A digital template for my notebook

At some point in July, 2019, I got the idea of maybe developing a digital version of my note taking method, using XHATEX. I hope it could be easy and efficient to use and the same time it keeps all the features of my original on-paper note taking method. If this is possible, then I can get rid of a heavy notebook being carried all the time and yet I can still take notes like I have been doing.

The template is based on the tufte-book class.

font settings and usage

Language	Style	Font	Examples
Latin	Serif	Bembo	ABC123
	Sans Serif	GillSans	ABC123
	Monospace	Menlo	ABC123
СЈК	Serif	SourceHanSerif	汉字かな한글
	Sans Serif	SourceHanSans	汉字かな한글
	Monospace	SourceHanMono	汉字かな한글

The default CJK glyphs are for Simplified Chinese. To change them for a specific CJK language, use the following commands:

\jp % Japanese: 骨文才免返曜

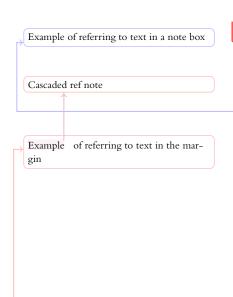
\kr % Korean: 骨文才免返曜

\sch % Simplified Chinese: 骨文才免返曜

\tch % Traditional Chinese: 骨文才免返曜

other useful commands:

\coding % Menlo + Source Han Mono
\sansall % Source Han Sans for all chars
\sans % GillSans + Source Han Sans



Continue on Doc#19072501 - reference notes

Drawing arrows to refer to some text is very frequent in my notes.

This example links to the reference note on the margin of this page.

It is done by:

```
% \clearpage
```

```
\rfnote[<offset>]{<ref id>}{<color>}{<text>}
\begin{notebox}/
  \markintext{<red id>}{<color>}{<text>}
\end{notebox}
```

<offset> means to adjust the end point of the arrow on the ref note. We need this because there is some unknown bug on getting the exact position of a tikz node on the margin. However, this is optional. It should be something like 0.8cm. <offset> must be an integer. <color> can be blue, red, etc. The two <text>s are linked texts.

I also want to allow cascading as well. This is an example. It is done by:

```
% \clearpage
```

```
\rfnote[<offset>]{<ref id #1>}{<color>}{<text>}
\rfnote[<offset>]{<ref id #2>}{<color>}{
   \markinmargin{<ref id #1>}{<color>}{<text>}}
\begin{notebox}{<title>}
   \markintext{<ref id #2>}{<color>}{<text>}
\end{notebox}
```

Note that when the linked <text> is in the margin, then you should use \markinmargin instead of \markintext.

I recommend using the same color for a whole cascading chain so that it is clear to see.

To structure a note

The main part of a note is located in a note box environment. we can use blue-background subtitles and dash lines to structure a note. The related commands are:

```
\begin{notebox}{<title>}
  \tcbsubtitle{<subtitle>}
  \tcbline % dash line
\end{notebox}
```

See here!

vertical texts

Since CJK texts can be formatted vertically, I think it is beneficial to have a simple command to do that.

â元年七月二十九日。 定议用全角的ABC123 不建议用半角字符 ABC123 不建议用半角字符 ABC123

To do this, use:

\cjkvert[<commands>]{<vertical length>}{<text>}

For example, to get the above output, <commands> should be \sans and <vertical length> should be 0.45\textwidth

I aslo want to use Furigana when I am writting some Japanese texts. You can do this as the following example:

\ruby{外貨}{がいか}預金には、 \ruby{為替}{かわせ}差益や為替差損があります。

The result is:

外貨預金には、為替差益や為替差損があります。

Doc#19073001

expand the note box to the whole page

We can do this using the fullwidth environment provided by tufte-book package itself outside the notebox environment. ref note should still work. However, I don't recommend expanding the note box when using ref notes because some ref notes maybe hidden by the note box.

Q&A

Q&A is a very effective way of taking notes. It helps you to get the point of a note very quickly because knowledge is essentially about answering questions. If there are no questions, there is no knowledge.

Q2: The question goes here

A2: The answer goes here

To do this, use the following command:

\qa[<q&a id>]{<question>}{<answer>}

Doc#190100101

Updates on the template

We now make **Bold** and *Italic* fonts possible. Here is an example list for both Latin and CJK characters.

Language	Style	Bold	Italic
Latin	Serif	ABC123	ABC123
	Sans Serif	ABC123	ABC123
	Monospace	ABC123	ABC123
СЈК	Serif	汉字かな한글	汉字かな한글
	Sans Serif	汉字かな한글	汉字かな한글
	Monospace	汉字かな한글	汉字かな한글

We also make a new design on concept element.

We use a name-meaning-example triplet to explain a concept.

name

meaning

examples

To do this, use the following command:

\concept[<name>] {<meaning>} {<examples>}

We use curly brackets to group concepts.

• A

• B
$$\begin{cases} \bullet & B1 \\ \bullet & B12 \\ \bullet & B2 \\ \bullet & B3 \\ \bullet & B4 \end{cases} = merge to B'$$

To use forking brackets, make sure you are inside an itemize or enumerate environment, and then use the following envronment:

```
\item A
\begin{fork}
  \item A1
  \item A2
\end{fork}
```

To use merging brackets, mark the two endpoints with \tikzmark{name1} and \tikzmark{name2}, and then use the following commands after them:

```
\merge{name1}{name2}[concept C]
```

Another update is that we now make listing latex code more easy with the following environment (delete the space in latexbloc k):

```
\begin{latexbloc k}{emph1,...}{kw1,...}{style commands}
  \keyword{emphasized word}
\end{latexbloc k}
```

updates on text emphasis

Command	Effect	
\strikethrough[color]{text}	AaBbCc123 汉字かな한글	
\crossout[color]{text}	KABNACIEN 213/70X/FF/BY/NG/FDIFFE	
<pre>\highlight[color]{text}</pre>	AaBbCc123 汉字かな한글	
<pre>\underline[color]{text}</pre>	AaBbCc123 汉字かな한글	
<pre>\underdbline[color]{text}</pre>	AaBbCc123 汉字かな한글	
<pre>\underwave[color]{text}</pre>	AaBbCc123 汉字かな한글	
\underdot[color]{text}	AaBbCc123 汉字かな한글	
<pre>\undertriangle[color]{text}</pre>	AaBbCc123 汉字かな한글	
\undercircle[color]{text}	AaBbCc123 汉字かな한글	
\undercross[color]{text}	AaBbCc123 汉字かなむ さ ××××××	

Bibliography