CSC302 Flash cards

Group 1

People have bad memory, need app to remember

Students might want to memorize:

- Learn languages
- Learn cities / places
- States / Presidents
- Key terms in classes
- Math formulas
- Famous people

Teachers might want to:

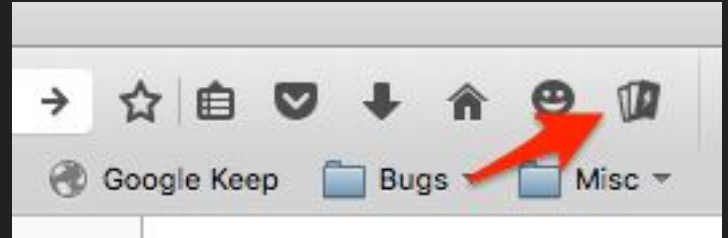- Create lists of things for students to study

Flashcards

- Most of the time we want to memorize things we come across on the web

- Making flashcards or exporting to flash-card apps can be time consuming

Solution - Firefox plugin

- Highlight text on a page

- Right click to bring out context menu

- Click "Create Flashcard" to create a new flashcard along with metadata about where the text was from.

Live Demo!

Architecture - Overall Design

- We kept things very simple

- We created panels using plain HTML and javascript, with bootstrap for some layout and styling requirements

- We have a right-click context menu where highlighted text on a page can be added to a new flashcard

Architecture - Panels

- A number of different panels:
  - Create Flashcard
  - Browse Flashcards
  - Test Knowledge
  - Manage Categories
- Each panel has its own HTML and javascript sources
- Panels communicate by passing messages
  - Using self.port.emit()

Architecture - Storage

- Objects are stored in Firefox's Simple Storage
    - Objects are saved to the user's profile folder
    - Objects persist across browser restarts

- Flashcards:
    - Array of JSON objects
    - { 'front': 'Canada',

      'back': 'Ottawa',

      'category': 'Capitals' }

- Categories:
    - Simply an array of Strings

Future enhancements

- Export / Import
- Synchronise across browsers
- (we implemented)
- Better management of cards, e.g some kind of list view.