On New Technologies

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Contents

1   On IPFS.

On September 8 2015, Neocities released support for IPFS protocol – a more **distributed** replacement for HTTP. Theoretically, a distributed system is inherently more reliable than a centralized system in terms of content uptime due to the lack (or lower counts) of a **single point of failure** (SPOF). In general, a single point of failure is an inherent risk for any chance of reliability – having that single aspect fail would bring the entire system down with it. However, with IPFS, which distributes content, bringing down the main server would not bring down what matters – the content.

   Update as of March 15, 2017. It appears Neocities's IPFS infrastructure is broken for now. From what I can see on Reddit, they are working on fixing it. Until then, IPFS links are not available.

2   On Haxe.

Haxe was our planned official language for our programs for easier deployment. After seeing various languages quickly becoming obsolete (*Flash* started losing support years ago, and *Java* will no longer run on some browsers are two examples), it made more sense to be able to *recompile* our source code to any newer language when needed.

A common concern that would have to be considered when using such a tool would be any possible *overhead* or lack of *optimization*. However, according to *Wikipedia*, this shouldn't be too much of an issue.

3   On Git.

For all of our projects (except this website – Neocities provides it's own revision system), *Git* is the main tool of choice for those who *did* use revision systems. After researching various revision systems, we opted for the one which is both simple (in terms of commands) and powerful in terms of control.

4   On SHA-256.

After a practical successful collision of SHA-1 occurred on February 23 2017, SHA-1 is now considered insecure by most parties. While it is unlikely that anyone would try to modify our programs with files that share the same SHA-1 hashes in the near future, we provide SHA-256 (which are SHA-2 hashes, of which is still considered secure for the time being) hashes to allow users to verify the integrity of their programs: see **here** for the available hashes.

5   Document Details.

As of this document's writing, the site is currently:
`programsforeveryone.neocities.org`.

This document was typeset on LaTeX using the Linux Libertine font.