**Comparison Video:**

After 8 weeks of continuous iterative playtesting the team has been able to produce a polished gameplay experience.

The team made the decision to focus on iterating the tutorial and main level gameplay and agreed that to best accomplish this with the teams resources, implementation of the reward schedules designed in the initial development phase should only be started if the team are confident in the polish of the gameplay.

* Team experimented with use of a 3D enemy ship model and flag sprite. Testing showed available screen space was an issue and players responded better to parallel movement to the ship of a sprite.
* Tutorial underwent numerous iterations, implementing new player view perspective and reducing interactable items to those only immediately essential to each tutorial section though playtesting revealed a continuous view to be the most understood across tutorial and main game
* The Tutorial underwent numerous iterations, such as from tutor feedback to implement a different player perspective and to reduce interactable items to those only immediately essential to each tutorial section. Although playtesting revealed a continuous perspective to be effective and universally understood across the tutorial and main game levels.
* The previous tutorial was designed with areas of randomised play inbetween each section. The intention was for players to become more familiar with all introduced elements before introducing another section – however Playtesting showed this to be confusing for players who failed to interpret the end/start of each section which negatively impacted there overall understanding.
* To move past this misunderstanding, the team iterated further and by the final sprint found including a ‘tick’ over the sections corresponding UI sprite was a continuously understood marker of the section end – with testers who played this iteration responding more positively in the game level
* Order of introducing – players understood the easier tasks more quickly, but didn’t understand the relationship between all mechanics when cannons/enemies etc weren’t introduced early on
* UI was iterated with Hand drawn designs, though players identified renders of models as the corresponding items far more quickly
* Removal of mechanics/tasks (firepit etc) as this added too many stages and made players disinterested and ultimately unbalanced time to complete player actions with the amount of hazards needing attention.
* The team removed the firepit mechanic after tsting provide it to be redundant. It over complicated the steps of firing the cannon and unbalanced the time to complete player actions with the amount of hazards that needed attention.
* Player animations when withdrawing hold items or using deck items. This removed much confusion in playtesting that had been associated with hold withdrawal and timers. Scale of all items while holding/in use to increase
* We updated player animations and item scales when withdrawing items from the hold or using items from the deck. This removed all confusions raised by the testers as to whether they had picked up the item or not
* Particle effects added to the completion of actions, such as the bucket which players did not always recognise had completed the bail action when they were preoccupied with other activities on screen
* Playtesters were often confused about whether actions had completed during periods of intense play – to combat this the team added large particle systems as visual telegraphing whch proved effective
* Remove poo in water – positive feedback loop – too slow and not complete able. Players unable to complete level
* We received negative feedback about the seagull mess when water levels were high, as players were stretched between more important tasks but slowed by the mass of seagull mess on deck. To combat this we removed the mess when water levels had risen as its designed to aid with ramping the difficulty during the early stages.
* Player feedback advised team that the floodwater slowing player movement speed was irritating and created positive feedback loop.
* Further playtesting revealing constantly slowing movement speed was irritating and was replaced with earlier implementation of buoyancy. This proved naturally understood, humorous surprise to players and was implemented in some strategies
* Despite this removal, the team received complints of slow movement preventing victory. The team chose to remove the slight slowing effect the water had on the player to remove the positive feedback loop.
* Instead the buoyany behaviour was reapplied to the water to create unpredictable with the movement of on deck items.
* Updated hole damage mechanic to necessitate players to plan ahead an strategise
* To encourage engagement and formulation of strategies between players, the team implemented and iterated a mechanic of reopening previously repaired holes should an enemy cannonball land within a proximity. The team noted higher levels of enjoyment and interaction between players to plan ahead.
* Start position of the flood water immediately below the hold allowed players to better identify the status of the ship more accurately more quickly
* New players were often surprised by the sudden increase in the water level. The team altered the way in which flooding was applied and moved the start poisitoin of the flood water immediately below the hold, allowing players to recognise the consequence of damage sooner.
* Prevented players from bailing the water level to anything below the deck level, maintaining pressure throughout the later stages of the level
* To keep the preasure on players, players are only allowed to bail down to a certain level
* Once these gameplay elements had been included, the team continued to iterate and contjnued to make adjustments to balancing gameplay variables incluing player speed, time taken to complete actions, frequency of tasks spawned, player debuff percentages, bailing amount, and respawn durations,
* Added an input control introduction loading screen. Each iteration of this had a positive increase in the speed and accuracy with which players were able to begin completing tasks and interacting with objects
* New players were often not confident in interacting with objects in the level, the team iteratively designed a loading screen containing input instructions which has now seen players more accurately and quickly begin actioning and preparing against hazards
* Making cannon UI more obvious by pivoting towards view camera
* Making player UI more obvious by increasing scale and vibrancy of colour, outline of element. Making player UI behaviour consistent across all tasks and resetting when a task is disrupted
* Players were reporting not understanding or noticing some UI elements within the game. To address this issue the team worked to pivot the cannon UI towards the camera and increase the scale and vibrancy of the player UI creating a consitant UI across all tasks completion and interuptions.
* Restricted movement of objects and players near ship deck to prevent player overboarding and dropping of items out of the ship. Reflection functionality added to objects dropped at ship edge which throws back to middle of ship

During testing, players were able to remove themselves and items from the ship. To counteract this behaviour the team implemented restrictions around the bounding edge of the ship. This stopped players being able to overboard themselves and rebounded items towards the ships centre.

* Player selection screens design, all 4 player pedestals are new visible with a corresponding ‘join’ button beneath each numbered player. This allowed players to see that there where 4 possible places where the previous version confused players greatly and they believed only 2 could join and both had to press to proceed
* Players often misunderstood the previous player selection screen, thinking that a maximum of two players could play. While more than 2 players is not appropriately implemented, the screen layout has been update to allow all 4 potential player spots to be simultaneuously shown so players are aware of player options.
* Code and object optimisations made while producing assets and also within unity – object pooling, batching, which improved frame rate and smoothness of experience. Implemented more optimised recreated models
* While the team were unable to implement all of the updated assets, we were able to optimise existing visual and code elements.

**If more time:**

* If development time was extended, the highest priority would be to further develop the tutorial. While over iterations we improved how to teach players each mechanic – feedback indicates we were not able to make the tutorial as ‘enjoyable’ as the main game.
* While ultimately pleased with the final version, the team struggled with the design of the tutorial throughout the project, with testers often appearing unenthused. Our best design ideas for a two-player experience still often left one player out of the action while the other was responsible for completing a tutorial step.
* Given more time we would have focused on the tutorial utilising our new designer’s skillset t incorporate more design theory, however since joining so late in development there were time restrictions and we had to work within the limitation set in place.
* The current collision-based detection of interactions sometimes prove inconsistent. When the team learnt of a better method using layer-based collision detection we agreed it was too late to reimplement all the existing functionality with the time remaining – though if the deadline was extended wold ensure this logic is replaced.
* To increase player motivation, with more time the team would have included the reward schedules designed in the early stage of development which we chose to omit from the final product in favour of iterating the gameplay and tutorial as much as possible.
* These rewards would allow players to unlock cosmetic options for their characters, further investing them in the game.
* With the team dynamic altered in the late stages of the project, if we had more time we would implement more efficient models and animations for all player interactions to better telegraph action completions.