

T_EXtacular

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Overview

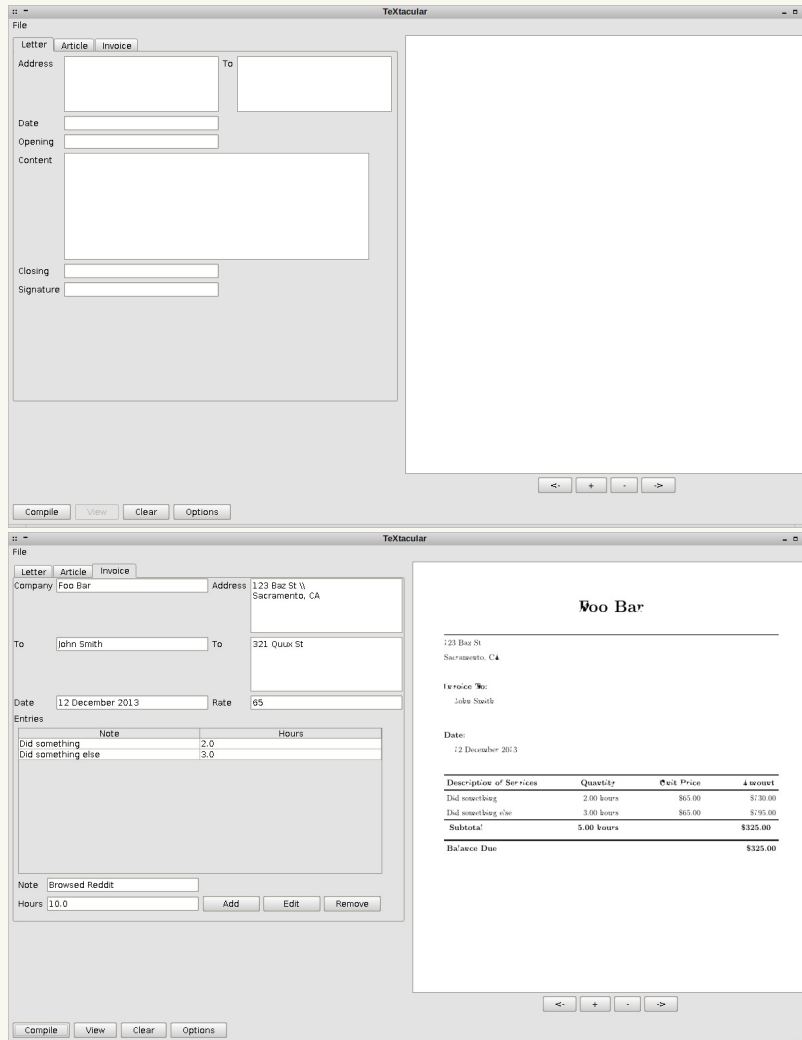
Idea

- Make \LaTeX accessible to everyone
- Simplify creation of beautiful documents

Audience

- Users who prefer point-and-click and simple forms over manual creation of \TeX source
- Those less technically inclined

Implementation



Implementation Details

- Main frame contains a concrete `TemplatePanel` with inputs, a few buttons at the bottom, and a `PreviewPanel` on the right
- A `TeXHandler` class handles compilation of $\text{T}_{\text{E}}\text{X}$ source
 - Uses `latexmk` and a script to compile
- `PreviewPanel` updates automatically with the contents of the compiled PDF
- Third party libraries
 - MiGLayout
 - Sun PDF-Renderer
 - PgsLookAndFeel

Difficulties & Concerns

- How best to handle template types
- Reasonable method of laying out components without a completely different strategy for each template type
- Auto-updating PDF panel and zooming (conversion of PDF to a `BufferedImage` – far from perfect
- Handling application and `latexmk` compilation errors

Future

- Improve scrolling inside preview panel
 - Currently click and drag but can be flaky
- More general, approachable way for building templates
- Improve scaling of PDF preview
- Add “Save”, “Load”, “Print” options
- Add Windows support