The `Old DMs` class

Faster assignments with a vintage look

`Old DMs` is a LaTeX class which simplifies the workflow for quick assignments while providing a vintage look.

It is based on the `article` class, so it keeps all the features while giving shortcuts for commands that are repeatedly used in an assignment-type work.

Contents

Why is this a thing?

LaTeX is awesome for typesetting large ambitious projects, but it can be too heavy and constraining to use for more modest work. I wanted to be able to get this LaTeX quality and versatility on small documents, or when I'm in a rush. As a student, the documents I happen to work on the most, are assignments.

`Old DMs` is therefore designed to make the workflow for assignments much faster. This documentation gives a glimpse of what this class does and how the documents look. I tried to make it as exhaustive as I could, but I might still be quite imperfect.

1   Installation and usage

1.1   Installation

Overleaf users, move directly to ??.

For these who run a LaTeX distribution on their system, `old_dms.cls` can be downloaded at `www.address.com`.

It requires these custom fonts installed on your system:

- Old Standard TT;
- GFS Baskerville;
- GFS Solomos;
- TeX Gyre Pagella.

It also requires Python and the `pygments` package, which can be installed using the following line.

```
pip install pygments
```

For Windows users, make sure Python is on the PATH.

1.2   Compilation

`Old DMs` use Unicode type fonts, so it compiles with XƎLaTeX. PdfLaTeX will not work.

This uses the `minted` package, which is based on `pygments`, which needs to be installed. It must therefore be compiled with the `--shell-escape` flag. On an IDE like T_EX*maker*, it can be changed in

```
Options > Configure TeXmaker
```

by adding the following line in the XeLaTeX field:

```
xelatex -synctex=1 -interaction=nonstopmode --shell-escape %.tex
```

For command-line compilation, just add `--shell-escape` to the command.

1.3 For Overleaf users

If you are on Overleaf, you just have to paste the `old-dms.cls` file into your project, start your `.tex` file with

```
\documentclass[<options>]{old-dms}
```

and it should work properly.

1.4 General usage

This documentation is made with the very `Old DMs` class, and it is meant to show as much as it is possible to do with `Old DMs`. The `.tex` file of this document can be found at `www.address.com` to serve as an example.

2 Document look

This documentation is made with `Old DMs` class. Reading it should give a glimpse on its classy – to my standards – vintage look. The main font used is *Old Standard TT*, which has a bit more retro look than the default L^AT_EX font.

The `section` titles are centered, but not the `subsection` and `subsubsection` ones.

The paragraphs are not indented, but separated with a little vertical space like

this. Too many indentations can be distracting by constantly breaking the alignment. Paragraphs like this help to maintain a clean look, especially when there are many short chunks of text instead of a rich prose.

Text in paragraphs is justified like in raw LaTeX, and this alignment is optimised to protrude a little bit, when the character before the line break is small, to keep a more balanced overall look, as seen in figure ??.
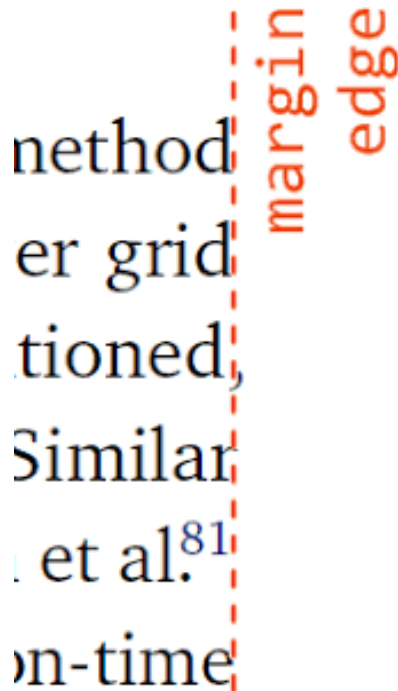

Figure 1 – Improved justification example

The figures are by default centered, and `.7\textwidth` wide.

Tables are as you want them to be. However, the packages `tabularx` and `booktabs` are included to provide tools for faster and cleaner tables.

As an example, here is a more or less complex table, which should illustrate the look and possibilities: see table ??.

Math environments are a bit pimped. Here are some examples:

$$e^x = \sum_{n=0}^{+\infty} \frac{x^n}{n!} \; ;$$

$$\frac{\hat{\tilde{p}}^2}{2m} \left| \Psi(t) \right\rangle + V\left(\hat{\tilde{r}}, t \right) \left| \Psi(t) \right\rangle = i\hbar \frac{\partial}{\partial t} \left| \Psi(t) \right\rangle \; ;$$

$$x_\pm = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \; ;$$

Table 1 – Energy states of a proton

Ground state				
n	l	m_l	m_s	Energy E_1 (eV)
1	0	0	+1/2	−13.6
1	0	0	−1/2	−13.6

First excited state				
n	l	m_l	m_s	Energy E_2 (eV)
2	0	0	+1/2	−3.4
2	0	0	−1/2	−3.4
2	1	1	+1/2	−3.4
2	1	1	−1/2	−3.4
2	1	0	+1/2	−3.4
2	1	0	−1/2	−3.4
2	1	−1	+1/2	−3.4
2	2	−1	−1/2	−3.4

$$\int_{-\infty}^{+\infty} e^{-ax^2}\,\mathrm{d}x = \sqrt{\frac{\pi}{a}}.$$

`Old DMs` changes the bibliography references. They are now in superscript instead of the full size. It mimics the Wikipedia[?] style and is less distracting.

For code snippets, it is possible to include inline code like this `def f(x):`, or full blocks of code:

```c
#include <stdio.h>

int main() {
    printf("Hello, World!");
    return 0;
}
```

It is also possible to have line numbering – see ??.

3   Macros provided

3.1   Question numbering

A custom numbering system is provided for questions, which is independant to section changes. To insert a question number, just use

`\q`.

It displays a question number which increments each time `\q` is used. It looks like this:

1/   This is the answer to the first question.

2/   Now moving to the second question.

3/   ...

4/   ... adding some more `\q` s ...

5/   ...

When you have to return to plain text, just put a `\t`. It tells LaTeX you're not in a question anymore and adds some space below the last question.

The question number is a custom counter which is simply named `question`. So it can be reset by using

`\setcounter{question}{1}`.

1/   The questions will now restart from one.

The `question` counter can be set at any given value.

There is also a subquestion system which can be used with `\sq`. It looks like this:

1/   The question.

2/   Another question.

(a) First subquestion.

(b) Second subquestion.

3/   (a) ...

(b) ... Some more subquestions ...

(c) ...

Which is obtained using the following code:

```
\setcounter{question}{1}

\q The question.

\q Another question.

\sq First subquestion.

\sq Second subquestion.

\q \sq \dots

\sq \dots{} Some more subquestions \dots

\sq \dots

\t
```

Subquestions are letters but this can be customized inside the class.

3.2   Figures

`Old DMs` provides a macro for figures. To insert a figure, just use

`\fig{<path>}{<caption>}{<label>}{<width>}`.

`<path>` is just the path of the image you want to put in.

`<caption>` is what will appear in the caption.

`<label>` is the figure label.

`<width>` is the width of the figure according to `\textwidth`. 1 will make the figure the full text width, 0.5 will make it half as wide as the text. Put nothing in the braces and it will make the figure 0.7 times the width of the text.

For example, this code

```
\fig{figures/bliss.jpg}{Bliss}{fig:bliss}{.6}
```

will provide the following figure (figure ??).

Figure 2 – Bliss

The macro has the `[ht!]` parameters in it, so LaTeX will do its best to place the figure where you want it to be.

Multiple figures

Multiple figures are useful but quite long to make. It can be slightly simplified by using the following code.

```
\begin{figure}[ht!]
    \centering
    \subfig{figures/1s.png}{1s configuration}{fig:1s}{.3}
    \subfig{figures/2p.png}{2p configuration}{fig:2p}{.3}\\
    \subfig{figures/3d.png}{3d configuration}{fig:3d}{.3}
    \subfig{figures/4f.png}{4f configuration}{fig:4f}{.3}
    \caption{Atomic orbital shapes}
    \label{fig:orbitals}
\end{figure}
```

This will give the figure ??.

`\subfig` works just like `\fig` and takes the same parameters.

(a) 1s configuration   (b) 2p configuration

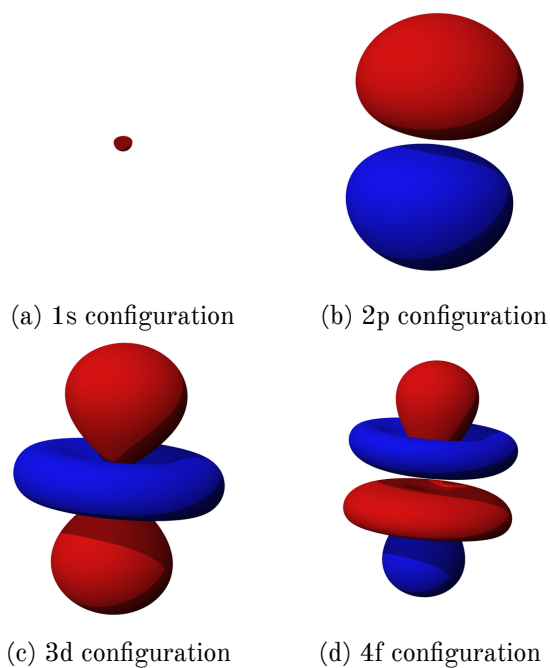(c) 3d configuration   (d) 4f configuration

Figure 3 – Atomic orbital shapes

Subfigures can be referenced too: figure ??.

I somehow struggled to create a simpler `multifig` environment that would automatically create the big figure with the caption and label. For more information, feel free to see section ??.

3.3 Math and physics

`Old DMs` gives features to write math and physics faster.

For the usual number sets, the following commands

`\N`, `\Z`, `\Q`, `\R`, `\C` will display these:

$$\mathbb{N}, \mathbb{Z}, \mathbb{Q}, \mathbb{R}, \mathbb{C}.$$

For the powers of ten, this command `\ee{}` allows to do it easily:

`h = 6.63\ee{-34} \;\text{J\cdot s}` gives

$$h = 6.63 \cdot 10^{-34} \text{ J} \cdot \text{s}.$$

For the units, this class includes the `SIunits` package, which documentation is at `https://ctan.org/pkg/siunits`.

As an example, this

`\unit{1}{\joule} = \unit{1}{\kilo\gram\square\meter\rpsquared\second}`
gives

$$1 \text{ J} = 1 \text{ kg} \cdot \text{m}^2 \cdot \text{s}^{-2}.$$

In order to give many physics shortcuts, `Old DMs` includes the `physics` package. Some examples of what is possible to do with it:

`\int \frac{x \dd{x}}{1+x^2}` gives

$$\int \frac{x \, \mathrm{d}x}{1 + x^2} \; ;$$

`\dv{u}{t}` gives
$$\frac{\mathrm{d}u}{\mathrm{d}t} \; ;$$

`\dv[5]{f}{x}` gives
$$\frac{\mathrm{d}^5 f}{\mathrm{d}x^5} \; ;$$

`\dv{}{t}\pdv{L}{\dot q_i} - \pdv{L}{q_i} = 0` gives

$$\frac{\mathrm{d}}{\mathrm{d}t} \frac{\partial L}{\partial \dot{q}_i} - \frac{\partial L}{\partial q_i} = 0 \; ;$$

`\bra{\Phi}\ket{\Psi}` gives
$$\langle \Phi | \Psi \rangle \,.$$

Note: the differential operator d is here in roman instead of italics. It is a convention that can be changed in the `physics` package inclusion.

There is much more packed in `physics`, so feel free to check the documentation at `https://ctan.org/pkg/physics`.

3.4 Code

Inline snippets and code blocks are possible, both with automatic color highlighting.

To insert a piece of code in an inline code, use

```
\inlinecode{<language>}{<your code>}.
```

For example, this `\inlinecode{python}{def f(x):}`

will give this `def f(x):`.

If your code uses braces like LaTeX, it is possible to use another separator, like `_..._`. For example, this

```
\inlinecode{c}_for(int i=1; i <= j; i++){printf(%d,i)}_
```

will give

```
for(int i=1; i <= j; i++){printf(%d,i)}.
```

For blocks of several lines of codes, the environment `codebox` is provided:

```
\begin{codebox}{python}
import numpy as np
import matplotlib.pyplot as plt

def f(x):
    return -np.exp(-x)
\end{codebox}
```

will give

```
1    import numpy as np
2    import matplotlib.pyplot as plt
3
4    def f(x):
5        return -np.exp(-x)
```

The environment `codeboxnonos` will give the same result without line numbering.

These macros are based on the `minted` package. It is very complete, so feel free to check the documentation here: https://www.ctan.org/pkg/minted.

To add captions to code boxes, use `\captionof{listing}{<your caption>}`.

For example, this

```
\captionof{listing}{"Hello World!" in C.}
\begin{codebox}{c}
#include <stdio.h>
```

```
int main() {
    printf("Hello, World!");
    return 0;
}
\end{codebox}
```

gives

<div align="center">

Listing 1 – "Hello World!" in C.

</div>

```
1    #include <stdio.h>
2
3    int main() {
4        printf("Hello, World!");
5        return 0;
6    }
```

3.5   Lists, tables and other

This class provides shortcuts for the environments `itemize` and `enumerate`, which are respectively `ul` and `ol`.

For example

```
\begin{ul}
    \item item 1;
    \item item 2;
    \item item 3.
\end{ul}
```

gives

- item 1;

- item 2;

- item 3.

`\begin{ol}`...`\end{ol}` can be used for numbered lists.

For tables, individual cases are so specific that macros are not that useful. However, this class includes `tabularx` for adaptive columns and `booktabs` for cleaner tables.

The example given in table **??** is obtained with

```latex
\begin{table}[ht!]
    \centering
    \caption{Energy states of a proton}
    \label{tab:energy}
    \begin{tabularx}{.6\textwidth}{llllXl}
        \toprule
        \midrule
        \multicolumn{6}{l}{Ground state} \\
        $n$ & $l$ & $m_l$ & $m_s$ &  & Energy $E_1$ (eV)\\
        \midrule
        $1$ & $0$ & $0$ & $+1/2$ & & $- 13.6$ \\
        $1$ & $0$ & $0$ & $-1/2$ & & $- 13.6$ \\
         & & & & & \\
        \multicolumn{6}{l}{First excited state} \\
        $n$ & $l$ & $m_l$ & $m_s$ &  & Energy $E_2$ (eV)\\
        \midrule
        $2$ & $0$ & $0$ & $+1/2$ & & $-3.4$ \\
        $2$ & $0$ & $0$ & $-1/2$ & & $-3.4$ \\
        $2$ & $1$ & $1$ & $+1/2$ & & $-3.4$ \\
        $2$ & $1$ & $1$ & $-1/2$ & & $-3.4$ \\
        $2$ & $1$ & $0$ & $+1/2$ & & $-3.4$ \\
        $2$ & $1$ & $0$ & $-1/2$ & & $-3.4$ \\
        $2$ & $1$ & $-1$ & $+1/2$ & & $-3.4$ \\
        $2$ & $2$ & $-1$ & $-1/2$ & & $-3.4$ \\
        \midrule
        \bottomrule
    \end{tabularx}
\end{table}
```

tabularx takes a width parameter. The column type X is left-aligned with adaptive width to let the table take the width given. Y is for centered adaptive columns.

The documentations of booktabs and tabularx can be found at https://www.ctan.org/pkg/booktabs and https://www.ctan.org/pkg/tabularx.

4   Package inclusions

Here is a list of all packages included in the class.

Encoding	`inputenc`
	`fontenc`
Geometry and color	`xcolor`
	`graphicx`
	`setspace`
	`fancyhdr`
	`mdframed`
Typography	`microtype`
Figures and tables improvement	`tabularx`
	`booktabs`
	`caption`
Fonts and symbols	`amsfonts`
	`mathrsfs`
	`amsmath`
	`mathspec`
Nerdy stuff	`empheq`
	`physics`
	`SIunits`
Bibliography	`natbib`
Miscellaneous	`hyperref`
Code	`minted`

5   Adaptation and customization

5.1   Language

It is possible to change the language of the document using the `polyglossia` package. It changes the table of contents, list of figures, list of tables headers, and the figures and tables captions.

However it does nothing for the listing captions and list of listings. To change these to French, for example, use

```
\renewcommand{\listingscaption}{Code source} % caption change
\renewcommand{\listoflistingscaption}{Liste des codes sources} %
↪    lol header change
```

5.2   Page layout

The geometry, margins, and page size are like vanilla LaTeX. It can be changed using the geometry package to suit everyone's taste.

`Old DMs` uses `fancyhdr` to change the headers and footers setup. It displays nothing on the header, and the folio on the right footer.

The class can take a `twoside` argument, just like `article`, which changes the layout to put asymmetrical margins, and the folios on the outside part of the footer.

For more header and footer customization, check `https://www.ctan.org/pkg/fancyhdr`.

6   Issues

6.1   Possible compilation errors

If compilation fails, make sure your LaTeX distribution is up to date, and that compilation is made with X∃LaTeX.

If `minted` spits obscure errors, try to delete the `_minted-main` folder and re-compile.

6.2   Problems within the class

Big figure environment

Environments for tables

Compilation time with TEX*maker*

7   Sauce

Here is `Old DMs`'s source code. It is also avaliable at `http://address.com`.

<div align="center">Listing 2 – <code>old-dms.cls</code></div>

```
1   %          .d88888b.  888        888
2   %         d88P" "Y88b 888        888
3   %         888     888 888        888
4   %         888     888 888  .d88888
5   %         888     888 888 d88" 888
6   %         888     888 888 888  888
7   %         Y88b. .d88P 888 Y88b 888
8   %          "Y88888P"  888  "Y88888
9
10  \NeedsTeXFormat{LaTeX2e}
11  \ProvidesClass{old-dms}[v0  class for assignments with a vintage
    ↪  look]
12
13  %                    8888888b.  888b     d888
14  %                    888   "Y88b 8888b   d8888
15  %                    888     888 88888b.d88888
16  %                    888     888 888Y88888P888 .d8888b
17  %                    888     888 888 Y888P 888 88K
18  %                    888     888 888  Y8P  888 "Y8888b.
19  %                    888   .d88P 888   "   888      X88
20  %                    8888888P"  888       888  88888P'
21
22  \LoadClassWithOptions{article}
23
24  %   OLd DMs is a LaTeX class which simplifies the workflow
25  %   for quick assignments while providing a vintage look.
26  %
27  %   It is based on the article class, so it keeps all the
28  %   features while giving shortcuts for commands that are
29  %   repeatedly used in an assignment-type work.
30
31
32  %====================================%
33  %      LAYOUT AND SHORTCUTS          %
34  %====================================%
35
36  % Basic stuff
37
38  \usepackage[T1]{fontenc}
39
40  % Raccourcis sympa
41
42  \newenvironment{ul} % instead of begin{itemize}
```

```latex
43    {\begin{itemize}}
44    {\end{itemize}}
45
46    \newenvironment{ol}
47    {\begin{enumerate}}
48    {\end{enumerate}}
49
50    \newcommand{\p}[1]{\paragraph{#1}}
51
52    %   Colors
53
54    \usepackage[table]{xcolor}
55
56
57    %  Tables
58
59    \usepackage{tabularx}    % tables with adaptive columns
60
61    \newcolumntype{Y}{>{\centering\arraybackslash}X} % tabularx column
      ↪  type
62
63    \usepackage{booktabs}    % cleaner tables
64
65    %  Pictures and advanced layout
66
67    \usepackage{graphicx}    % for pictures
68
69    \usepackage{multicol}    % for multicolumn sections especially toc
70
71    \usepackage{fancyhdr}    % custom headers and footers
72
73    \usepackage[labelsep = endash, size = small]{caption} %custom
      ↪  captions
74
75    %  Other
76
77    \usepackage{numprint}  % to display large numbers in a clean way
78
79    %  Biblio
80
81    \usepackage[super,square]{natbib} % for custom bibliography
      ↪  references
82
83    %  m a t h
84
85    \usepackage{amsfonts}  % fonts
86    \usepackage{mathrsfs}
87    \usepackage{amsmath}
88
```

```latex
89    \renewcommand{\phi}{\varphi}
90    \renewcommand{\epsilon}{\varepsilon}  % i find it more pleasing
91
92    \newcommand{\N}{\mathbb{N}}      % shortcuts for usual number sets
93    \newcommand{\Z}{\mathbb{Z}}
94    \newcommand{\Q}{\mathbb{Q}}
95    \newcommand{\R}{\mathbb{R}}
96
97    \usepackage{empheq}    % to have numbered equations in arrays
98
99    % vectors with a space before
100   \let\oldvec\vec
101   \renewcommand{\vec}{\:\oldvec}
102
103   %            dP                            oo
104   %            88
105   %    88d888b. 88d888b. dP    dP .d8888b. dP .d8888b. .d8888b.
106   %    88' `88 88' `88 88    88 Y8ooooo. 88 88' `"" Y8ooooo.
107   %    88.  .88 88    88 88.  .88      88 88 88.  ...      88
108   %    88Y888P' dP    dP `8888P88 `88888P' dP `88888P' `88888P'
109   %    88                    .88
110   %    dP                 d8888P
111
112   \usepackage[squaren, Gray, cdot]{SIunits} % units
113
114   \newcommand{\ee}[1]{\cdot 10^{#1}}   % powers of 10
115
116   \newcommand{\vect}[1]{\:\overrightarrow{#1}} % new vect with
      ↪  overrightarrow style
117
118   \usepackage{physics}    % best package on earth
119
120   % Micro-typesetting
121
122   \usepackage{microtype}
123   \UseMicrotypeSet[kerning]{allmath}
124   \SetExtraKerning{encoding={OMS,OML,U}, family={mdbch}}{p={1000,}}
125
126   % Hyperlinks in PDFs
127
128   \usepackage[hidelinks]{hyperref}
129
130
131   %===================================%
132   %       STYLE: FONTS AND HEADERS       %
133   %===================================%
134
135   % Fonts definitions : see
      ↪  https://tex.stackexchange.com/questions/9894/old-style-antique-typesetting-in-latex-tex
```

```latex
136
137  \usepackage{mathspec} % https://ctan.org/pkg/mathspec
138      \defaultfontfeatures{Mapping=tex-text}
139      \setmainfont{Old Standard TT}
140      \setmathsfont(Greek)[Uppercase=Plain,Lowercase=Regular]{GFS
         ↪  Solomos}
141      \setmathsfont(Latin)[Uppercase=Italic,Lowercase=Italic]{Old
         ↪  Standard TT}
142      % download GFS's fonts from http://www.greekfontsociety.gr/
143
144  \newfontfamily{\bask}{GFS Baskerville}
145  \let\sum\relax
146  \DeclareMathOperator*{\sum}{\raisebox{-3.5pt}{\scalebox{2}{\rotatebox{1}{{\bask
     ↪  Σ}}}}} % all these lines to define this extreme summation sign
147
148  \newfontfamily{\tgp}{TeX Gyre Pagella Math}
149  \let\partial\oldpartial
150  \newcommand{\partial}{\text{{\tgp ∂}}} % these three lines go for the
     ↪  weird \partial symbol
151
152  %  two-column TOC
153
154  \setlength{\columnsep}{20pt}
155  \setlength{\columnseprule}{0.4pt}
156
157  \newcommand*{\multicolumntoc}{2}
158  \newcommand\beautifultableofcontents{%
159      \begin{multicols}{\multicolumntoc}[\section*{\contentsname
160          \@mkboth{%
161
                 ↪  \MakeUppercase\contentsname}{\MakeUppercase\contentsname}}]%
162      \@starttoc{toc}%
163      \end{multicols}%
164      }
165
166  \let\TOC\beautifultableofcontents
167  \renewcommand{\tableofcontents}{
168  \setlength{\parindent}{0pt}
169  \setlength{\parskip}{2pt}
170  \TOC
171  \setlength{\parskip}{8pt}
172  }
173
174  %  Centered sections
175
176  \usepackage{titlesec}
177  \titleformat{\section}{\centering\Large\bfseries\filcenter}{\thesection}{1em}{}
178
179
```

```latex
180    %=====================================%
181    %       CODE                           %
182    %=====================================%
183
184    \usepackage{verbatim}   % for verbatim environments
185
186    \usepackage{minted} % for color highlighting
187    \usemintedstyle{friendly}
188
189    \usepackage{mdframed} % for custom code boxes
190
191    \mdfdefinestyle{code_box}{%
192        topline,
193        bottomline,
194      linewidth=.4pt,
195      leftline=false,
196      rightline=false,
197      innerleftmargin=35pt,
198    }
199
200    \mdfdefinestyle{code_box_nonos}{%
201        topline,
202        bottomline,
203      linewidth=.4pt,
204      leftline=false,
205      rightline=false,
206      innerleftmargin=6pt,
207    }
208
209    \renewcommand{\theFancyVerbLine}{
210      \scriptsize
211      \textcolor{black}{
212        \texttt
213        \oldstylenums{}
214        \arabic{FancyVerbLine}
215      }
216    }
217
218    % Macro environments
219
220    \newenvironment{codebox}[1]{%
221    \VerbatimEnvironment
222    \begin{mdframed}[style = code_box]%
223    \begin{minted}[
224      breaklines,
225      fontsize=\small,
226      linenos,
227      tabsize=2,
228    ]{#1}%
```

20

```latex
229    }{%
230    \end{minted}%
231    \end{mdframed}%
232    }
233
234    \newenvironment{codeboxnonos}[1]{%
235    \VerbatimEnvironment
236    \begin{mdframed}[style = code_box_nonos]%
237    \begin{minted}[
238      breaklines,
239      fontsize=\small,
240      tabsize=2,
241    ]{#1}%
242    }{%
243    \end{minted}%
244    \end{mdframed}%
245    }
246
247    %   Inline code
248
249    \newcommand{\inlinecode}[1]{\mintinline[ fontsize=\small]{#1}}
250
251
252    %=====================================%
253    %        DOCUMENT CONFIGURATION        %
254    %=====================================%
255
256    \setlength{\parindent}{0pt}
257    \setlength{\parskip}{8pt}
258
259    \renewcommand{\headrulewidth}{0pt}
260    \pagestyle{fancyplain} %header
261    \fancyhf{} % sets both header and footer to nothing
262    \fancyfoot[LE,RO]{\thepage}
263
264
265    %=====================================%
266    %        CUSTOM MACROS                 %
267    %=====================================%
268
269    %   Questions
270
271    \newcounter{question}
272    \newcommand{\q}{
273    \setcounter{subquestion}{1}
274    \paragraph{\thequestion /}
275    \refstepcounter{question}
276    }
277
```

```latex
278    \newcounter{subquestion}
279    \newcommand{\sq}{
280    (\alph{subquestion})
281    \refstepcounter{subquestion}
282    }
283
284    \setcounter{question}{1}
285
286    \renewcommand{\t}{\vskip15pt}
287
288    % Figures shortcuts
289
290    \usepackage{subcaption}
291
292    \newcommand{\fig}[4]
293    {
294    \begin{figure}[ht!]
295        \centering
296        \ifthenelse{\equal{#4}{}}
297        {\includegraphics[width=.7\textwidth]{#1}}
298        {\includegraphics[width=#4\textwidth]{#1}}%
299        \caption{#2}
300        \label{#3}
301    \end{figure}
302    }
303
304    \newcommand{\subfig}[4]
305    {
306    \begin{subfigure}{#4\textwidth}
307        \centering
308        \includegraphics[width=\textwidth]{#1}
309        \caption{#2}
310        \label{#3}
311    \end{subfigure}
312    }
313
314    \usepackage{xparse}
315
316    \NewDocumentEnvironment{multifig}{mm}
317    {
318        \begin{figure}[ht!]
319        \centering
320    }{
321        \caption{#1}
322        \label{#2}
323        \end{figure}
324    }
325
326
```

```latex
327    %=====================================%
328    %        THINGS THAT MUST BE PUT HERE     %
329    %=====================================%
330
331    \renewcommand{\C}{\mathbb{C}} %parce que c'est une redéfinition de
    ↪    commande existante mais dont on s'en balek
```

References

[1] wikipedia.org, LaTeX – Wikipedia. `https://en.wikipedia.org/wiki/LaTeX`.

List of Figures

List of Tables

List of Listings