The document below is an example of a system change/improvement proposal I made while working as a Game Designer for a company making a social online game with creative building elements.

Players customized their islands using available 3D props and created activities like racing minigames and could visit each other's islands where they displayed their unlocked props and competed in different activities.

Objective: Improve engagement and retention

Under the [MDA framework](#), [REDACTED GAME NAME] falls under the categories of *fellowship* (games as a social framework) and *expression* (games as self-discovery) aesthetics, which generally go hand in hand - there are great benefits in making your character and your base prettier if it means other players get to see it.

However, in the current state of the game, every player gets every placeable block and prop right from the start, meaning a player who just started the game has as many customization options as a player who's been playing for months or years. There is nothing making them want to come back to the game, nothing to work towards, they have everything from the get-go.

This can be improved with the clever usage of an unlock system.

Players would unlock blocks and props through different activities in the game. What you unlock is related to the activity you do.

Island Level

Base structural blocks like regular floors, walls, and ceilings can be unlocked by the number of visits to your island, and other players rating your island. Creating a fun, attractive island brings in foot traffic and thus levels up your island, unlocking structural blocks but also increasing the build limit (number of blocks you can place) and area limit (how big you can make your island). The time other players spend on your island counts towards that as well.

Leveling up your island happens on an exponential scale, so you need 10 XP to reach level 1 but to reach level 6 you need 100 XP.

Will require further testing and balancing, but as an initial experiment this is how much XP you need to level up the first few levels:

Level	XP Needed
1	10
2	25
3	40
4	60

5	80
6	100
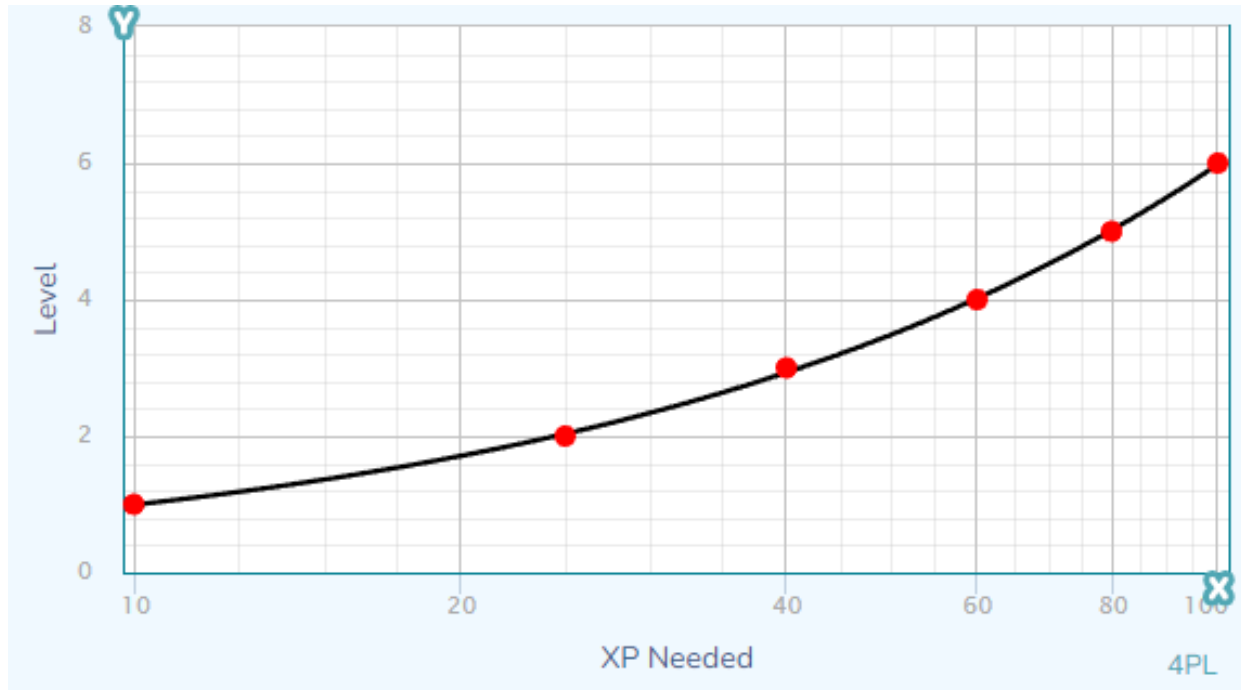
- **Number of minutes other players stayed on your island**
  - 1 XP per 10 minutes spent on your island (per player)
    - 2 players spending 10 minutes on your island would grant it 2 XP, and so on
    - Players spending time on your island also get XP for their own islands, to encourage players visiting each other and moving about. They gain XP at a rate of half of what the host gets - they would get 0.5 XP per 10 minutes on your island
  - Players must be non-AFK - there must be a system to detect players not touching their mouse or pressing any keys to stop counting the XP
- **Other players visiting your island**
  - 2 XP per unique island visits, per day.
    - This is of course to avoid players teleporting in and out of an island to exploit grind XP
    - The visitors get XP for their own islands while visiting other islands, at a rate of 1 XP per unique island visits, per day.
      - Players can visit as many unique islands as they want per day to get XP, but will only get XP for a unique island visited every hour.

Players are rewarded with blocks and props every level, but every 5 levels they get a special prop or a bigger bundle of blocks and props as a reward.

Racing & other minigames:

By participating and winning on minigames, you can unlock more customization abilities for building future minigames.

Since we currently have the racing minigames only, this is my proposal for adding unlocks to them. This is supposed to be balanced in a way that a new player can still make fun, albeit shorter races, and as they participate and win more races, they can make longer more intricate tracks.

- By participating in races, players can unlock more checkpoints to be used in their own races.
  - For starters, players can make races with 8 checkpoints and can increase the limit as they participate in more races

Races Participated In	Reward
5	+2 Checkpoints
10	+1 Minute Race Duration
15	+2 Checkpoint
20	+2 Checkpoints, +2 Minute Race Duration

- By winning races, players can unlock placeables to make their own race more fun.
  - They start with 2 spring pads and 1 speed boost zone

Races Won	Reward
1	+1 spring pad
3	+1 spring pad, +1 speed boost zone
5	+1 slow down zone
10	+2 spring pad, +2 speed boost zone
15	+2 slow down zone
20	+3 spring pad, +3 speed boost zone
30	+2 spring pad, +2 speed boost zone, +2 slow down zone

Further unlocks for other activities can be developed as the activities are brought into the game in future versions.

Objective: Design the foundation of a progression system for the game

My proposal for a progression system, other than the aforementioned unlock system, is a system where you upgrade a raft in order to be able to reach further islands and collect more resources. This can be tied to the unlock system and you can unlock different blocks to customize your island by exploring other islands. Like ice-related furniture from icy islands, bamboo and tribal-looking blocks from the jungle island, etc.

After playing the game for a while and finishing the tutorial, you unlock the raft prop, that you can place by the water. It is a pre-made raft that can eventually be upgraded in order to increase its effective range.

By interacting with the raft, you can open the adventure island menu (sketched above), where you can see different islands you can visit, and the range of your vessel.

Each island is going to be pre-made, with some randomly placed elements (like enemy encounters, puzzles, and hidden treasure). You can also collect resources from these islands.

Since combat implementation is still a long way to come, for now, islands can only have resources to be gathered. Every time you visit new islands, they are going to generate resources spread out around the island that you can interact with to collect, such as trees, bushes, ore, etc.

There's a 20% chance0 an island will only have resources to be gathered, a 40% chance an island will additionally have a map to a hidden treasure (containing a substantial amount of resources), and a 40% chance it will additionally have a puzzle that will give you resources if you complete it

Resources

You can find a plethora of different resources in order to upgrade your raft (and eventually other things on your island - this system is just setting up the foundations for more content in the future).

Resource	Found
Wood	Grassy Islands (small amounts), Jungle Island (great amounts)
Plant fibers	Grassy Islands
Stone	Mountain Island (great amounts)
Metal	Mountain Island (small amounts), Volcano Island (great amounts)
Magma Cores	Volcano Island
Frost Crystals	Ice Island
~~Diamonds~~	~~Monster Island (small amounts), Hell Island (great amounts)~~

Diamonds as of right now will have no uses, but can be used as a late game resource in the future. For this release, we can leave them (and their related monster and hell islands) out of the game.

Vessel Upgrades

By going on voyages and exploring the islands you find, you can bring back resources in order to upgrade your vessel. Vessels have a set amount of cargo they can hold, and by upgrading them, you can bring more resources back home. Better vessels also have more HP to withstand damage by enemies in the future, when they are added.

Vessel Level	HP	Requires	Properties
Raft	100	Finishing the tutorial	Minimal Range, Cargo 10
Rowboat	120	15 wood	Range 1, Cargo 20
Sailboat	150	20 wood, 15 plant fiber, Wooden dock	Range 2, Cargo 25
Sloop	200	30 wood, 15 plant fiber, 10 Stone	Range 3, Cargo 30
Galleon	230	50 wood, 30 plant fiber, 10 Metal, Stone dock	Range 4, Cargo 40
Turbo Galleon	250	10 Magma Cores	Range 5, Cargo 45, floats (untouchable by mobs)
Windrider	300	20 Frost Crystals	Range 6, Cargo 50, shoots crystals at mobs from afar

Initial Island Map

This below is my proposed map. We will need to balance it in the future but it is a starting point. Each circle is a range that the boat needs to have in order to be able to reach the islands on that range.

Grassy Island (Wood, Fibers)

Jungle Island (Wood+)

Mountain Island (Stone, Metal)

Skull Island (Monsters)

Volcano (Metal +, Magma Cores)

Ice Island (Frost Crystals)

Hell Island (Monsters+)

R6 R5 R4 R3 R2 R1
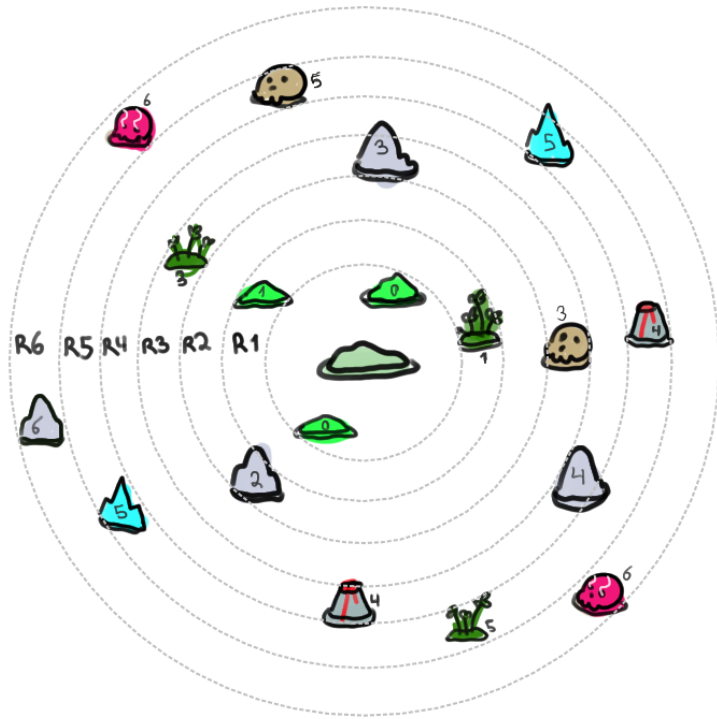
There is a resource multiplier the further away a type of island is from the island of the same type that is closest to the center. For each island of the same type away from the center of the map, you get an additional 1x multiplier for the resource type of that island, up to a maximum of 3.0x.

So for instance, there is a jungle island on R1, R3, and R5
1.0x wood multiplier on the jungle island on R1
2.0x wood multiplier on the jungle island on R3
3.0x wood multiplier on the jungle island on R5

A jungle island with 2.0x wood multiplier would have bigger trees that gave 2 wood instead of one, and the same goes for the island with 3.0x multipliers. This means that every resource will need 3 visual assets showing the amount of resources they give (since the maximum multiplier is 3.0x).

This is to encourage players to go to islands further away, which will be more challenging than the ones close to the center of the map. Once we introduce the combat system we can fine-tune this.

Islands will have a certain number of "slots" where resources can appear. A grassy island with 5 slots can spawn with 3 wood resources and 2 plant fiber resources, or 4 plant fiber resources and 1 wood resource.
Slots have a small chance of spawning no resources at all, so there is a chance that this island would have 2 wood resources, 2 plant fiber resources, and an empty slot.
However, every island must spawn a minimum amount of resources no matter what.

Island	Slots	Possible Resources per slot	Minimum Resources
Grassy	5	Wood (20%), Fibers (50%), Nothing (30%)	1 Wood, 2 Fiber
Jungle	8	Wood (70%), Fibers (15%), Nothing (15%)	4 Wood
Mountain	15	Stone (50%), Metal (20%), Nothing (30%)	3 Stone, 1 Metal
Volcano	15	Stone (10%), Metal (50%), Magma Core (25%), Nothing (15%)	1 Magma Core, 5 Stone, 2 Metal
Ice	10	Metal (40%), Ice Crystals (40%), Nothing (20%)	1 Ice Crystal, 3 Metal

Vessel and In-Island Mechanics
The game will not have any type of sailing. Once you click on a reachable island on the map, you simply teleport to it.

However, your boat will have a health counter, which when depleted, will prevent you from going to any islands beyond range 0 (meaning you can only go to the starting islands around your own island.
Once you land on the island, your boat will be static by the shore and will be exposed to enemies (once combat is introduced), who can spot your boat and attack it.
If your boat breaks, or if you die, you will be forced to sail back to your island, losing all resources collected in the process.
Back at your base, you can choose to repair your vessel's hull using wood. The amount of wood depends on the damage the ship has suffered, at a 1 wood to 10 HP ratio.
Once you upgrade your vessel to the turbo galleon, which floats, it becomes untouchable by enemies and you will not need to repair it anymore. The last vessel upgrade, the Wind Rider, shoots crystal shards at enemies who are close to the ship, helping you in combat.

Islands will be pre-generated, with spots where things like puzzles, treasure hunt spots or resources can appear randomly.
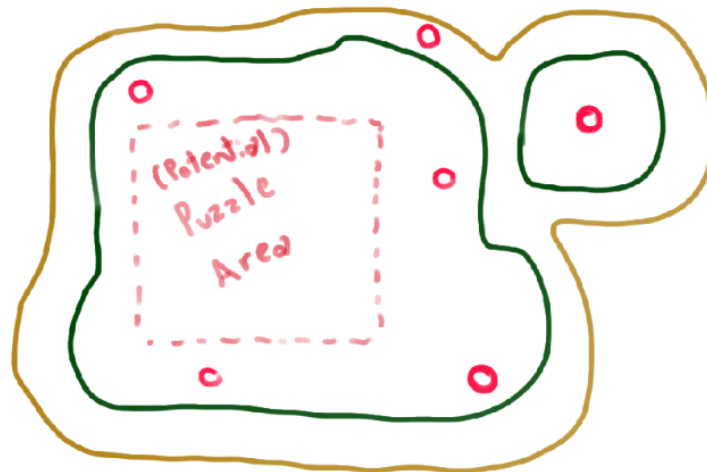

The very simple island above has some slots (red circles) for resources or treasure hunt spots to appear. The level design of this should be standardized so we can reutilize puzzles and props on every island.
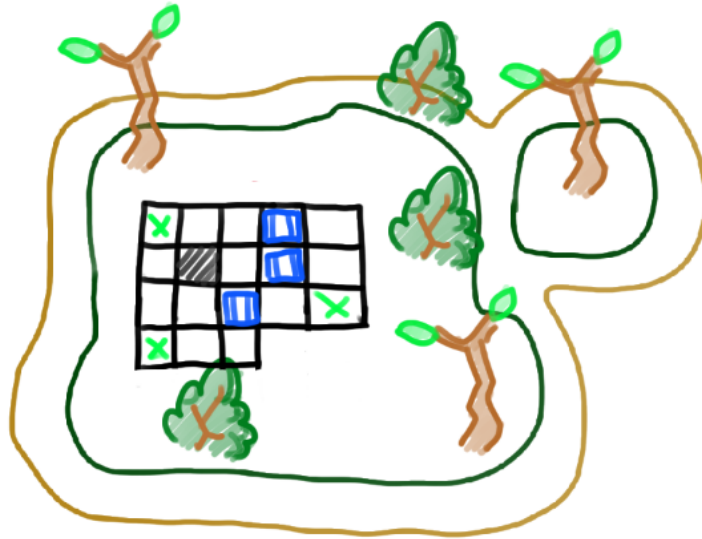
This is an example of an island that was generated with a push block puzzle and some random placement of resources.
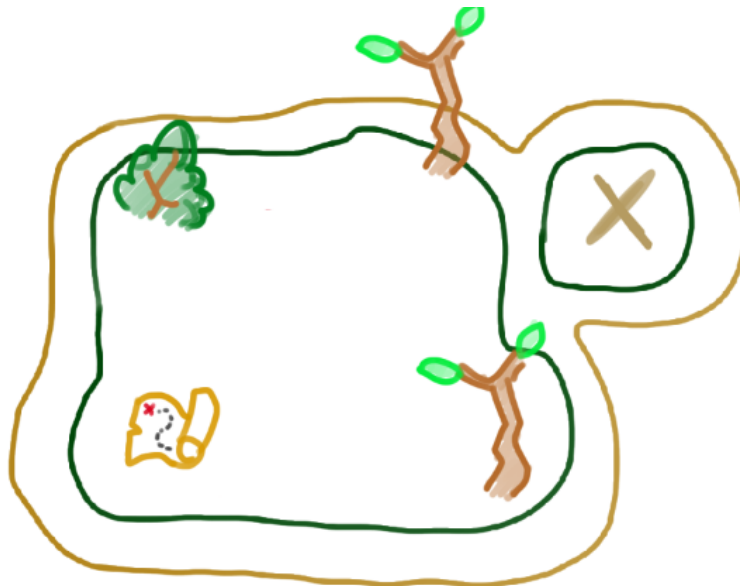
This is another example of an island that generated a different placement of resources and instead generated a map in one of the slots, and the X for the treasure at another spot.
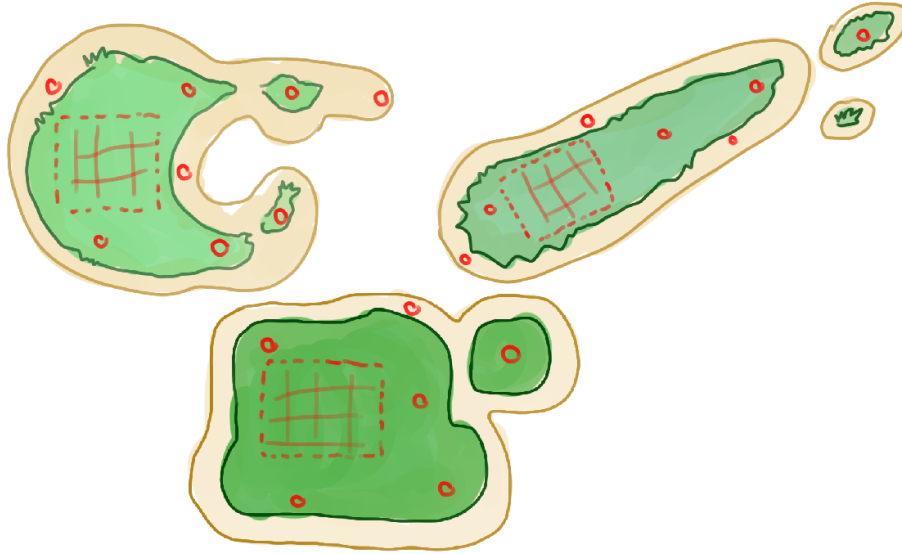
We could have different pre-made islands with different spots for spawning resources, maps, treasures, and pre-set areas where puzzles could happen.

Puzzles

The game can have a plethora of puzzles, from rotating stone discs to form an image, to pushing blocks into Xs, to solving riddles: the possibilities are endless.

Since we are still in the process of getting a level designer on the team, for now, we can have a small variety of Sokoban-style push block puzzles, which will be designed if this feature is green-lit.
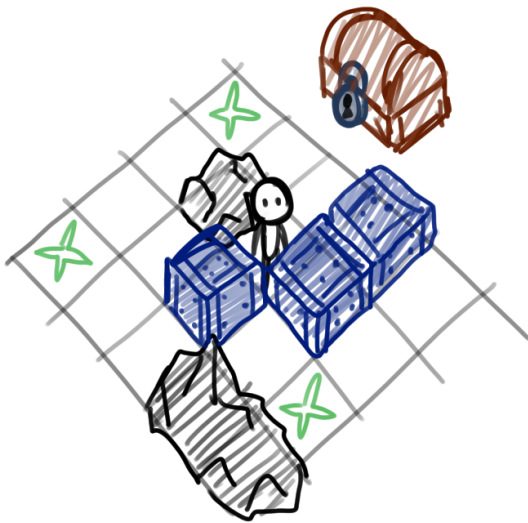
An example of a simple sokoban push block puzzle to open the treasure chest and get resources.

Treasure Hunt

In order to avoid feature creeping in this release, treasure hunts can be very simple. You will find a map in one of the "slots" of the island, and once you have it, you will be able to see a faint trail

leading to another slot containing the treasure. Once you reach it, there is a prompt for you to press the interaction key to dig up the chest and get the treasure.

The implementation of the trial can be done by the usage of a navmesh agent (since we are already integrating pathfinding on islands anyway) going from map to treasure and rendering a faint line on its path. If we go this way, we can also programmatically calculate the distance from the map to the treasure and multiply the loot accordingly - you will get a smaller treasure if the chest is right next to the map.

For now, we can make it so that there's a 0.5x treasure multiplier for treasures right next to where the map is found, linearly to a 3.0x multiplier if the treasure is in the maximum distance it can be. These are initial values and will of course need to be fine-tuned after we get a level designer on the team.