Track Forever

Future-proofing issue trackers

Christopher Addison (cjteam)
William Cao (pastor13)
David Dupre (djdupre)
Jared Le (jaredtle)
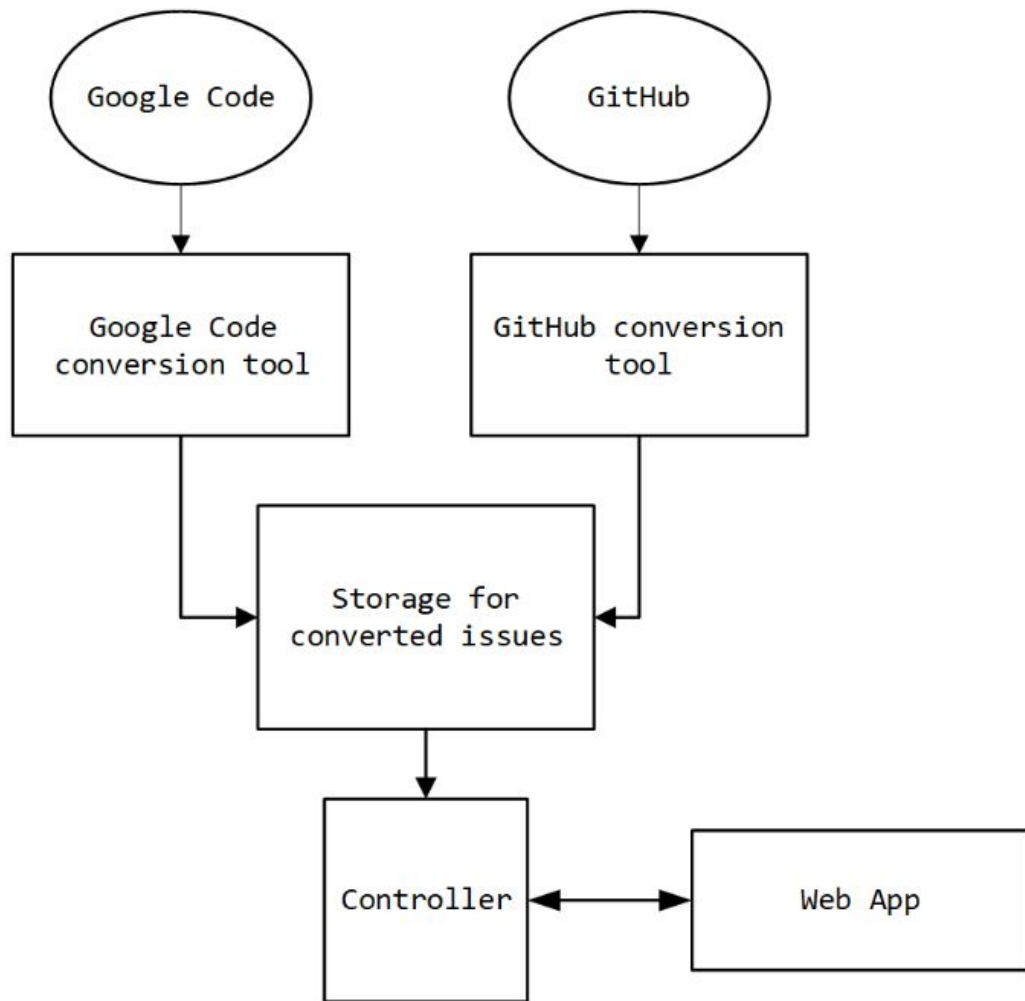Christine Ta (cta95)

Motivation

- Issue tracking essential to productivity of team

- Problem when issue tracker discontinued

  - Need to access issues

  - Need to migrate to a new issue tracker

- How common is this?

  - Google Code discontinued January 25, 2016

  - Microsoft Codeplex discontinued December 15, 2017

- Extraction tools for these issue trackers are already deprecated or non-functional

Related Work

- Offline support is an afterthought for most issue trackers

- TaskWarrior can import from 15 issue trackers and works offline

  - Lacks support for teams

  - Awkward user interface

- Jira can import from > 10 issue trackers and works offline

  - Proprietary → not future-proof

  - Not free

  - Exported issues are not designed to be universal

Approach

- Convert issue trackers into a unified format

- Prioritize extensibility to convert from more issue trackers

- Support offline from the start

- Be open to usage from other clients

Metrics

- Primary metrics: Number of issue trackers compatible with our tracker

  - Quality of the conversion

- Real world

  - Create "dummy" project on popular issue trackers that utilizes multiple features and has a minimum number of issues

  - Export to our issue tracker to show real world usage

Difficulties and Challenges

- No issue tracker is the same
  - Different types of files exported by issue trackers
  - Field conflicts in the files exported by issue trackers
    - Missing fields
    - Fields with the same functionality but different names

- A conversion tool for each issue tracker is necessary

Difficulties and Challenges

- How to import fields into our issue tracker

- Difficulty working with proprietary issue trackers like Jira

- Dealing with custom fields