**SCHOOL DISCLAIMER**

Hey, if you’re a teacher (or assistant teacher) (or any other faculty who has dominion over my academic life) reading this planning document, please note that “drugs” refers to the medical term. This means that rather than referring to anything illicit or non-school appropriate, I am merely using this term to refer generally to pharmaceuticals. Please do not discredit my project for this reason, and while some of the items in this game may bear analogous resemblance to real-life illicit substances, they are entirely separate and only fantastical, creative inventions intended to enhance the experience I attempt to curate. Please don’t get all squeamish just because I added mind-altering substances to my game, I will not be removing them. I can rename or reskin them if you want but the gameplay mechanics will remain as stipulated. This is non-negotiable, and if you want to get some generic and low-effort gradebook padder submitted at the end of the year while I covertly work on my own projects, then by all means try to influence the creative direction of my game. You’ll find it as intended on itch.io that same day, completely separate from any school-based obligations. I don’t care if this reads like a threat or ultimatum, maybe it is.

World structure

* World data files store individual chunks, these are loaded as needed and the filenames are stored in a 2d hashmap that dictates their position. Files contain the class and properties of each “part” in the chunk.

Class structure

* **Part**
  + Methods
    - abstract void fromText
    - abstract String toText
    - abstract void draw
  + Attributes
    - Int temperature
    - ArrayList<Liquid> soakedIn
    - Bool onFire
  + Children
    - **Block**
      * Methods
      * Attributes
        + ArrayList<Part> storedItems
        + ArrayList<Entity> population
      * Children
        + **Solid**

Methods

Attributes

Int structuralIntegrity

Children

**Sand**

**Stone**

**Gravel**

**Soil**

Methods

Attributes

ArrayList<Plant> foliage

Int fertility

Children

**Clay**

**Plant**

Methods

Attributes

static Drug drug

Int maturity

Int nutrients

Children

* + - * + **Liquid**

Methods

Attributes

Int amount

Children

**Drug**

Methods

abstract ingested(Entity)

abstract contacted(Entity)

abstract inhaled(Entity)

abstract injected(Entity)

Attributes

* + **Entity**
    - Methods
    - Attributes
      * Int xSpeed
      * Int ySpeed
    - Children
      * **Player**

**STATS MASTERLIST**

* **Speed**
* **Perception**
* **Strength**
* **Sanity**

**FISHING**

Just throw your rod in the water and wait for fish to come on top of it, or throw bait to attract nearby ones. Spiced bait has much longer reach, while meat catches bigger fishes.

**PARASITES**

Any food you eat has a very rare chance to give you one of these little fuckers, but they can be detected using an eyepiece. When injested, they will root on a random part of your skin, and will drain your stats, not noticeably at first but growing, and draining more as they grow. As they grow, they too become more visible, increasing your chance of noticing them when using your arms or inspecting them. They can be cut out.

**INSPECTION/VISIBILITY**

Every trait of an object has a “visibility” value, which increases the likelihood you will be told about it when interacting with it. You can do an invasive inspection with a file for some items, which will damage them in some way but yield total knowledge of them. Your screen is 33 across, 19 tall.

**WORLDGEN**

Perlin noise for heights, scattered rocks/plants/animals. World size of 16000\*16000, with a moat of lava or some shit surrounding the world. rivers/lakes.

**SPEED**

Oh boy its a whole thing with like vectors and shit good lord it's all a math problem dw about it

**NUTRIENTS**

Carbs (fruit/honey/grain) - manages speed

Roots - just fills hunger

Fungi - manages perception

Meats - manages strength

Fat- manages max hunger, diminishing returns

**TEMPORAL STORMS**

Regenerates a part of the world, keeping gameplay fresh in a limited environment.

**SUNLIGHT**

Sunlight determines the temperature of an area, and is consumed by plants in order to grow.

**SANITY**

Increased by performing certain actions, has a maximum and middle, cannot go above maximum, and will slowly sink to middle if above it. Going above the middle can get rid of some effects that are intended to be usually permanent, such as monsters spawning at night. Reduced by a lot of stuff, like interfacing with the incomprehensible such as gods/leviathans, being in the dark for too long, etc.

**SALVATION**

Angels descend temporarily, and can be seen from across the map. In their wake, during the apocalypse, they leave very unstable “golden esotes”, which can be used to reverse the effects of the apocalypse, and win the game.

**ENTITIES**

| **Entity** | **Notes** | **resources** |
| --- | --- | --- |
| Serpent (rare) | venom | Venom, meat |
| Bear (rare) | Protective of cubs, which can be tamed | Meat, fat, fur |
| Deer (uncommon) | skittish | Meat, hide |
| Wolf (uncommon) | Runs in packs, can be tamed | Meat, fur |
| Mosquito (common) | Chance to give disease, gives itch on affected area | none |
| Honeybee (rare) | Makes honey, only aggressive if provoked. Honey has the same effect as spice, multiplying when used together. | honey |
| Wasp (very rare) | aggressive | none |
| mountain cat (very rare) | Stalks, hunts | Meat, fur |
| Fish (common in water) | Water-based, can be fished up | Meat, fat |
| Frog (common) | Amphibious, hunts flies/mosquitos | Meat, fat |
| Flies (common) | Seeks food and rots it | none |
| Ghost (special case) | Populate towns, unkillable and will attack if they catch you stealing. Can’t be seen unless hostile. | Gold, meat, fat, hide, fur, every kind fo plant, etc. |
| Player (one of one) | You like control it lol | N/A |
| Critter (common) | Eats stuff and skitters around | meat |
| Fog beast (special case) | Comes from fog and darkness unless at very high sanity, dont come near light sources but take a while to move back from one, get closer and more numerous the less sanity you have or the weaker your light source. Will kill you on contact. | N/A |
| Stalker (special case) | Comes from fog and darkness unless at very high sanity, will move towards sounds but cannot see, will kill you on contact. | N/A |
| Parasite (special case, not really an animal) | See parasite | N/A |
| Barracuda (rare in water) | Spawn in water, hostile | meat |

**FORCES**

Magical forces that are more indirectly influenced, rather than the intentional influencing of the gods through player-built rituals

| **force** | **description** |
| --- | --- |
| essence | birth/growth consumes, death/withering restores, must be conserved, low chunks will draw from adjacents and high chunks will spread to adjacents. Low values have debuffs for living things |
| vapors | Essentially nighttime in the day, everything is light but fog reduces visibility and monsters will spawn from it. The presence of fog makes air itself a vector for all disesases, spreading them much faster. |
| warp | Higher warp increases sanity loss from all sources. The presence of certain entities, leviathans, and rituals all increase warp. All warp added comes in two components: temporary and permanent. Permanent warp drains much slower than temporary warp. |

**APOCALYPSE/HARDMODE**

Activated through the combination of all esotes, makes leviathans much worse, much faster, and able to multiply. all sourcewood plants and sourcestones wither, lifeforce is no longer replenished by death. The gods leave your world.

**VAMPIRISM**

Must find and consume the absurdly rare sanguis plant, losing all favor with gods, and maxing out all nutritional stats at the cost of being severely debuffed by sunlight, (although able to sleep through day), having passive sanity reduction, needing to consume rather large amounts of blood, and having much lower maximum sanity.

**SOURCEWOOD ROOTS**

Special, rare plants that can be harvested for the rare “sourcewood”, which is used to make several unique items that unlock powerful abilities. These “source items” are as follows:

* Scrying bowl (Signals from leviathans will appear in “clouds” in a circle around the bowl, larger and clearer the closer they are. Colored differently for different leviathans.)
* Spyglass (can create “starmaps” that act as waypoints, must play minigame where you connect stars to make constellations, must be acute triangles, can share points/edges, more stars included more precise waypoint is). Create starmaps from cloth
* Fishing rod (allows you to catch fish from natural water)
* Trowel (allows you to get plant seeds)
* Pipe (allows you to inhale drugs)
* Chisel (allows you to carve rituals)
* Pestle (allows you to extract pure drugs from plants)
* Hammer (allows you to crush rocks to get and enter dungeons)
* Eyepiece (allows you to see much more non-invasively)
* Bell (can be rung to see positions of ghosts when non-hostile)
* Collar (allows you to permanently tame animals)
* Pick (allows you to thieve covertly)

**ROCK CRUSHING**

Can find rare rocks around the world, potassium, saltpeter, sulfur, gold. Potassium increases max fertility, saltpeter+sulfur+charcoal makes blackpowder. Charcoal is burned woodroot.

**LEVIATHANS**

Enormous beings in orbit that significantly affect the climate of large areas as they pass over. Their positions can be seen through scrying, triggering hardmode “awakens” them. When both affect the same area, their effects cancel out and nothing is done.

| **Leviathan** | **Description (normal, awakened)** |
| --- | --- |
| winter/thanatos | Low sunlight, zero sunlight |
| spring/gaia | Increased vapors, massive vapors |
| summer/pandora | Increased sunlight, enough sunlight to set grass on fire |
| fall/athena | Increased warp, massive warp |

**SOIL**

Soil can have it’s fertility completely removed by mixing sand into it, and can have it increased by allowing food items to rot inside of it, requiring exponentially more the less or more fertility it has, as given by a curve analogous to y=((x-100)^2)/100 where x is the current fertility and y is the cost to increase it.

**PRIMITIVE CRAFTING**

Underlines are not consumed

Stick, flint, string - spear

Stick, flint - knife

Threadleaf, knife - string

Stick, knife - needles

Needles, string\*10 - cloth

Flint, flint - lighter

Stick, flint, knife - arrow

Stick, string - bow

cloth\*3 - bedroll

Woodroot, knife - bowl

**PLANTS**

Plants with nutritional value are marked with (N), (NC) requires some kind of process to make use of it

Drugs that must be extracted to have value are marked with (E)

Drugs can be extracted to get rid of the plant and separate different drugs

Plants grow according to the following rules:

* Plants spread only if fully mature
* Plants start at maturity -1, as a “seed”, requiring a certain (large) amount of fertility to germinate, from then on needing more and more in order to grow.
* The “commonness” of a plant affects how much fertility it takes up.

| **Plant** | **Drug** |
| --- | --- |
| Demonleaf (very rare) | hellsight |
| Longleaf (rare) | lauris |
| Grass (everywhere) |  |
| Ivy (uncommon) | odium, lux (E) |
| Nightshade (rare) | sirius |
| tuber (N) (common) |  |
| Spiceroot (rare) | spice |
| Mushrooms (N) (uncommon) |  |
| Mold (uncommon) | Rot, Penicillin |
| Grain (NC) (common) |  |
| threadleaf, used to make cloth, string. (uncommon) |  |
| Stickreed (common) |  |
| Fruit (N) (uncommon) |  |
| Sanguis (exceptionally rare) | nightblood |
| Woodroot (uncommon) |  |
| Algae (everywhere in water) |  |
| stimroot (rare) | stim |
| Sourcewood (extremely rare) |  |
|  |  |

**RITUALS**

Carve a ritual rune out of rare (as rare as sourcewood) sourcestones, drop items in a circle around and light a fire atop the soucestone. (sourcestones make up the ground)

**GODS**

Rituals get exponentially more expensive the more rituals you have completed.

| **God** | **benefits** | **drawbacks** | **How to gain favor** | **Max favor reward** |
| --- | --- | --- | --- | --- |
| Koqotzl (god of power) | Strength increased  (strength) | Lower harvest  (misery) | Ritual animal sacrifice | Spectral bear (very powerful) |
| Indi (god of wealth) | Better harvest  (propserity) | Reduced strength  (weakness) | Ritual gold sacrifice | Bag of holding (can hold stuff for you) |
| Unlu (king of gods) | Increased favor gain  (majesty) | Higher enemy spawns, stronger enemies (hubris) | Sacrificing favor with other gods | Eternal flame (provides eternal fire, but no light/warmth on its own) |
| Anax (god of strength) | Max. sanity increased  (bravery) | Ritual cost increased  (foolishness) | Ritual monster sacrifice | Spectral wolf (buffs other wolves) |
| Meshe (god of wisdom) | Maximum sanity reduced (cowardice) | Ritual cost decreased  (wisdom) | Ritual crop sacrifice | Raven (points out hidden things) |

**FIREBUILDING**

Assemble stickreed into a firepit, use lighter for lighting attempts, chances are decreased at lower temperatures.

**GHOSTS**

Come from Ghost Ruins, which spawn very rarely and temporarily around the world, a maze of crumbling walls, invisible residents, a mysterious bowl in the center, and tempting loot about. Strong and unkillable, these haunts can’t be seen unless hostile, and turn hostile when stolen from. Spectral bowl at the center and have items dropped into it to “sell” them to the ghosts for gold. Can also be stolen from for scrap, gold, food, etc. These towns dissapear entirely a little while after the bowl is used, or a good while after spawning in. They store stuff in chests around the ghost town, which can either be smashed open, alerting all ghosts in the town, or picked, which will still alert ghosts if caught, and is quite difficult to pull off, but can be done. Ghosts won’t notice missing items.

**FAMILIARS**

Gain some from having high favor with gods, gain others by taming them. Requires collar to tame.

**DISEASES**

| **Disease** | **effects** |
| --- | --- |
|  |  |

**DRUGS**

Tolerance can be built up to all that are marked with a (T)

Effects are (I), (C), (B) for ingested, contacted, and inhaled respectively. Bolded letters indicate a higher effectiveness for a certain method.

| **Drug** | **effects** |
| --- | --- |
| hellsight | You awake in a maze of blood, broken angels approaching you, their forms twisted by corruption, pleading for death. They move only when out of view. If they come into contact with you, the dream ends, and your sanity is reduced by 90%. If you escape, you are granted favor with a random god. Gets harder every time you use it. (B) |
| lauris | Increases sanity a good amount, but kills your stats for a little bit, as well as taking a good chunk of water and food. (B) |
| odium | Gives you itching effect, reduces stats and sanity (C)(I) |
| sirius (T) | Seriously reduces your stats, in high enough concentrations can kill you. (B)(I) |
| lux | Accelerates healing (C)(**B**) |
| spice | Increases sanity when accompanied with food (I)(**B**) |
| pennicillin | Accelerates recovery from bacterial infections (I)(C)(**B**) |
| rot | Gives you a low-level infection |
| stim (T) | boosts your stats temporarily, too much will kill you. (B) |
| nightblood | Activates vampirism permanently |
| venom (T) | Same as sirius |

**ESOTES**

Realization, obliteration, abstraction, refraction, amplification, reduction, derivation, portion, combination, integration.Found in the center of large “nightmare regions”, where there is no sunlight, max warp/vapor, and several actively hostile entities. Combine all ten to activate hardmode.