

UX Analysis of *Subnautica: Below Zero*

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Purpose

The purpose of this document is to identify issues with the user experience (UX) of playing the game *Subnautica: Below Zero* and offer suggestions for improvement. UX here differs from gameplay in that the focus is not on concepts such as world/level design, content design, or story. There is a strong focus on user interface (UI) design, but also a general critique of how the player is made able to draw information from the game to understand their situation in-game and go about gameplay in an informed manner.

The following points are issues in the user experience of playing the game, predominantly with keyboard and mouse. The issues are categorized according to some of the ten usability heuristics devised by Jakob Nielsen, selected and modified for their relevance to video game UX, along with additional heuristics that were informed by gameplay across multiple games, for a total of eight heuristics. Suggestions provided are quick, unpolished options for possibly solving the problems presented, and should inspire rather than define one's own solutions to these problems.

Game Version: Early Access, Seatruck Update

Heuristics

Visibility of system status: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Match between interface and game world: The interface system should speak the world's language, with words, phrases and concepts native to that universe, rather than modern colloquial terms. Show how the game's language relates to controls and status indicators.

Consistency and standards: Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform and game world conventions.

Informed failure: Games must allow for mistakes and failure to make risks and loss meaningful, but such errors must be due to poor planning or bad strategy, rather than ignorance due to the game's failure to provide necessary information. Exceptions include scenarios wherein ignorance or powerlessness on the character's or player's part is desired.

Reference:

<https://www.nngroup.com/articles/ten-usability-heuristics/>

Heuristics Continued

Recognition rather than recall: Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Efficiency of play: In just about any game, certain actions are universally the most frequently taken. Examples include taking all of a weightless valuable into one's inventory, accepting quick and free help, confirming a choice to engage in default gameplay, etc. For customizable games and variant control schemes, allow users to tailor frequent actions. Don't waste players' time.

Help and documentation: Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Suspension of play: Gameplay can be beneficially suspended in situations such as pause menus, inventories, dialogues, and cutscenes. Ensure that such suspensions don't detract from enjoyment of the game, and that the transition between suspended and active play allows for players to reassume control.

Reference:

<https://www.nngroup.com/articles/ten-usability-heuristics/>

Heuristics - Severity

Each heuristic will be graded on a scale of 0-4 to determine the severity of the game's usability issues.

0 = I don't believe this is a usability problem

1 = Cosmetic problem only: need not be fixed unless extra time is available

2 = Minor usability problem: fixing this should be given low priority. I also include missed UX opportunities under this rating.

3 = Major usability problem: important to fix, so should be given high priority

4 = Usability catastrophe: imperative to fix this before game can be released

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

Reference:

<https://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/>

Evaluation

Efficiency of Play, Consistency and Standards



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

'Esc' is a pretty universal 'back out' command. Many players will expect it to be used in the same way within Subnautica, if they play many other games.



Attempts to leave the inventory screen are often met with the pause screen.

Suggestions:

Use Esc to exit menus & inventories before opening the pause menu.

Evaluation

Efficiency of Play, Consistency and Standards



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

Similar to 'Esc', 'E' is a common enter/exit command used in many games, and therefore a convention many players expect, especially when it is being used in your in-game vehicles.



A classic example, I frequently tap 'E' fruitlessly when trying to leave the habitat.

Suggestions:

Allow hatches to operate with 'E', and consider the same with habitat modules.

Evaluation

Efficiency of Play, Visibility of System Status



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

When crafting at the fabricator, players may want to go straight from the fabricator screen to the inventory screen, either to check their quantity of ingredients, or to access their newly-crafted items immediately. Currently, players need to click out of the fabricator screen before 'Tab' will bring up the PDA.



Players will want to access food and drink quickly, especially if they are starving or parched.

Suggestion:

Allow 'Tab' to pull up the PDA inventory while the player is in the fabricator screen.

Evaluation

Visibility of System Status



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

The boxes scattered throughout the sea for holding helpful resources have a nice, easy-to-see texture of bright blue light, but they easily get confused with full boxes even after the player empties them.



This box is open and empty, but in the darkness of the sea floor, its still-lit texture screams “loot”

Suggestion:

Boxes should turn dim once either opened or emptied.

Evaluation

Visibility of System Status



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

Oxygen, being so fundamental to the gameplay of *Subnautica*, needs to be continuously monitored and factored into decisions of navigation. It is suboptimal, then, that the player must rely on a jerkily retreating green circle and an abstract number to convey their oxygen levels.



40 O₂? 40 seconds? 40 “oxygen units”? It is difficult to discern what the O₂ number means, complicated by the fact that it is exhausted faster at lower depths.

Suggestions:

Give a clear, accurate unit to the O₂ number. If this number does not currently accurately reflect time left, add a timer that accounts for different rates of O₂ intake.

Evaluation

Help and Documentation



Severity

OK/Excellent	Cosmetic	Minor	Major	Catastrophe
0	1	2	3	4

CEO Maxim's rant is jarring and only serves to take away from the immersion and characterization of *Subnautica*. He is clearly being set up as a character to dislike, but this is done so clumsily that the joke of his absurdity fails to land. He is so unreasonable in his lack of any serious concern for employee/contractor safety or even company expense, he comes off as a silly cartoon, interrupting two otherwise serious characters.



It sounds like Maxim thinks the lost colleague and garbled biosample are Robin's fault, though both are better explained through some mechanical failure.

Suggestion:

Rework CEO Maxim's script/character, perhaps to have him worry about lost expensive equipment or Alterra's PR over Robin's safety. If you want to write a funny corporate antagonist, maybe look to Handsome Jack from *Borderlands 2* for inspiration.