

Tech on the Toilet Sort Lines in Source Code



by Kyle Freeman

Imagine you're adding a two-player mode to a game. When testing the feature, you launch the game but don't see the option to add a second player. The configuration looks correct; you enabled two-player mode on the last line!

So what happened? Can you spot the bug in the following example?

```
allow_warping: false
enable_two_players: false
show_end_credits: true
enable_frost_band: false
enable_two_players: true
```

Using keep-sorted (github.com/google/keep-sorted) to sort lines makes the error easy to spot: the flag enable_two_players is set twice, with different values:

```
# keep-sorted start
allow_warping: false
enable_frost_band: false
enable_two_players: false
enable_two_players: true
show_end_credits: true
# keep-sorted end
```

Sorted lists and lines of code are easier to read and maintain, and can help prevent bugs. To use keep-sorted in your source code, config, and text files, <u>install keep-sorted</u> and then follow these instructions:

- 1. Add keep-sorted start and keep-sorted end comments in your file, surrounding the lines you want to sort.
- Run keep-sorted: keep-sorted [file1] [file2] ...
- 3. (Optional) Add keep-sorted to your pre-commit so it runs automatically on git commit

You can add options to override default behavior. For example, you can ignore case, sort numerically, order by prefixes, and even sort by regular expressions:

```
bosses := []int{
   // keep-sorted start by_regex=//.*
   111213, // Aethon Annie
   52816, // Blazing Benny
   711, // Daisy Dragon
   1003, // Kenzie Kraken
   // keep-sorted end
}
```

Remember: before sorting, ensure the original order isn't intentional. For example, order can be critical when loading dependencies.

More information and archives: testing.googleblog.com

