism traits:

**-HP**

How much damage the average member can take before dying.

**-DEFENSE**

Defense successful if DEF higher than ATK from enemy. Sums with packs.

**-ATTACK**

Attack successful if ATK higher than DEF from prey. Sums with packs.

**-SNEAK**

If higher than prey INTEL, predator initiates fight, otherwise chase.

**-INTELLIGENCE**

If higher than predator SNK, initiates chase, otherwise fight.

**-SPEED**

In chase, faster species wins. If predator, fight. If prey, n/a.

**-FOOD CONSUMPTION**

Based off of sum of base stats in every category plus evolutionary modifiers. Must intake this amount in food or else a percentage starves.

**-FOOD CONVERSION RATE**

% of food that goes from raw intake to energy. Can produce waste

**-WEIGHT**

(FC \* FCR) - (sum of HP through SPEED). This is because the leftover energy from these things goes toward body structure.

**-MATURITY AGE**

Modified by evolutionary perks. Years until maturity is reached.

**-LIFESPAN IN YEARS**

MA \* 4. (can be tweaked internally). + or - only via evolutionary perks. The total amount of years that the average organism can live.

**-BREEDING/SPLITTING RATE**

population above maturity age / maturity age / 2

Accumulated things as a species:

**-EVOLUTION POINTS**

The main way your species evolves. Granted randomly in each successful fight/flee, and in greater quantities with higher intelligence.

**-POPULATION**

Gained through POP + POP \* BSR. Each new POP has a chance of mutating to new species (with spent EP) according to radiation levels.

**The World:**

The environment will be broken into pixels on the surface. The player will chose where to start, but any subsequent movement must happen through the species spreading into neighboring squares. After every major period (Archean, Proterozoic, Cambrian, etc), the squares move based on some random cellular automata rule. Squares will be broken into the following stats:

**-Radiation amount**

Contributes directly to the rate of mutations (random spending on evolution points). Mutations from the start species will be run outside of player control in idle mode, while they in turn may mutate again.

**-Area type (one of the following)**

-Land (Hot, Temperate, Cold, underground nullifies temp)

-Fresh Water (Hot, Temperate, Cold)

-Salt Water (Hot, Temperate, Cold, deep nullifies temp)

**-Volcanic Rate**

Rate of nutrient regeneration due to volcanic activity. 0 in most places.

**-Nutrient Availability**

Initially starts out high in all areas. WIll only be replenished from volcanic activity and species death (weight\*deaths).

**User Interface:**

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Wasn’t feeling google draw:



