A Calligraphy Grid in ConTeXt/LMTX

WARNING: WORK IN PROGRESS (ALPHA) USE AT YOUR OWN RISK!
This project is a generator of grids for medieval calligraphy in ConTeXt/LMTX and MetaPost.

Files included

- Main module: `tex/context/third/pauta/t-pauta.mkxl`
- Example file: `doc/context/third/pauta/pauta-example.tex` (also in pdf)
- A copy of this file in ConTEXt format: `doc/context/third/pauta/pauta-example.tex` (also in pdf)
- Environment file for the example: `doc/context/third/pauta/env-pauta.tex`
- This `README.md` file, and a pandoc generated ConTeXt version at `doc/context/third/pauta/README.tex`.
- The build script `build.lua`, that takes care of generating the tex version of the README file and all the pdfs.

Use

1. Clone this repository: `git clone https://github.com/conradolandia/pauta.git`, and go inside it.
2. Copy the `doc` and `tex` folders to your ConTeXt tree and rebuild your database with `context --generate`. You can find more details about the process on the ConTeXt wiki. Alternatively, place `t-pauta.mkxl` on the same directory.
3. Include the grid in your ConTeXt file.
4. Compile with `context [FILE]`.
5. Invoke the `\Pauta` macro as many times as you want pages. Each invocation can have a different configuration.

Generating the example file

Review and run the lua script `build.lua`. If you don't have a standalone lua interpreter, you can run it with luametatex like so:

```
luametatex --luaonly build.lua
```

You can also adapt it and use to build your own project.

Configuration Parameters

All parameters are optional. Defaults are as follows:

```
\Pauta[
  hand=, % Hand name
```

```
  handInfo=, % Some extra info for the hand
  infoPosition=header, % Where to show the extra info (header | footer)
  displayNibs=true, % Show pen width marks (true | false)
  displayAngleMarks=true, % Display dotted guides for the nib angle
  nibWidth=3mm, % Pen nib width (with units)
  ascenders=3, % Number of ascender lines (in nib widths)
  xHeight=4, % Number of x-height lines (in nib widths)
  descenders=3, % Number of descending lines (in nib widths)
  adjustment=0, % Sometimes it's necessary to adjust the line height if the last one covers the page
info
  mainColor={s=.4}, % Main color (lines that separate sections)
  secondaryColor={s=.6}, % Secondary color (lines separated by a nib width and dotted angle lines)
  tertiaryColor={s=.8}, % Tertiary color (nib width marks on the left margin)
]
```

Code Examples

Example 1: Basic Usage

```
\usemodule[pauta]

\startdocument
\Pauta[
  hand={Carolingian},
  handInfo={Tours school, VIII\high{th} century},
  infoPosition=header,
  displayNibs=true,
  displayAngleMarks=true,
  nibWidth=3mm,
  ascenders=2,
  xHeight=3,
  descenders=2,
  adjustment=0,
  mainColor={s=.6},
  secondaryColor={s=.8},
  tertiaryColor={s=.8},
]
\stopdocument
```

Example 2: Multiple Pauta Instances

```
\usemodule[pauta]

\startdocument
\Pauta[
 hand={Carolingian},
 handInfo={Tours school, VIII\high{th} century},
 infoPosition=header,
 displayNibs=true,
 displayAngleMarks=true,
```

```
 nibWidth=3mm,
 ascenders=2,
 xHeight=3,
 descenders=2,
 adjustment=0,
 mainColor={s=.5},
 secondaryColor={s=.6},
 tertiaryColor={s=.7},
]

% Overriding the hader / footer info:

\Pauta[
 infoLeft={An excercise in Visigothic script},
 infoRight={from an Spanish manuscript, VII\high{th} century},
 infoPosition=footer,
 displayNibs=true,
 displayAngleMarks=false,
 nibWidth=2mm,
 ascenders=4,
 xHeight=3,
 descenders=4,
 adjustment=1,
 mainColor={s=.3},
 secondaryColor={s=.4},
 tertiaryColor={s=.5},
]
\stopdocument
```

This project aims to provide a flexible and efficient tool for creating calligraphy practice templates, leveraging the power of ConTEXt and MetaPost.

Changelog

- 20240307: Added build script, first alpha version
- 20240308: Improved build script, TDS compliant branch created