Adapting to Censorship in a Centralised Internet

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Contents

Abstract

An analysis of censorship prevalence, it's uses and misues from a socio-political point of view and demonstrating alternative technologies to help end-users be more self reliant on open source software and try to improve on the technical barrier between new technologies and them. The core of the project will revolve around utilising technologies such as IPFS to create an open source file-sharing client possibly using the bittorrent style protocol most likely devloped in Golang using go-ipfs and orbitdb. This client may also incorporate a bulletin board type system (BBS) for idea sharing amongst clients including a small amount of multi-user-dungeon style gaming. As a possible aside the repository may also be hosted on IPFS using radicle.xyz. For a database i would also like to incorporate GUN.js backend mobile app for accessing services securely with encryption this would also host a chat app with a novel design.

Introduction

Purpose

Intended use and Audience

Goals and Requirements

Goals

Requirements

Methodology

The first half of this section is research and an exploration of tech, leading to the developmental approach to be taken i.e. Agile, TDD etc.

Decentralised

peer 2 peer

Beaker Browser

dat protocol

Hyperdrive

gun.js

end-to-end encryption

Distributed Hash Tables

Blockchain

What is a blockchain

Comparing technologies (IPFS, Zeronet, LBRY, BitTorrent)

Development cycle?

An Agile Approach with Kanban

Using Trello, Sprints

Test-Driven-Development

Continuous Integration/Development

Build – We will compile the code in this stage.

Test – We will test the code in this stage. We can save both efforts as well as time can be saved by performing the techniques of automation.

Release – In this stage, we will release the application in our GitHub repository.

Deployment – We will deploy the application to the production environment.

Validation and compliance – Your organization's needs determine the steps to validate a build. ### Golang on IPFS

Installing and operating radicle [To be removed]

On Debian/Ubuntu the package manager must be altered by first entering the signing key, then update the sources.list file, finally updating and installing via apt.

```
$ curl https://europe-west6-apt.pkg.dev/doc/repo-signing-key.gpg | sudo apt-key add -
$ echo deb https://europe-west6-apt.pkg.dev/projects/radicle-services radicle-cli main | sudo tee -a
    /etc/apt/sources.list.d/radicle-registry.list
$ sudo apt update
$ sudo apt install radicle-cli
```

Results

Discussion

Conclusion

References

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