

Foundational Development for Words Research Game (Sprint 1)

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“Words” is a word-finding game that uses incremental and reversible pseudo-random number generation to create an indefinite board of letters for the player to explore. Although still at an early stage of development, the game demonstrates novel PCG techniques and has potential applications in language pedagogy. As part of the project, we are also attempting to explore procedural rhetorics which offer alternatives to the standard rhetorics of capitalist accumulation and colonialist domination prevalent in most popular games. This summer we added features to the Words game through two two-week development sprints.

For the first two weeks of the program, we worked on implementing the glyph menu and a quiz mode. In the previous version of the game, in order to match a word, the player had to only use letters from the grid. The glyph menu enables the player to use extra letters from a list to build a word. In a case where the player is struggling and finds most of a word but it is missing a letter or two, this feature allows the user to complete the word using letters available from the glyphs menu. As of right now, the user cannot add or remove letters from this menu, however, in the future, this mechanism could allow the user to collect letters and also use them up.

The original Words game randomly places words from large word lists in languages including Chinese, Japanese, Turkish, and English onto an indefinite board. With such capabilities, it could be a useful tool for language learning. To strengthen this use-case, we built a quiz mode feature, which allows players to upload a custom word list and create a link to a version of the game that uses those words. In quiz mode, after finding all of the words from the custom list, the player can either reshuffle the same words on a new board, or upload a new word list. While the original Words game has an indefinite board, this feature creates a finite board that includes all of the given words, with some random words added to fill in blank space. This feature could potentially be useful for vocabulary review because the player can practice finding and spelling specific words. In the future, players will hopefully be able to add definitions as well so that they can test their understanding of the words.

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