Org to Reveal.js

Reveal.js Cheatsheet

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Reveal.js and Org-Reveal

- Reveal.js is a tool for creating good-looking HTML presentations, authored by Hakim El Hattab.
  For an example of a reveal.js presentation, see here.
- Org-Reveal exports your Org documents to reveal.js presentations.
  With Org-reveal, you can create beautiful presentations with 3D effects from simple but powerful Org contents.

Codes

- You can also install the latest developing version of org-reveal directly from GitHub.
  Please download the latest Org-reveal package from the Org-reveal GitHub page. Or clone the GitHub repository:

```
git clone https://github.com/yjwen/org-reveal
```

- Copy `ox-reveal.el` to one of your Emacs's `load-path`, and add the following statement to your `.emacs` file.

```
(require 'ox-reveal)
```

- Note: It is suggested to use the Org-mode git repository in pair with the GitHub org-reveal. Please get the Org-mode git repository by:

```
$ git clone https://code.orgmode.org/bzg/org-
```

  Follow the online instruction for building and installing Org-mode.

MATLAB code

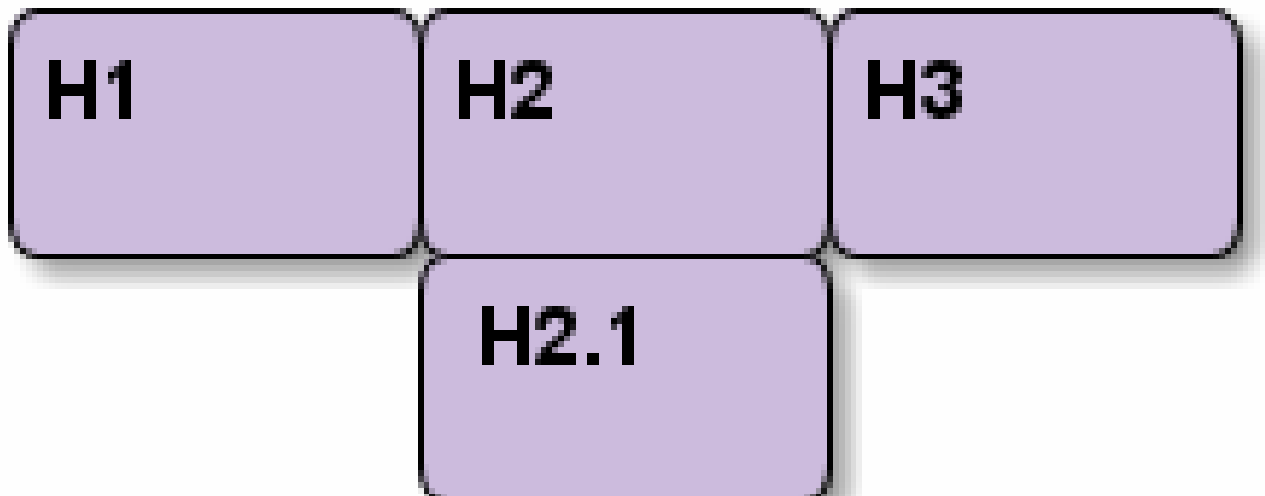
```
function x = fpi(g, x0, n)
% FPI x = fpi(g, x0, n)
% Computes approximate solution of g(x)=x
% Input:
%   g     function handle
%   x0    initial guess
%   n     number of iteration steps
    x = x0;
    for k = 1:n
        x = g(x);
    end
end

f = @(x) x.^2 - 4*x + 3.5;
g = @(x) x - f(x);
fplot(g, [2 3], 'r');
hold on
plot([2 3], [2 3], 'k--')
```

Images

Assume we have a simple Org file as below:

```
* H1
* H2
** H2.1
*** H2.1.1
* H3
```

If HLevel is 1, the default value, headings H2.1 and H2.1.1 will be mapped to vertical slides below the slides of heading H2.



More Images

[width=.9]./media/array$_c$*reation*

Lorenz Equation

The Lorenz system is

$$\begin{aligned} \dot{x} &= \sigma(y - x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy \end{aligned}$$

More Maths

The rootfinding problem $f(x) = x^3 + x - 1 = 0$ can be transformed to various fixed point problems:

- $g_1(x) = x - f(x) = 1 - x^3$
- $g_2(x) = \sqrt[3]{1 - x}$
- $g_3(x) = \dfrac{1 + 2x^3}{1 + 3x^2}$

Note that all $g_j(x) = x$ are equivalent to $f(x) = 0$. However, not all these find a fixed point of g, that is, a root of f on the computer.

Exercise. Run `fpi` with g_j and $x_0 = 0.5$. Which fixed point iterations converge?

Fragmented Contents

Make contents fragmented (show up one-by-one) by setting option `ATTR_REVEAL` with property ":frag frag-style", as illustrated below. Paragraphs can be fragmented.

- Lists can
- be fragmented.

Pictures, tables and many other HTML elements can be fragmented.

Fragment Styles

Available fragment styles are:

- grow
- shrink
- roll-in
- fade-out
- highlight-red
- highlight-green
- highlight-blue

H1 heading (new slide)

H2 heading (new slide)

H3 heading (new slide)

- Lv1 item 1
  - Lv2 item1
    - Lv3 item1
    - item 1
    - item 2
    - Lv3 item 2
  - Lv2 item 2
  - Lv2 item 3
- Lv1 item 2
- Lv1 item 3

Contents area (more margin on the right)

Boxes

Two Columns: Pro/Con of emacs-reveal

Pros

- Free/libre open source software
- Device-independent presentations
  - Also mobile and offline
  - Generated from simple text format
    - Easy to learn
    - Collaboration with diff/merge/git
    - Separation of layout and content

Cons

- No WYSIWYG
- (Need to learn something new)