**# xlwings Reports**

xlwings Reports is a Python-based solution for automated Excel and PDF reporting. It allows business users without Python knowledge to generate pixel-perfect factsheets by using placeholders in Excel workbooks: xlwings Reports separates the data acquisition (Python code) from the report design (Excel template).

**# Placeholders and Filters**

To use a Python variable as placeholder in your Excel template, put it in between two curly braces. Powerful filters (separated by the pipe character) allow the designer to prepare and format the data and graphics in the desired way.

E.g., {{ '{{ fund\_return | format(".1%") }}' }} will format the variable \*fund\_return\* with the value {{ fund\_return }} as percentage with one decimal like so: {{ fund\_return | format(".1%") }}.

**# Features**

\*\*Text\*\*: Easily format your text via Markdown syntax and use your favorite text editor including Microsoft Word, Google Docs, VS Code etc.

\*\*Tables\*\*: Write pandas DataFrames to Excel cells and Excel tables and format them dynamically based on the number of rows.

\*\*Charts\*\*: Use your favorite charting engine: Excel charts, Matplotlib, or Plotly.

\*\*Images\*\*: You can work with both raster (e.g., png) or vector (e.g., svg) graphics, including dynamically generated ones like QR codes or Python plots.

\*\*Multi-column layout\*\*: Split your content up into e.g. a classic two-column-layout by using Frames.

\*\*Single template\*\*: Generate reports in various languages, for various funds etc. based on a single template.

\*\*PDF report (small size)\*\*: Generate PDF reports automatically and “print” the reports on PDFs in your corporate layout for pixel-perfect results including headers, footers, backgrounds and borderless graphics. This technique keeps the file size small.

\*\*Easy pre-processing\*\*: Since everything is Python-based, you can connect to literally any data source without paying thousands of dollars for custom connectors. Use your favorite Python library (e.g. pandas) for cleaning and preparing your data.

\*\*Easy post-processing\*\*: Again, with Python you’re just a few lines of code away from attaching the PDF reports to your weekly newsletter. Or you can upload them to your web server, S3 bucket etc.