# Intro

This design document was made during the selection process for a position. The purpose was to design systems for a game that increase replayability and support the predetermined core loop. The main theme of the game was sailing and discovering the waters and island surrounding a central hub island.

The goal with my design is to encourage replayability by adding great variety to each game loop and dividing the loop into a strategy-execute style solution, where the player gets to strategize before setting off for the more interactive gameplay.  I believe this would fit the game's core loop well and would encourage players to "do one more" after getting to see how different the next loop is shaping up to be each time.

This is done by adding build variety through different ship types and equipment that allow for different approaches to the objectives at hand. I believe this would serve a vast variety of player types. The downside of this solution however is that it can get a little front-loaded the further you go as you get more upgrades, leading to more choices to make before setting off.

Please bear in mind that I have elected to go with a more high-level design to start with, and with feedback from the team it would be then iterated on and the more practical, lower-level mechanical aspects of the design would be crafted. These systems are extremely flexible and complexity can be added, removed, or moved at will.

As sailing the seas is a big part of the game, I would like to highlight exploration, and thus a big part of these systems is to support an increasing map size that becomes available the more the player plays and unlocks upgrades, and the playable map changing in meaningful ways from loop to loop. This allows for creating natural growth by playing the game and presents the player with interesting choices each time before they even set off to explore.

# Replayability Features

## Feature 1 - Island Improvement

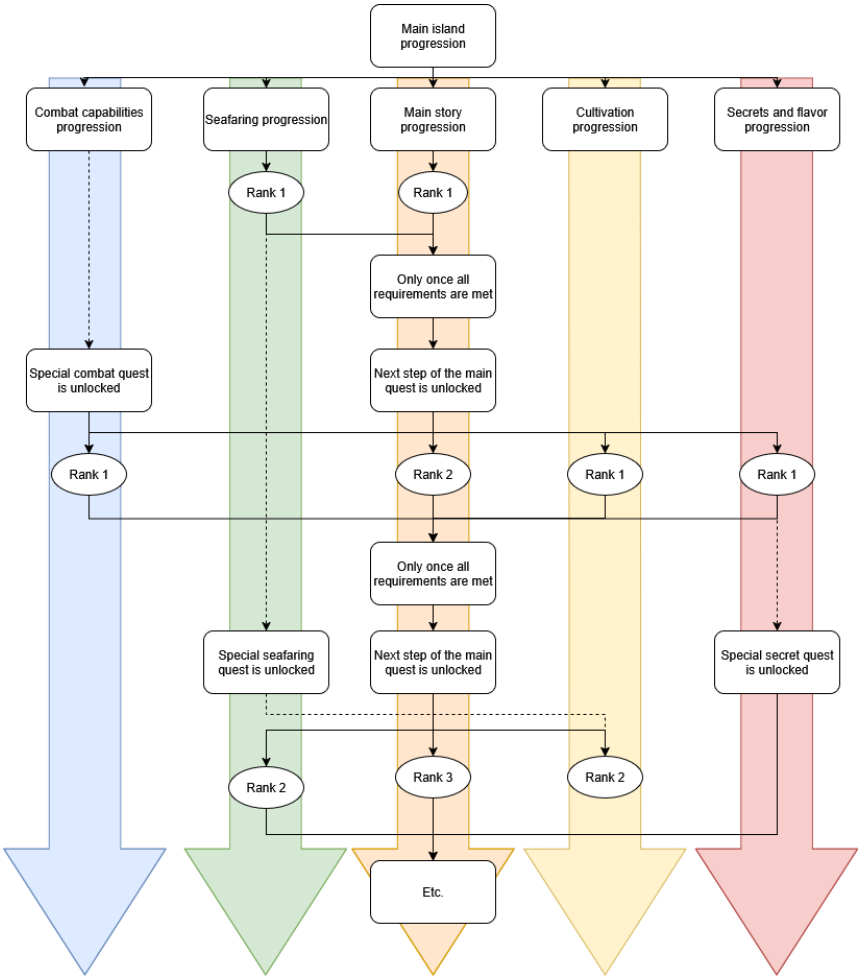
**What:** As the player gathers resources and completes quests, they help build out the main island. As the required goals are met, more facilities are built on the island which increases the breadth of upgrades and supplies available, and more people find their way onto the island which increases the variety and difficulty of quests available. This feature can also be used to lock off main story progression to ensure a smooth difficulty curve within main story objectives.

Island improvement can also include land cultivation and other farming style mechanics. Gathering seeds on islands, for example, would allow the player to plant them on the main island and over time these seeds become plants that can be used as resources for unlocks and upgrades.

**Why:** I think this feature would fit well in the game's setting, as the core loop includes receiving quests from the main island already. As the player succeeds in these quests, others around the world hear of it. As the player's esteem within the game world grows, more people will concentrate on the main island in the hopes of their quests being completed too. And as that happens, more expertise is pooled in the area which then leads to better facilities and the player's gathered resources help build it all.

**How:** It increases replay value as the game evolves the more it is played. More, and more varied upgrades are unlocked and new areas become accessible which incentivizes the players to stay engaged and keep going in order to discover what else the sea is still hiding.

**What's unique:** Seeing the humble base of operations get built up into a self-sustaining town over time will give the player a uniquely fulfilling experience during and especially at the end of the game.




*Example progression structure for upgrading the main island. The main story unlocks new tiers of ranks of upgrades, and at certain points the next main story quest is only unlocked once the required facility ranks have been constructed. Some unlocks can require a specific side quest to be completed before becoming available.*

## Feature 2 - Character Progression

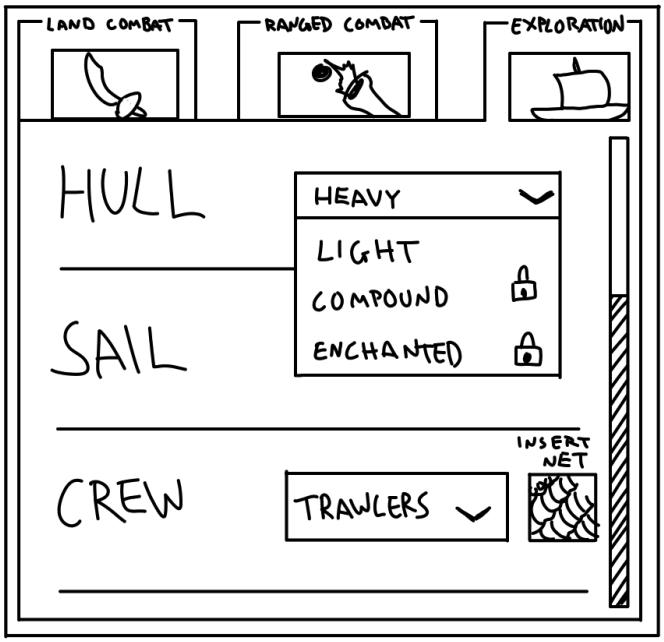
**What:** Gathering resources while out exploring, or by cultivating the main island, and unlocking new facilities by completing main island related quests give access to different types of upgrades for the player to unlock. Some areas of the map can be locked off and require more powerful ship upgrades to get through, certain enemy types found across the sea and islands may require specific upgrades to make less formidable, and some treasures can only be accessed with specific upgrades equipped. Some of the upgrade types can require reagents, which can be crafted by the player once they unlock a corresponding facility that allows for combination of resources into this reagent.

The player must choose which upgrades to equip on their ship before setting off, as the slots can be limited per category. Selecting some will then block off others. This will allow for interesting decisions to be made before even leaving the main island each time. For example, the game could support different ship base types, which specialize in a gameplay style. These ships could then have a different amount and type of slots for equipment, further complementing the ship's gameplay style.

**Why:** Thematically, the ship is the player's lifeline on the sea. As the game has a focus on sailing and exploring, I think it would make sense to focus progression on that aspect of the game as well. It synergizes well with feature 1 as exploration and resource gathering is rewarded with new unlocks which in turn alleviate hurdles posed by the exploration and combat themselves.

**How:** This feature would increase the game's replay value a great deal, as it allows for players to customize their equipment loadout before setting off each time and experiment with different loadouts between loops. The synergy with other features ensures organically occurring variance in each gameplay loop. Player engagement is increased because the player gets to feel like they own a certain strategy or loadout and gets to build upon it, or experiment with other approaches depending on the obstacles presented each time, incentivizing proceeding to the next loop to see what obstacles the game poses that time and develop plans for overcoming them.

**What's unique:** Each player will get to end up with a personalized build that will feel uniquely theirs.




*UI mockup for ship equipment selection window. Here the player can select which ship type they want to select for the next loop. Each ship type then has different loadout selections available, such as hull type, sail type, and crew. Hull type might, for example, allow the player to maneuver across certain obstacles, sail type might affect speed or enemy detection while on the sea, and crew can affect efficacy of the selected ship type by, for example, adding on extra effects either on the sea or in combat.*

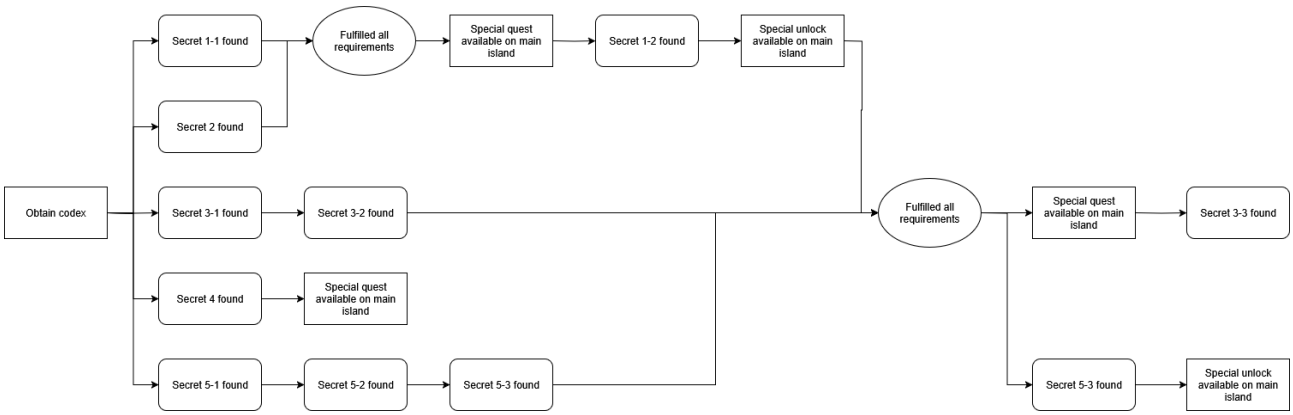
## Feature 3 - Secrets and Flavor

**What:** The player has a codex-type feature that can be filled out by finding new things such as creatures, people and treasure. Finding these things will unlock side stories, world-building snippets and lore for the player to learn about. This system can be expanded to include hints of mysterious objectives that are less clear and more of a treasure hunt in feel. For example, each day there could be a chance of a message in a bottle washing ashore on the main island that leads the player on one of these treasure hunts and tying into feature 4.

**Why:** Exploration implies mystery so I think playing into that would fit the game perfectly. As the player maps out the surrounding islands and sea, the sea offers more and more stories and lore that places the player ever more firmly into the game's world.

**How:** This feature would engage the player to continue in order to find out more about the world the game takes place in. Each new loop comes with a promise of learning more, of discovering more.

**What's unique:** Uncovering the secrets held by the sea and its islands will feel like a unique seafaring adventure.




*Example progression chart for secrets. Some secrets only appear once others have been found, or certain unlocks have been made, such as a quest or a facility upgrade, or a certain loadout equipment is equipped.*

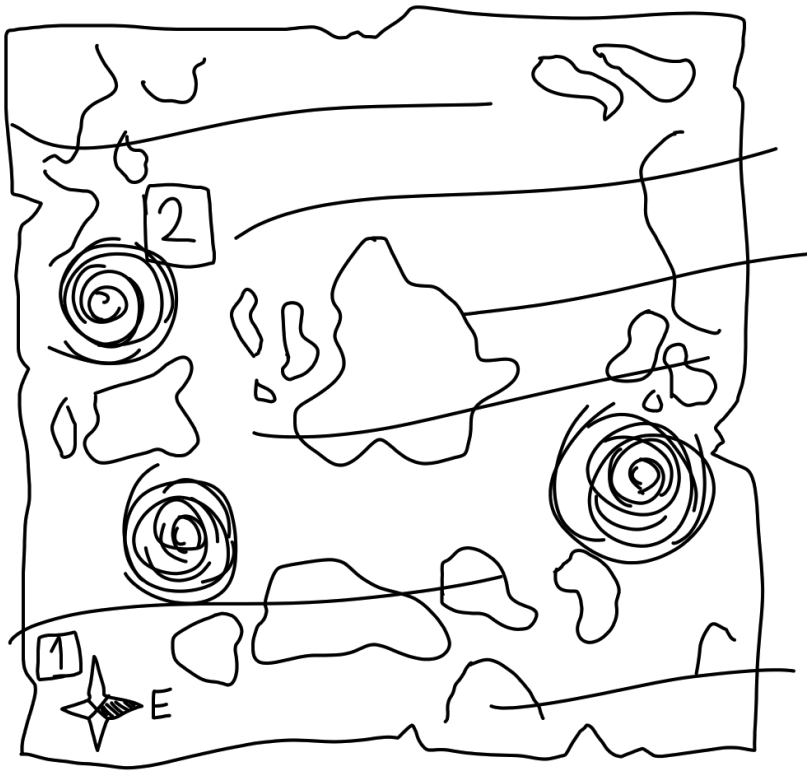
## Feature 4 - Happenstances

**What:** Random chance events that can occur before setting off from the main island. This can include things like strong winds from one direction, raging maelstroms, high waves, stranded castaways, crewmembers on strike, or even mythical sea creatures. They impose certain effects upon the next loop, and incentivize the player to change their strategy and equipment before setting off.

**Why:** The seas can be treacherous and unpredictable so every day there can be something new happening that the player must answer in one way or another. I think this would fit well within the game's premise and is further solidified through feature 3, as the player could find out more about what is happening and why within a story context.

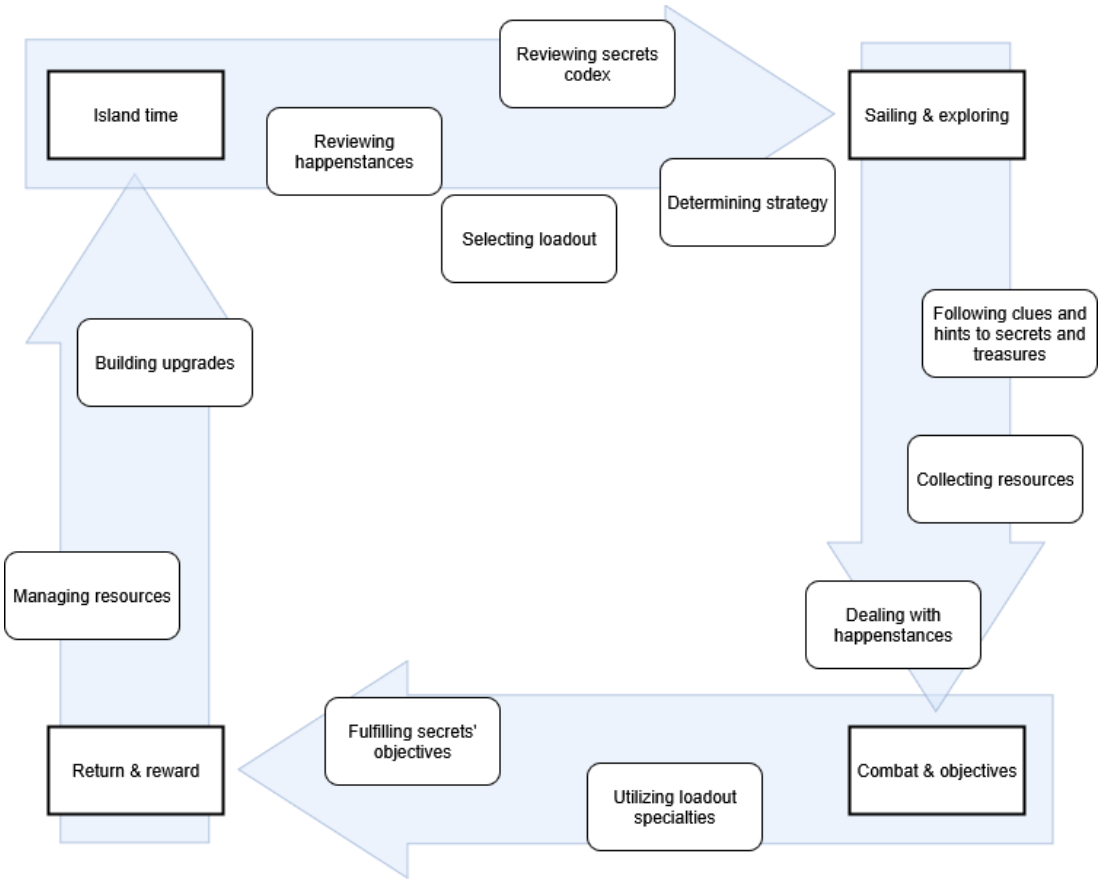
**How:** I think this would help increase replay value as every loop would become more and more unique, as different events occurring would allow the player to develop fresh and varied strategies for taking them on. As the game progresses, these events could start to overlap, offering an exponentially increasing amount of combinations.

**What's unique:** Happenstance events will certainly help make each loop feel unique for the players.




*Map UI mockup showing currently active happenstances. [1] indicates strong wind direction that bars passage to the western areas unless it is mitigated or overcome in some manner, and [2] indicates maelstroms restricting movement options that can also be overcome in some manner, but not the same as [1].*

# Updated core loop




The above image shows how each feature's associated player actions would fit into the core gameplay loop. As these systems focus on build and loop variety, the core loop itself remains mostly unchanged, but each step is more filled out.

For example, combat itself is highly affected by feature 2 as it can change how the player behaves in combat up to a great degree. It is also possible that the player elects to go with a non-combat oriented loadout for a loop, where they will do very little combat or none at all and instead focus on traversal, gathering resources and finding secrets.