MIND'S ISLE

Game Design Document V0.2.0

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Version History

Version	Date	Notes
0.1.0	23/04/2024	Doc outline
0.2.0	05/06/2024	Resources, Items and crafting added. Game overview touched up a bit & mechanics refined.

Table of Contents

Game Overview

Genre	Sandbox, survival, adventure
Target Audience	15-21 year old, all genders, casual players
Platform	PC (Steam release)
Artstyle	Mid-High realism, earthy.
Mood & Feel	Relaxing, repetitive, warm, satisfying, grindy
POV & Perspective	First-person, Third Person, 3D

ELEVATOR PITCH

"Stranded on an island, you must explore, gather and craft to survive, however the island is watching. Keep the island pleased to survive, if you don't it will punish you.

PILLARS

- Primitive survival
- Sentient island
- Roadmap

WHERE'S THE FUN?

- Twist to the survival game, the island is alive.
- Pleasing the island will make the game easier for you, however you need to go out of your way to do so. The island will reward you based on your actions. (Reactive to player)
- Not pleasing the island will make the game harder, however, you won't have to return to the origin point?
- No matter which way you go (happy or sad island) there will be unique rewards/consequences for each route

SETTING AND NARRATIVE

You play as somebody who woke up on an island. You can't remember how you got there. What happened to everyone? The island speaks to you. You must keep it happy to survive, if not, it will punish you.

GAMEPLAY OVERVIEW

- A 3D first-person or thirdperson open world sandbox survival game set on a small island
- The player will be able to gather resources such as wood, stone and metal.
- Players can build structures from these materials.
- The island will be "alive," reacting to player actions by increasing resource respawn
- Sad = more enemies, less resources. Happy = less enemies more resources
- The goal of the game is for the player to build structures to help them survive (like a fortress) and collect resources such as fruit and mob drops to keep the island happy,. (island will tell player to give xyz to make it happy, player can obey / disobey)
- A meter will be shown in the UI to see how happy the island is.
- Day/Night system, every day a new quest. (quests daily)

- Resources needed for question will be independent, not based off increment changes
- Unique resources at 0% and 100% happiness
- Explore -> gather -> craft (Loop explore gather craft/build)
- Road map loop

- The game will heavily focus on the concept of having a very limited work force in a primitive world, and being able to create modern day technologies using modern science concepts.

LOOPS

Explore → Gather → Craft
Next tree milestone → Gather/Craft milestone requirements → Meet milestone
Automate process→ Gain resources for upgrade → upgrade automation
Explore → Find new resource → Research resource → New recipes
Find food /water → Consume to survive → Food water drainage
Plant crops → Harvest crop → Food gathered → Replant
Research new recipe → Set tree billboard → Follow tree → Complete billboard

Need to clearly define the action, progress and reward

Audience & Monetization

TARGET AUDIENCE

A target audience for a game like this would fall under sandbox/survival/adventure. Similar games could be Minecraft, Subnautica or Ark Survival Evolved. Looking at the target audience for these games it's leaning towards young adults usually between 15-21. These people who have more time to invest themselves in games like this, compared to an older audience. With the platform falling under any, the most common would be PC and console as these are the most common devices for this target audience. Due to the skills and size of the team, the game will only be made for PC, with a planned Steam release. It will be around $15 AUD

MONETISATION STRATEGY

Premium model, the game will be sold for roughly $15 AUD and thats final. There will be not microtransactions. Potential for paid dlc in future

Gameplay

Mechanics & Features

MOVEMENT

Player can move anywhere around them, jump

TOOLS

Tools will be used to help a player break or kill an object or enemy. The tools present will be an axe, a spear and a pickaxe. Base damage will be 5. When using the designated tool, the tool will multiply the base damage by 15.

BREAKING

With the right tool, a player can break objects (trees, rocks, buildings, ore) to collect the resources dropped by each.

COLLECTING

When walking over a dropped item and touching it, it will auto-collect into your inventory

WEIGHT

Each item will have a designated weight. Once at the cap, the player's speed will be lowered until they are at a standstill.

CRAFTING

The player can use their resources to craft different objects.

INVENTORY

The player will have 24 inventory slots for different objects. As mentioned before, they will have designated weight they can carry that will also affect how much they can carry

BUILDING

Once the player acquires the building item, they will be able to build. The build will be free form, a grid created around the first object placed in that area. A building wheel will open up, allowing the player to choose their building piece. (if mallet equipped)

STATS

Several stats will be present. These can be upgraded, but only by completing island quests. These stats are: Damage (base dmg to object or enemy), Speed (player speed), Health (player health), Strength (amount of resources collected) .

HEALTH

A simple health meter. Can be refilled by consuming food. Can be lowered by enemies or jumping off heights.

DEATH

Upon death, the player will drop all their items in a sack at the location of death

FOOD

Food can be found in the wild, growing on trees and shrubs. Can be consumed to raise health.

DAY NIGHT CYCLE

A day and night cycle to pass time in the game. This will mark when each new quest is given

QUESTS

Daily (in game world) quests.
These quests range from taks like:
- Bring x item to island
- Perform x actions y amount of times
- Kill x amount of creatures
- Build x amount of pieces

Rewards from the island include x% increase to the resource respawn multiplier as well as minor stat increases

ISLAND METER (NPC)

Island interface. Interact with the heart to view and accept daily quests. Gives quests.
A meter present on the top of the screen. Will show the happiness of the island. When hovered over, will expand the bar show in depth info such as resource multiplier value.

MOBS

Both passive and aggressive mobs will be present. They won't be a big focus, however they act as a driving force for the player to build their base. They will also provide unique resources to the player when killed.

ROADMAP

Road map

WEIGHT SYSTEM

The player's inventory will have up to 200 slots. Each item will have a weight value, if the total weight value of the items in the players inventory are more than the weight scale (100) the player will not be able to move.

UNLOCKING RECIPES

The player will be given science points on each level up. This will allow them to unlock a new recipe on a skill tree, revealing the road map to each recipe. (similar to a skill tree)

DYNAMIC ENVIRONMENT

Player's actions affect the environment and biome, completing quests will cause resources to spawn back faster.

Gameflow

Explore -> Gather -> Craft

Accept island quest -> Meet quest requirements by doing XYZ -> Rewarded for the quest.

Collect resources -> Build structures -> Run out of resources

Unlike most survival games, instead of unlocking recipes once you find a resource, it will almost be vise versa. You will see the end object (roughly) you can make, the roadmap of all the things you need to do in order to get there. You will be able to however over each resource to find out a bit about the resource (loc, what its used for etc). The island will almost act as an ingame wikipedia??

Example roadmap, player will be able to create a "Road map board" to display this stuff on screen.

Resources

BASIC

Item	Location	Recipe
Wood	Any biome with trees	n/a
Sticks	Under trees, any biome with trees	n/a
Stone	Ground, from mining rocks	n/a
Plant Fiber	Ground, from bushes	n/a
Flint	Rare drop from flint rocks, mount on mountains	n/a
Animal Hide	From killing animals	n/a
Seashell	Found of beaches by the ocean	n/a
Seaweed	Found underwater in coastal areas	n/a

INTERMEDIATE

Item	Location	Recipe
Sand	Beach, desert	n/a
Clay	River banks	n/a
Iron	In caves, mountain	n/a
Coal	In caves, mountain	n/a
Copper	In caves	n/a
Tin	On land, ore near mountain area	n/a
Limestone	Limestone deposit, arid area	n/a
Animal Fur	From animal	n/a
Animal Bone	From animal	n/a

ADVANCED

Item	Location	Recipe
Aluminum	Aluminum ore in caves	n/a
Oil	Oil deposits	n/a
Gas	Natural gas vein/deposits	n/a
Gold	Panning, gold ore in caves	n/a
Silver	Silver ore in caves	n/a

SPECIALIZED

Item	Location	Recipe
Graphite	Found near coal in caves	n/a
Sulfur	Volcano area	n/a
Salt	Sea water, Saltrocks on top of mountain.	n/a
Phosphorus	Underwater areas, skeleton bone (island)	n/a
Calcium carbonate	n/a	Crushing seashells (in mortar and pestle)
Lithium	Dry lake bed, arid environment	n/a
Zinc	Sphalerite rocks	n/a
Tungsten	Tungsten ore deep in caves	n/a

CAN CRUSH PEGMATITES, COMMON ROCKS TO FIND RESOURCES TOO!

CHEMICALS

Item	Location	Recipe
Sulfuric Acid	Sulfur lake	Burn, oxidize, mix in water
Alcohol	Fermenting berries and fruit	n/a
Hydrochloric acid	n/a	Hydrogen chloride (gas), water (in chemistry station)
Acetic acid	n/a	Fruit, water, yeast (in chemistry station)
Ammonia	n/a	Manure, water (in ceramic container)
Nitric Acid	In cave under bats	n/a
Potassium Nitrate	n/a	Nitric acid, potassium carbonate
Yeast	n/a	Fruit, water, flour (in ceramic container)

FABRICATED / SYNTHETIC

Item	Location	Recipe
Silica	n/a	Sand (at furnace)
Chain	n/a	Iron (at furnace)
Glass	n/a	Sand (at furnace)
Plastic	n/a	Phenol, formaldehyde, ammonia (at furnace)
Steel	n/a	Carbon, iron (in forge)
Paper	n/a	Wood Pulp
Wood pulp	n/a	Wood Pulp (at crafting station)

RARE EARTH ELEMENTS

Item	Location	Recipe
Diamond	Quarry	n/a
Lanthanum	Quarry	n/a
Neodymium	Quarry	n/a
Cerium	Quarry	n/a

TECHNOLOGICAL

Item	Location	Recipe
Copper Wire	n/a	Copper (at furnace)
Gold Wire	n/a	Gold (at furnace)
Electrical Components	n/a	Fiberglass, Gold Wire, Aluminum (at crafting station)
Fiberglass	n/a	Glass, Plant fiber, Plastic (at crafting station)

FOOD & WATER

Item	Location	Recipe
Water	Water sources	
Raw meat	Animals	
Berries	Bushes	
Fruit	Fruit tree/bushes	
Coconut Husk	Beach sand, Palm tree	

Crafted Items

TOOLS

Item	Recipe	Station	Usage
Stone Axe	Stone, Wood, Rope	By hand	Cut down trees, split wood.
Stone Knife	Stone, Wood, Rope	Crafting Station	Cut animals and finer resources.
Stone Shovel	Stone, Wood, Rope	By hand	Dig up ground resources (sand, gravel, dirt) for collection.
Wooden Mallet	Wood, Rope	By hand	Allows Player to build.
Stone Hammer	Stone, Wood, Rope	Crafting Station	Allows Player advanced building.
Stone Hoe	Stone, Wood, Rope	By hand	Allows Player to till the ground to allow planting.
Adze	Iron, Wood, Rope	Crafting Station	Allows Player for fine delicate crafting / details to build pieces.

WEAPONS

Item	Recipe	Station	Usage
Spear	Stone, Wood, Rope	By hand	Medium damage medium range weapon (can be thrown)
Sword	Iron, Wood, Rope	Crafting Station	High damage close range weapon.
Wooden Bow	Wood, Rope	By hand	High range weapon, medium damage.
Stone Arrow	Stone, Wood, Rope	By hand	Ammunition for wooden bow

FOOD & WATER

Item	Recipe	Station	Usage
Composter	Wood, Rope	By hand	Make natural fertilizer
Rain Collector	Coconut husk, Wood, Rope	By hand	Collect rainwater for player to drink
Well	Stone, Wood, Rope	By hand (preplace)	Collect and store water for players to drink from the pipe.
Fishing Rod	Wood, Rope	By hand	Allows Player to fish. (manual)
Fishing Net	Fiber, Stone	By hand	Allows Player to fish. (Automatic)
Smoke House	Wood, Rope	Crafting Station	Allows Player to smoke meat to preserve for longer.
Irrigation System	Bamboo, Rope, Wood	Crafting Station	Transport water from source to location of pipe
Crop plot	Wood, Rope	Crafting Station	Allows players to plant crops outside of the natural farm area.
Water Storage Tank	Glass, Wood, Rope	Crafting Station	Store water collected by pipe.

CLOTHING & PROTECTION

Item	Recipe	Station	Usage
Leather Armor	Hide, Rope	By hand (needle needed)	Low level protection from elements and enemies
Iron Armor	Iron, Rope	Crafting Station	High level protections from elements and enemies.
Wooden Shield	Wood, Rope	By hand	Direct damage block
Fur Clothing	Fur, Rope	Crafting Station	High level protection from elements
Waterproof Clothing	Plastic, Rope	Fabricator	High level protections from water / rain.

EQUIPMENT

Item	Recipe	Station	Usage
Rope	Plant fiber	By hand, Loom	Allows Player to climb. Used for crafting.
Pocketwatch	Chain, Tech Comps, Glass	Crafting Station	Tell time of day from inventory.
Fire Starter (Bow Drill)	Wood, Rope	By hand	Allows Player to start a fire (slow)
Flint and steel	Flint, Steel	By hand	Allows Player to start a fire (quicker)
Basket	Rope, Sticks	By hand	Allows Player to carry extra inventory slots. Small storage
Clay Pottery	Clay	Kiln	Basic storage item for water.
Bone Needle	Animal bone	By hand	Used for sewing clothes together.

HEALTH

Item	Recipe	Station	Usage
Herbal Medicine	Berry Type A	Mortar and pestle	Used to heal any conditions / sickness
Bandage	Berry Type B, rope	Crafting Station	Used to regain health (low)
Medical Elixir	Berry Type B, Berry Type D	Chemistry Station	Used to regain health (high)
Soap	Calcium carbonate, Seaweed	By hand	Used for crafting.

CONSTRUCTION & INFRASTRUCTURE

Item	Recipe	Station	Usage
Brick Oven	Clay, Stone	By hand (Preplace)	Cooking food
Mortar and pestle	Stone, Hide	By hand (Preplace)	Used for crushing and grinding basic resources.
Chemistry Station	Glass, Metal, Crucible, Rubber	Fabricator	Used for chemical synthesizing and work
Workbench	Wood, Metal, Stone, Hide	By hand (Preplace)	Wooden table with tools, used for basic crafting.
Fabrication Bench	Metal, Electrical Comp	By hand (Preplace)	Metal table, used for creating more advanced items such as technologies.
Grain Mill	Metal, Wood	Fabricator	Reduce grains into finer substances
Loom	Wood, Rope	Crafting Station	Used for mass crafting of fabrics and cloth
Lathe	Wood, Rope	Crafting Station	Used for crafting delicate wooden structures.
Furnace	Stone, Crucible	By hand (Preplace)	Melt lower temp metals into ingots. Create charcoal.
Anvil	Iron	Crafting Station	Used for tool and weapon crafting
Crucible	Silver, Clay	Crafting Station	Used for crafting furnaces.

Forge	Crucible, Tungsten	Fabricator	Melt higher temp metals into ingots. Create charcoal
Kiln	Stone	By hand (Preplace)	Create brick and pottery structures.
Tanning Rack	Sticks, Rope, Hide	By hand (Preplace)	Leather / Hide crafting
Food Rack	Sticks, Wood, Rope, Metal	By hand (Preplace)	Store raw meat by hanging them

NAVIGATION

Item	Recipe	Station	Usage
Map	Paper, Berry Types A-E	Crafting Station	Mark key locations and environment
Compass	Iron, Glass	Crafting Station	Keep north direction always.
Sundial	Wood	By hand (Preplace)	Primitive clock to tell time of day

TECHNOLOGIES

Item	Recipe	Station	Usage
Battery	Copper, Zinc, Lemonjuice, Elec Comp	Fabricator	Power technologies that require energy
Wind Turbine	Metal, Copper Wire	Crafting Bench	Convert wind into power, to power technologies that require energy.
Pump	Elec comp, Metal	Fabricator	Pump water through irrigation tubes.
Electromagnet	Iron, Copper Wire	Strike it with Lightning	Used to craft motors and generators.
Generator	Electromagnet, Wire	Fabricator	Used to power technologies that require energy.
Quarry / Mine	Elec Comp, Steel, Diamond?	Fabricator	Digs the earth, automatically harvesting and collecting resources.
Pulley	Rope, Wood	By hand (Preplace)	Lift heavy objects
Solar Panel	Silica, Iron, Glass, Elec Comp	Fabricator	Convert sunlight into power, to power technologies that require energy.
Water Wheel	Wood	Crafting Bench	Convert water movement into power, to power technologies that require energy.

TRANSPORT

Item	Recipe	Station	Usage
Wheelbarrow	Stone, Wood, Metal, Rubber	Crafting Bench	Transport large amounts of heavy resources on land.
Raft	Wood, Hide, Rope	By hand (Preplace)	Transport large amounts of heavy resources over water.
Canoe	Wood, Sticks	By hand (Preplace)	Quick transportation over water.
Sled	Wood, Iron, Rope	By hand (Preplace)	Quick transportation over land, can be hooked up to animals.

AGRICULTURE

Item	Recipe	Station	Usage
Small Animal Trap	Sticks, Stone, Rope	By hand	Trap small animals.
Big Animal Trap	Rope, Wood, Iron	By hand (preplace)	Trap larger animals.
Animal Enclosure	Wood, Rope	mallet	Keep tamed animals in here to ensure protection.
Beehive	Wood	mallet	Keep bees inside to collect honey.

MISC & OTHER

Item	Recipe	Station	Usage

SHELTER & BUILDING

Item	Recipe	Station	Usage
Foundation (VAR)	Var material (wood, stone, metal etc)	mallet	Used at the bottom to support structures.
Ceiling (VAR)	Var material (wood, stone, metal etc)	mallet	Used for shelter in buildings.
Wall (VAR)	Var material (wood, stone, metal etc)	mallet	Used for shelter in buildings.
Fence (VAR)	Var material (wood, stone, metal etc)	mallet	Base protection from mobs (place on ground)
Doorway (VAR)	Var material (wood, stone, metal etc)	mallet	Allows space in wall for door.
Door (VAR)	Var material (wood, stone, metal etc)	mallet	Door, opening and closing
Window Wall (VAR)	Var material (wood, stone, metal etc)	mallet	Wall with a window attached
Trapdoor (VAR)	Var material (wood, stone, metal etc)	mallet	Used as a vertical door
Bed	Wood, Hide, Rope, Leaves	mallet	Allows players to sleep, restoring their stats.
Wooden Bridge	Wood, rope	mallet	Allows crossing over ravines or gaps in the land.
Tree Platform	Wood, rope	mallet	Allows building on tall thick trees.
Dock	Wood, rope	mallet	Provide a fishing area and area to tie rafts to shore.

Standing Torch	Wood, rope, hide	mallet	Provide light.
Chair	Wood	mallet	Furniture item, no direct purpose.
Table	Wood	mallet	Furniture item, no direct purpose.

Level Design

THE ISLAND

The island will be basic but tropical-feeling. It won't be too large but will have an abundance of resources. It will include a jungle, a mountain, and plain areas. This will expand to different islands.

As the spawn of the island, will be the island heart. Where the island will talk to you and you can interact with it. This will be the centre of the islands, with the island will be made into four sections, one being jungle, one being mountain, one being plain and one being beach.

Body features will be found all over the island to create a human body. Each island could be a

Forests & Jungles: Wood, food, fiber/plant materials, animals, rubber.
Mountains & Quarries: Stone, iron ore, copper ore, rare earth elements, graphite.
Riverbanks & Coastal Areas: Clay, sand, water, salt.
Deserts & Beaches: Sand, silicon.
Plains & Grasslands: Food, fiber/plant materials, animals.
Mining Areas: Coal, iron ore, copper ore, tin ore, gold, silver, bauxite, limestone, sulfur, phosphate.
Oil & Gas Fields: Oil, natural gas.
Specialized Ecosystems: Unique plants, rubber, medicinal plants.
dif organ?

Narrative

The player wakes up on a mysterious island, faced with a talking island. (the island will act as the tutorial) the island will greet the player and explain a quick overview. How the quests work, stats, building etc. It will tell you to build a shelter for the night and slowly show the player how to.

UI

Player HUD

- Health
- Stamina
- Time
- Island happiness

Menus

- Inventory
- Recipes
- Pause menu
- Start screen
- Main menu
- Options

Look & Feel

Mood Board

Artstyle

- Stylized, semi realistic?

Technical & Software

Prototyping

The prototype will be v1.0. The version used for the AIE project.

Software & Controls

CONTROLS	PC
Move	WASD
Attack	Left Click
Use UI Button	Click
Hotbar slot	1-6 Numberpad
Reload	R
Aim	Right Click
Inventory	Tab

Software used will include:
- Unity
- Blender
- Krita
- Visual studio 2022
- Github
- Audacity

Appendix

SCRIBBLES / NOTE DUMP

Less focus on health and shelter management (that's the first speed bump) then its crafting after.

Need a reason to be able to create all these things.

Signs of life on the island before that perished?

MAIN CHAR time travels from past 5000 years into the future - his goal is to fix his time machine and get back, while also figuring out what happened. Time travel allows access to the island when it is performed, with a society present on it? - bit of a cop out

Travel around islands, find organs and stuff in caves etc. The island is alive.

- Realistic crafting, massive trees
- Island is alive
- Discover the truths of the island, what caused you to find yourself here?
- Simulation?
- The island can bless you with less hunger and thirst depletion (stat increases)

RECIPES

How does unlocking/learning recipes work? Island NPC acts as a wiki? Ask it about resources and discover things you can craft with it?

Have a brain/recipe skill tree, with levelling up, XP learning by doing every action, each level you get x amount of points and can unlock x recipe? (Similar to ark)

How can I do something similar but different, want to reveal the end goal without spoiling gameplay?

Unlock certain avenues and just the recipes for the end goal? For example, unlock tier 1 crafting and you unlock 3 different types of crafting tables. Once the recipe put into the billboard it automatically shows the prerequisites

Recipe skill tree
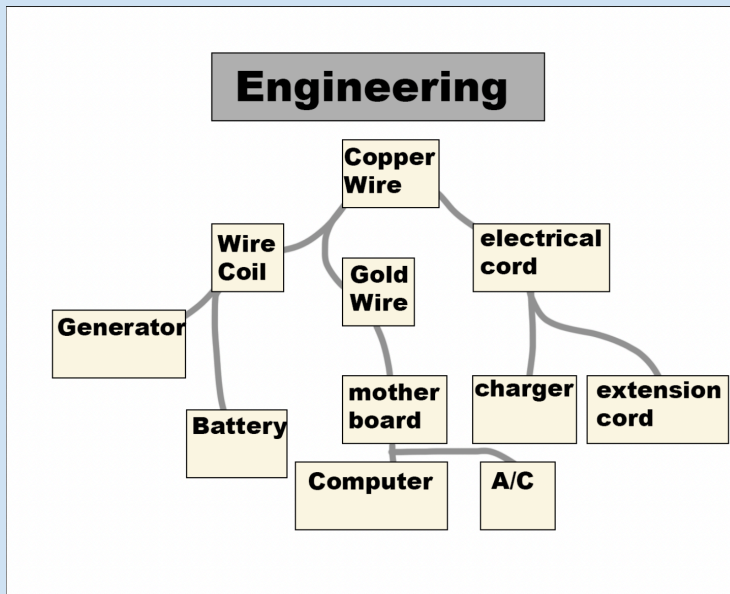
Skill trees will be for engineering, chemistry, construction, agriculture, farming, mining

Component/resource skill tree, recipe skill tree

Only for recipes or only for components?
Unlock components on skill tree → will automatically unlock recipes
Recipe page & Component Page
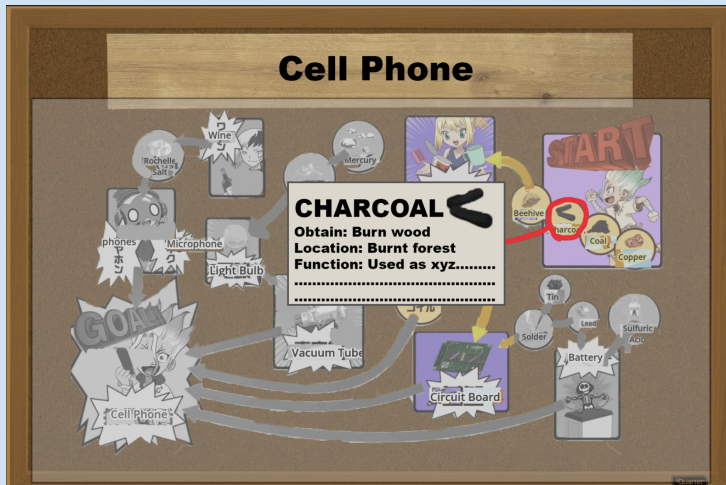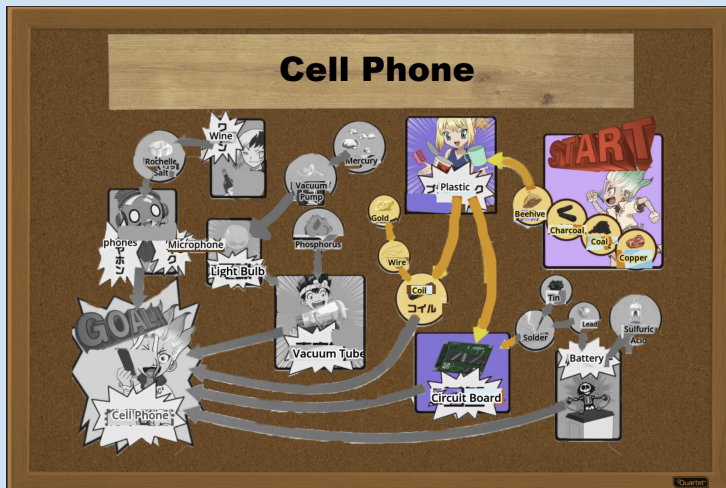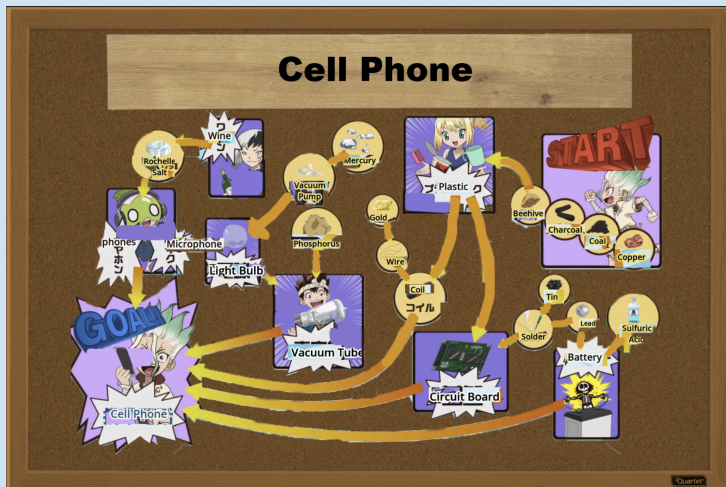View Recipe on board, how do you find this recipe? Skill tree (in the order)
Can unlock the recipe without all the components

Knowledge points, unlock recipes and components with them
So two skill trees, a component one and a recipe one.
Keep them separated, same currency.

ROADMAP BOARD

Milestones / Components that havent been met will be grayed out. Hover over for more info

References / Inspirations

- Dr Stone
- Adventure Time
- Ark survival evolved / rust
-