pyspread for presentations under Linux

Is it usable and efficient?

Martin Manns 2014

Spreadsheets are like ducks

They can store data - but not as good as a data base.

They can do calculations - but not as good as scientific toolkits.

They can visualize data - but not as good as presentation software.

Image: Mike Baird, Morro Bay, USA

Spreadsheets are good for getting **good-enough results fast**.

Why pyspread for presentations?

- A grid allows keeping a clear structure for all slides.
- Pyspread can display vector images, bitmaps and charts.
- No automagically altered font sizes
- Easy export of multiple grid sheets as PDF pages.

But pyspread only makes sense for presentations if it is easier, faster or gets better results than existing solutions.

Competition

LibreOffice / OpenOffice.org Impress

Calligra Stage / KPresenter

Inkscape & JessyInk

Inkscape & Sozi

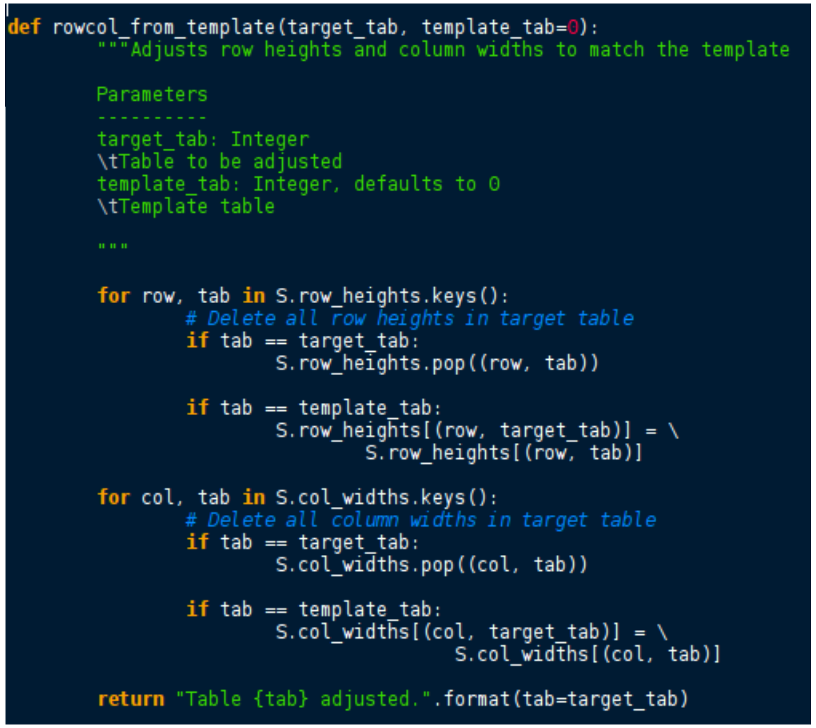
... and of course a well-known Windows program that is running under wine.

Solutions without graphical slide builders that compile text or code into slides (e.g. LaTeX, Bruce or MagicPoint) are omitted here.

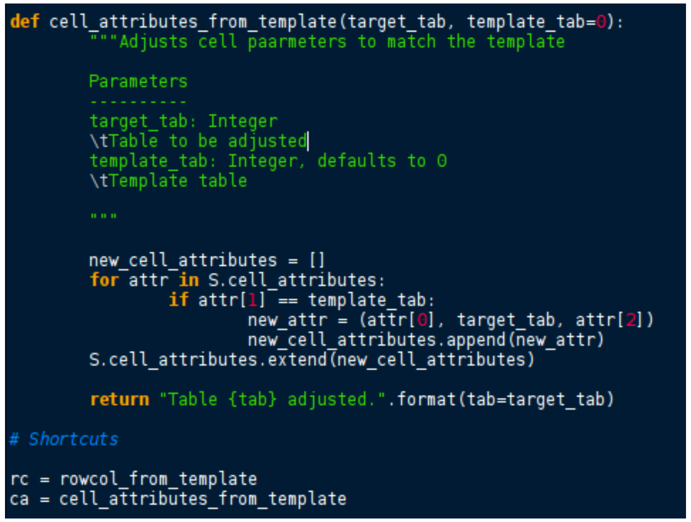
Slide templates: Creation and application

1) On table 0, create a template layout (~15 rows, ~10 columns).

2) Load the following script as a macro:



```python
def rowcol_from_template(target_tab, template_tab=0):
        """Adjusts row heights and column widths to match the template

        Parameters
        ----------
        target_tab: Integer
        \tTable to be adjusted
        template_tab: Integer, defaults to 0
        \tTemplate table

        """

        for row, tab in S.row_heights.keys():
                # Delete all row heights in target table
                if tab == target_tab:
                        S.row_heights.pop((row, tab))

                if tab == template_tab:
                        S.row_heights[(row, target_tab)] = \
                                S.row_heights[(row, tab)]

        for col, tab in S.col_widths.keys():
                # Delete all column widths in target table
                if tab == target_tab:
                        S.col_widths.pop((col, tab))

                if tab == template_tab:
                        S.col_widths[(col, target_tab)] = \
                                        S.col_widths[(col, tab)]

        return "Table {tab} adjusted.".format(tab=target_tab)
```



```python
def cell_attributes_from_template(target_tab, template_tab=0):
        """Adjusts cell paarmeters to match the template

        Parameters
        ----------
        target_tab: Integer
        \tTable to be adjusted
        template_tab: Integer, defaults to 0
        \tTemplate table

        """

        new_cell_attributes = []
        for attr in S.cell_attributes:
                if attr[1] == template_tab:
                        new_attr = (attr[0], target_tab, attr[2])
                        new_cell_attributes.append(new_attr)
        S.cell_attributes.extend(new_cell_attributes)

        return "Table {tab} adjusted.".format(tab=target_tab)

# Shortcuts

rc = rowcol_from_template
ca = cell_attributes_from_template
```

3) In each table, execute ca(Z) and rc(Z) to apply template.

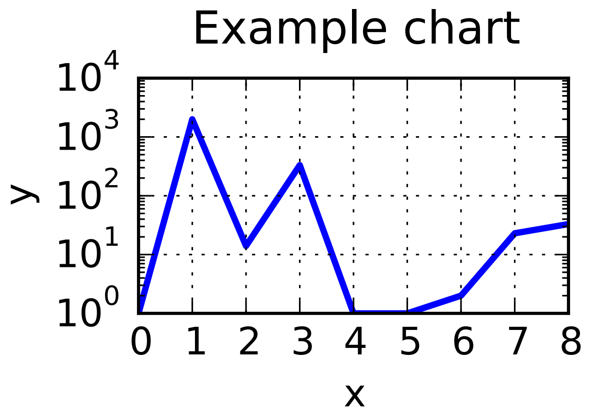
Slide content - the fastest way in pyspread

Enter text into a cell followed by
<Ctrl> + <Enter>.

Copy bitmaps from the clipboard.

Import SVG graphics via the import macro.

Create carts via the chart dialog.



Merge cells that are too small.

Presentation export

Export a PDF via the export button.

In the PDF export dialog start from sheet 1 and end with your last slide.

View the result with a PDF viewer of your choice.

Light and shadow

- Slide layout easy and fast
- High quality PDF export
- Slide layout follows template
- Integration of high quality charts

- Cell merging required in most cases
- In-cell formatting only via markup
- No spell checker
- No animation or video support

Images: Kreuzschnabel (top), Tom Bayly, England (bottom)

pyspread for presentations

This is my 1st presentation using pyspread v0.4.

Pyspread is usable. No crashes so far.

It is faster to create long presentations than JessyInk or Sozi.

Minor bugs: White grid lines may flicker. Merged cells get filled.

Pyspread is free.
Just try it out.