

# Fancy paragraph designs with the fancypar package

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## Abstract

This package offers five predefined decorative styles for individual text paragraphs of a document; the user can easily control the styles' attributes using the key-value mechanism. The package also allows the creation of new fancy designs.

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## 1 Introduction

The fancypar package exploits the “dissecting paragraphs with `\lastbox`” technique explained in Section 5.9.6 of Viktor Eijkhout’s *T<sub>E</sub>X by Topic* (See [2]) to provide five predefined and easily customizable fancy paragraph styles. New designs can also be easily defined.

↗ The five commands were designed for *text* paragraphs, so the mandatory argument of the five main commands described in Section 3, page 3 cannot contain, for example, displayed math, nor `\par` commands. By the way, this paragraph was typeset using one of the predefined styles offered by this package.

The author will gladly receive suggestions, comments and bug reports.

## 2 User Interface

Simply load this package in the preamble of a document (i.e. the part of your document between `\documentclass` and `\begin{document}`) in the standard way:

```
\usepackage{fancypar}
```

This will make available the five predefined styles, through the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar` and `\UnderlinedPar`, described in Section 3, page 3.

↘ The `fancypar` package internally loads the `xcolor` package (See [3]) without package options. If `xcolor` needs to be loaded with some options in a document, then ↘ `fancypar` must be loaded *after* `xcolor` to prevent a clash.

### 2.1 Package options

The `fancypar` package can also be loaded declaring some package options:

```
\usepackage[options]{fancypar}
```

Here (and in what follows) *options* represents a comma-separated list of *key=value* pairs<sup>1</sup>, controlling some attributes of the predefined styles. The available options are described in Section 3, page 3 (a summary with the default values is shown in Table 1, page 6).

`\fancyparsetup` Additionally, for a later change of options, the `fancypar` package offers the command `\fancyparsetup`:

```
\fancyparsetup{options}
```

So, for example,

```
\usepackage[colorone=blue!20,colortwo=red!20]{fancypar}
```

and

```
\usepackage{fancypar}
\fancyparsetup{colorone=blue!20,colortwo=red!20}
```

---

<sup>1</sup>This feature was implemented using the `xkeyval` package (See [1]).

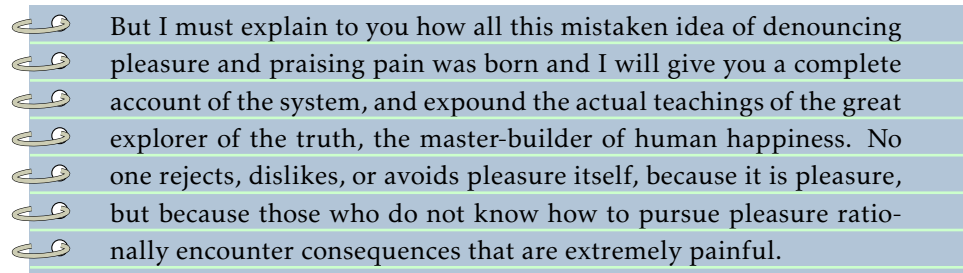
will produce the same result. The advantage of `\fancyparsetup` is that it can be used not only in the preamble but on the body of the document, as many times as required. Even more control can be obtained using the optional argument for the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar`, and `\UnderlinedPar`.

### 3 Predefined styles

Each of the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar`, and `\UnderlinedPar` described in this section has one mandatory argument: the *text* paragraph to which the style will be applied to. As mentioned above, each style has some predefined settings which can be changed by using the corresponding options in either the `\usepackage` or `\fancyparsetup` commands or individually, by using the optional argument of the corresponding command.

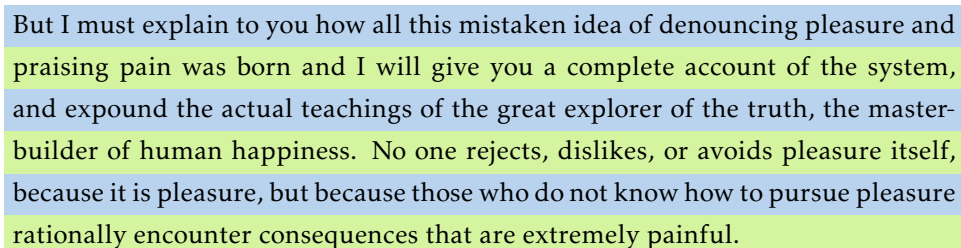
Below is an illustration of the look of the predefined styles, using some placeholder text (see Section 5, page 7).

*The notebook style:*



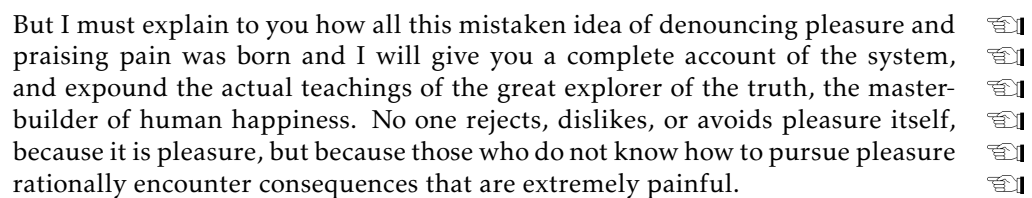
But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

*The zebra style:*



But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

*The marked style:*



But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

*The dashed style:*

-----  
But I must explain to you how all this mistaken idea of denouncing pleasure and  
-----  
praising pain was born and I will give you a complete account of the system,  
-----  
and expound the actual teachings of the great explorer of the truth, the master-  
-----  
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,  
-----  
because it is pleasure, but because those who do not know how to pursue pleasure  
-----  
rationally encounter consequences that are extremely painful.  
-----

*The underlined style:*

But I must explain to you how all this mistaken idea of denouncing pleasure and  
praising pain was born and I will give you a complete account of the system,  
and expound the actual teachings of the great explorer of the truth, the master-  
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,  
because it is pleasure, but because those who do not know how to pursue pleasure  
rationally encounter consequences that are extremely painful.

### 3.1 The notebook style

`\NotebookPar` This command will present the affected paragraph as if it was written in a notebook. Using the TikZ package (See [5]), a spiral is added by default to the notebook (the spiral can be activated/deactivated using the `spiral` option). The options for this command are

<code>linecolor=&lt;color&gt;</code>	Color of the notebook's lines.
<code>intercolor=&lt;color&gt;</code>	Color of the rule between lines.
<code>textcolor=&lt;color&gt;</code>	Color of the text.
<code>spiralcolor=&lt;color&gt;</code>	Color of the spiral.
<code>interheight=&lt;length&gt;</code>	Height of the rule used between consecutive lines.
<code>spiral=&lt;true false&gt;</code>	Activate/deactivate the spiral.
<code>nbtextwidth=&lt;length&gt;</code>	Text width inside the notebook (only affects the text).

The syntax is

```
\NotebookPar[options]{<text paragraph>}
```

### 3.2 The zebra-like style

`\ZebraPar` This command will color every line of the affected paragraph using a two-color (zebra-like) pattern. The options for this command are

<code>colorone=<i>&lt;color&gt;</i></code>	Background color of the odd-numbered lines.
<code>colortwo=<i>&lt;color&gt;</i></code>	Background color of the even-numbered lines.
<code>textcolorone=<i>&lt;color&gt;</i></code>	Color of the text in the odd-numbered lines.
<code>textcolortwo=<i>&lt;color&gt;</i></code>	Color of the text in the even-numbered lines.

The syntax is

```
\ZebraPar[options]{<text paragraph>}
```

`fancycolor` Internally, the counter `fancycolor` is used to alternate colors for the odd and  
`\FancyZColor` even-numbered lines, by redefining the command `\FancyZColor`. A little vari-  
`\FancyZTextColor` ation allows to achieve more sophisticated patterns with more than two alter-  
nating colors (see Example 4, page 10). By an appropriate redefinition of the  
`\FancyZTextColor`, some interesting patterns for the color of the text could also  
be achieved.

### 3.3 The dashed paragraph

`\DashedPar` This command uses the `\xleaders` T<sub>E</sub>X primitive to fill the textwidth with evenly spaced copies of a symbol (or “dash”). The options for this command are

<code>dashsymbol=<i>&lt;symbol&gt;</i></code>	Symbol to be used as “dash”.
<code>dashcolor=<i>&lt;color&gt;</i></code>	Color for the symbol to be used as “dash”.
<code>separation=<i>&lt;length&gt;</i></code>	Distance between two copies of the symbol.

The syntax is as follows:

```
\DashedPar[options]{<text paragraph>}
```

### 3.4 Marking every line

`\MarkedPar` This command will add a symbol (or “mark”) to every line in the affected paragraph; the options for this style are `mark=<symbol>` (the symbol to be used as the mark) and `position=<right|left>` (the position of the symbol). The syntax is as follows:

```
\MarkedPar[options]{<text paragraph>}
```

### 3.5 Underlining every line

`\UnderlinedPar` This command will underline every line of the affected paragraph. The only option for this command is `rulecolor=<color>` which controls the color of the rule used. The syntax is

```
\UnderlinedPar[rulecolor=<color>]{<text paragraph>}
```









Command/Style	Options	Default
<code>\NotebookPar</code>	<code>linecolor=&lt;color&gt;</code>	SlateGray3!80 
	<code>intercolor=&lt;color&gt;</code>	green!20 
	<code>textcolor=&lt;color&gt;</code>	black
	<code>interheight=&lt;length&gt;</code>	1pt
	<code>spiralcolor=&lt;color&gt;</code>	LightYellow3 
	<code>spiral=&lt;true false&gt;</code>	true
	<code>nbtextwidth=&lt;length&gt;</code>	<code>\textindentright</code>
<code>\ZebraPar</code>	<code>colorone=&lt;color&gt;</code>	SlateGray2 
	<code>colortwo=&lt;color&gt;</code>	DarkOliveGreen2!90!white!70 
	<code>textcolorone=&lt;color&gt;</code>	black
	<code>textcolortwo=&lt;color&gt;</code>	black
<code>\DashedPar</code>	<code>separation=&lt;length&gt;</code>	0.9em
	<code>dashsymbol=&lt;symbol&gt;</code>	– (en-dash: --)
	<code>dashcolor=&lt;color&gt;</code>	blue!50 
<code>\MarkedPar</code>	<code>mark=&lt;symbol&gt;</code>	<code>\rightpointleft</code>  <sup>2</sup>
	<code>position=&lt;right left&gt;</code>	right
<code>\UnderlinedPar</code>	<code>rulecolor=&lt;color&gt;</code>	DarkOliveGreen3 

Table 1: summary of the predefined styles, their options and their default values.

## 4 Defining new styles

`\FancyPreFormat` `\FancyFormat` `\AddFancyFormat` The creation of new paragraph designs involves the redefinition of the two commands `\FancyPreFormat` and `\FancyFormat`. The redefinition of the former will have effect just before the first line of the affected paragraph, whilst the redefinition of the latter will affect all lines of the paragraph; the redefinition of `\FancyFormat` *must* contain the `\box\linebox` construct. After redefining those commands, the actual typesetting of the modified paragraph is done by invoking

<sup>1</sup>From the dingbat package (See [4]).

`\vbox{#1\par\AddFancyFormat}`. Schematically the definition of a new style (called, for example, `\MyStylePar`) should have the following aspect:

```
\newcommand*\MyStylePar[1]{%
  \renewcommand\FancyPreFormat{%
    ...some commands...
  \renewcommand\FancyFormat{%
    ...some commands...
    \box\linebox%
    ...some commands...
  }
  ...some commands...
  \vbox{#1\par\AddFancyFormat}%
  ...some commands...
}%
```

For a complete illustration of a new style definition, see Example 5, page 10.

## 5 Examples

In the following examples we will use some placeholder text, taken from H. Rackham's 1914 translation of Section 1.10.32 of “de Finibus Bonorum et Malorum”, written by Cicero:

```
\newcommand*\testtext{But I must explain to you how all this
mistaken idea of denouncing pleasure and praising pain was born
and I will give you a complete account of the system, and
expound the actual teachings of the great explorer of the
truth, the master-builder of human happiness. No one rejects,
dislikes, or avoids pleasure itself, because it is pleasure, but
because those who do not know how to pursue pleasure rationally
encounter consequences that are extremely painful.}
```

Each example includes the complete compilable code (after addition of the above definition of the `\testtext` command) and its result.

### Example 1

*The default predefined styles.*

```
\documentclass{article}
\usepackage[english]{babel}
```

```

\usepackage{fancypar}

\begin{document}
\textit{The notebook style:}
\NotebookPar{\testtext}
\textit{The zebra style:}
\ZebraPar{\testtext}
\textit{The marked style:}
\MarkedPar{\testtext}
\textit{The dashed style:}
\DashedPar{\testtext}
\textit{The underlined style:}
\UnderlinedPar{\testtext}
\end{document}

```

The output of this example is shown on Section 3, page 3.

### Example 2

*Changing the predefined styles (via \usepackage and \fancyparsetup).*

```

\documentclass{article}
\usepackage[english]{babel}
\usepackage[x11names]{xcolor}
\usepackage[spiral=false,linecolor=Chocolate3!100!white!80]%
{fancypar}

\begin{document}
\NotebookPar{\testtext}
\fancyparsetup{spiral=true,linecolor=LightGoldenrod3,
interheight=2pt,intercolor=Cornsilk2}
\NotebookPar{\testtext}
\fancyparsetup{spiral=false,linecolor=OliveDrab4!100!white!90,
interheight=0pt,textcolor=white}
\NotebookPar{\testtext}
\end{document}

```

- But I must explain to you how all this mistaken idea of denouncing
- pleasure and praising pain was born and I will give you a complete
- account of the system, and expound the actual teachings of the great
- explorer of the truth, the master-builder of human happiness. No
- one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
- but because those who do not know how to pursue pleasure ratio-
- nally encounter consequences that are extremely painful.



But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

- But I must explain to you how all this mistaken idea of denouncing
- pleasure and praising pain was born and I will give you a complete
- account of the system, and expound the actual teachings of the great
- explorer of the truth, the master-builder of human happiness. No
- one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
- but because those who do not know how to pursue pleasure rationally
- encounter consequences that are extremely painful.

### Example 3

*Changing the predefined styles (via the optional argument of the commands).*

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage{fancyhdr}

\begin{document}
\MarkedPar{\testtext}
\MarkedPar[mark=\eye,position=left]{\testtext}
\MarkedPar[mark=\checkmark]{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

- But I must explain to you how all this mistaken idea of denouncing pleasure and
- praising pain was born and I will give you a complete account of the system,
- and expound the actual teachings of the great explorer of the truth, the master-
- builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,
- because it is pleasure, but because those who do not know how to pursue pleasure
- rationally encounter consequences that are extremely painful.

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful. ✓  
✓  
✓  
✓  
✓

**Example 4**

*In this example a three color zebra pattern is used for the lines of the paragraph.*

```
\documentclass{book}
\usepackage[english]{babel}
\usepackage{x11names}{xcolor}
\usepackage{fancy par}
\usepackage{intcalc}

\renewcommand*{\FancyZColor}{%
  \ifcase\intcalcMod{\value{fancycount}}{3}%
    OliveDrab4!100!white!90\or Chocolate3!100!white!80%
    \or LightGoldenrod3\fi
}

\begin{document}
\ZebraPar{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

**Example 5**

*Definition of a new style.* In this example we build a new style; the odd-numbered lines will be typeset in red and the even-numbered lines will be typeset in black.

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage{fancy par}
```

```

\newcounter{mycount}

\newcommand*{\MyStylePar[1]{%
  \renewcommand\FancyPreFormat{\setcounter{mycount}{0}}
  \renewcommand\FancyFormat{%
    \stepcounter{mycount}
    \ifodd\themycount%
      \noindent\textcolor{red}{\box\linebox}%
    \else%
      \box\linebox%
    \fi%
  }
  \par\medskip%
  \vbox{\noindent#1\par\AddFancyFormat}%
  \par\medskip%
}%

\begin{document}
\MyStylePar{\testtext}
\end{document}

```

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

## References

- [1] Hendri Adriaens, The xkeyval package. <http://www.ctan.org/pkg/xkeyval>.
- [2] Viktor Eijkhout, T<sub>E</sub>X by Topic. <http://www.eijkhout.net/tbt/>.
- [3] Dr. Uwe Kern, The xcolor package. <http://www.ctan.org/pkg/xcolor>.
- [4] Scott Pakin, The dingbat package. <http://www.ctan.org/pkg/dingbat>.
- [5] Till Tantau, The PGF/TikZ package. <http://www.ctan.org/pkg/pgf>.

## 6 Implementation

Standard identification:

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{fancypar}[2010/04/22 v1.0 fancy paragraphs]
3
```

We load the necessary packages:

```
4 \@ifpackageloaded{xkeyval}{}{\RequirePackage{xkeyval}}
5 \@ifpackageloaded{tikz}{\usetikzlibrary{calc}}
6 {\RequirePackage{tikz}\usetikzlibrary{calc}}
7 \@ifpackageloaded{dingbat}{}{\RequirePackage{dingbat}}
8 \@ifpackageloaded{xcolor}{}{\RequirePackage{xcolor}}
9
```

colorone	The xkeyval package was used to handle the package options that will also be
colortwo	used later on. First, the options declaration (prefix: FP, family: fancypar).
textcolorone	10 \DeclareOptionX[FP]<fancypar>{colorone}{\def\FancyZColorOne{#1}}
textcolortwo	11 \DeclareOptionX[FP]<fancypar>{colortwo}{\def\FancyZColorTwo{#1}}
linecolor	12 \DeclareOptionX[FP]<fancypar>{textcolorone}{\def\FancyZTextColorOne{#1}}
intercolor	13 \DeclareOptionX[FP]<fancypar>{textcolortwo}{\def\FancyZTextColorTwo{#1}}
interheight	14 \DeclareOptionX[FP]<fancypar>{linecolor}{\def\FancyNlColor{#1}}
spiralcolor	15 \DeclareOptionX[FP]<fancypar>{intercolor}{\def\FancyNilColor{#1}}
textcolor	16 \DeclareOptionX[FP]<fancypar>{interheight}{\def\FancyNilHeight{#1}}
nbtextwidth	17 \DeclareOptionX[FP]<fancypar>{spiralcolor}{\def\FancyNSColor{#1}}
mark	18 \DeclareOptionX[FP]<fancypar>{textcolor}{\def\FancyNTextColor{#1}}
rulecolor	19 \DeclareOptionX[FP]<fancypar>{nbtextwidth}{\def\FancyNTWidth{#1}}
separation	20 \DeclareOptionX[FP]<fancypar>{mark}{\def\FancyMark{#1}}
dashcolor	21 \DeclareOptionX[FP]<fancypar>{rulecolor}{\def\FancyUColor{#1}}
dashsymbol	22 \DeclareOptionX[FP]<fancypar>{separation}{\def\FancyDSeparation{#1}}
	23 \DeclareOptionX[FP]<fancypar>{dashcolor}{\def\FancyDColor{#1}}
	24 \DeclareOptionX[FP]<fancypar>{dashsymbol}{\def\FancyDSymbol{#1}}
	25

\textindent	The length \textindent will be used to control the indentation of the paragraph
\textindentright	in the notebook style, depending on whether or not the spiral will be used. The
	length \textindentright controls the distance from the right indentation of the
	text; it is set to \textwidth-2cm.

```
26 \newlength\textindent{}
27 \newlength\textindentright{}
28 \setlength\textindentright{\textwidth}
29 \addtolength\textindentright{-2cm}
30
```

spiral	The boolean key spiral is used here to set \textindent appropriately and will
	be used in the definition of the notebook style to draw or not the spiral.

```
31 \define@boolkey[FP]{fancypar}{spiral}{%
32 \ifFP@fancypar@spiral
33 \setlength\textindent{-2.6mm}%
34 }
```

```

34 \else
35   \setlength\textindent{3mm}%
36 \fi
37 }
38

```

position The choince-key position is used to specify the placement of the mark in the marked style.

```

39 \define@choicekey+{FP}{fancypar}{position}[\val\nr]{left,right}{%
40   \ifcase\nr\relax
41     \def\FancyMarkPosition{\llap{\mbox{\FancyMark\quad}}\box\linebox}
42   \or
43     \def\FancyMarkPosition{\box\linebox\rlap{\mbox{\quad\FancyMark}}}
44   \fi
45 }{%
46   \PackageWarning{fancypar}{erroneous input ignored}%
47 }
48
49 \DeclareOptionX*{\PackageWarning{fancypar}{\CurrentOption ignored}}
50

```

Now we define some of the colors that will be used by default. We use the RGB system to define colors already present in the x11names family, just to avoid loading the xcolor package with options.

```

51 \definecolor{zcolori}{RGB}{185,211,238}%SlateGray2
52 \definecolor{zcolorii}{RGB}{188,238,104}%DarkOliveGreen2
53 \definecolor{lcolor}{RGB}{159,182,205}%SlateGray3
54 \definecolor{scolor}{RGB}{205,205,180}%LightYellow3
55 \definecolor{rcolor}{RGB}{162,205,90}%DarkOliveGreen3
56

```

We set the default value for the keys that were defined.

```

57 \ExecuteOptionsX[FP]<fancypar>{%
58   colorone=zcolori,%
59   colortwo=zcolorii!90!white!70,%
60   textcolorone=black,%
61   textcolortwo=black,%
62   linecolor=lcolor!80,%
63   intercolor=green!20,%
64   interheight=1pt,%
65   spiralcolor=scolor,%
66   spiral=true,%
67   textcolor=black,%
68   nbtextwidth=\textindentright,%
69   mark=\rightpointleft,%
70   rulecolor=rcolor,%
71   position=right,%
72   dashcolor=blue!50,%
73   separation=0.9em,

```

```

74 dashsymbol=--
75 }
76

```

Now comes the processing of the keys and values which will be passed by the user to the package.

```

77 \ProcessOptionsX[FP]<fancypar>
78

```

`\fancyparsetup` Definition of the command to control attributes in the preamble or at any point of the document.

```

79 \DeclareRobustCommand*\fancyparsetup[1]{%
80   \setkeys[FP]{fancypar}{#1}
81 }
82

```

`\NotebookPar` Now, to the definition of the five predefined styles. `\NotebookPar` comes first.

```

83%%% notebook %%%%%%%%%%%%%%%
84 \newcommand*\NotebookPar[2][1]{%
85   \begin{group}
86     \setkeys[FP]{fancypar}{#1}
87     \renewcommand\FancyPreFormat{\smallskip}
88     \renewcommand\FancyFormat{%
89       \hskip\textindent%
90       \tikz{%
91         \draw[draw=black,fill=white] (-1,-0.3) circle (3pt);%
92         \ifFP@fancypar@spiral
93           \draw[very thin,rotate=4,double=\FancyNSColor,%
94             double distance=1.5pt]%
95             (-1,-0.2) arc (40:-250:10pt and 2pt);%
96         \else\relax
97         \fi
98       }
99       \hskip4mm\vphantom{Hy}%
100      \textcolor{\FancyNTextColor}{\box\linebox}%
101      \color{\FancyNilColor}\hrule height\FancyNilHeight%
102      \smallskip%
103    }
104    \setlength\parindent{0pt}
105    \par\vskip\baselineskip
106    \noindent%
107    \begin{tikzpicture}[inner sep=-1.1pt]%
108      \setlength\fbboxsep{0pt}%
109      \node (a) {\colorbox{\FancyNlColor}{%
110        \vbox{%
111          \vskip-0.5mm\parshape 1 0cm \FancyNTwidth%
112          #2\par\add@fancy@format%
113        }}%
114      }%
115    } {};

```

```

116 \end{tikzpicture}
117 \par\bigskip
118 \endgroup
119 }
120
fancycount Next, we define the counter fancycount, and the command \FancyZColor
\FancyZColor used to produce the zebra-like pattern (by changing the color depending on
\FancyZTextColor whether the value of the counter is odd or even). We also define the command
\FancyZTextColor \FancyZTextColor to allow a similar definition for the color of the text lines.
The counter and the commands can be used, or redefined by the user, in a LATEX
document to produce more sophisticated zebra-like designs.
121 \newcounter{fancycount}
122 \newcommand*\FancyZColor{}
123 \renewcommand*\FancyZColor{%alternate line colors
124 \ifodd\thefancycount %
125 \FancyZColorOne%
126 \else
127 \FancyZColorTwo%
128 \fi
129 }
130
131 \newcommand*\FancyZTextColor{}
132 \renewcommand*\FancyZTextColor{%alternate text colors
133 \ifodd\thefancycount %
134 \FancyZTextColorOne%
135 \else
136 \FancyZTextColorTwo%
137 \fi
138 }
139
\ZebraPar Now, the definition of \ZebraPar.
140%%% zebra %%%%%%%%%%%%%%%
141 \newcommand*\ZebraPar[2][ ]{%
142 \begingroup
143 \setkeys[FP]{fancypar}{#1}%
144 \renewcommand\FancyPreFormat{\setcounter{fancycount}{0}}%
145 \renewcommand\FancyFormat{%
146 \noindent\stepcounter{fancycount}%
147 \makebox[\textwidth]{\colorbox{\FancyZColor}{%
148 \textcolor{\FancyZTextColor}{\box\linebox}}}%
149 \hrule height 0pt%
150 }
151 \par\smallskip\noindent%
152 \vbox{#2\par\add@fancy@format}%
153 \par\smallskip%
154 \endgroup
155 }

```

156

`\leaderfill` Definition of the leader that will be used in `\DashedPar`.

```
157 \def\leaderfill{%
158   \color{\FancyDColor}%
159   \xleaders\hbox to \FancyDSeparation{\hss\FancyDSymbol\hss}\hfill%
160 }
161
```

`\DashedPar` The turn now is for `\DashedPar`.

```
162 %%%% dashed %%%%%%%%%%%%%%%
163 \newcommand*\DashedPar[2][]{%
164   \begingroup
165   \setkeys[FP]{fancypar}{#1}%
166   \renewcommand\FancyPreFormat{%
167     \hbox to \textwidth{\leaderfill}%
168     \vskip-\baselineskip%
169   }
170   \renewcommand\FancyFormat{%
171     \vphantom{Hy}\box\linebox%
172     \hbox to \textwidth{\leaderfill}%
173     \vskip-\baselineskip%
174   }
175   \par\medskip
176   \vbox{\noindent#2\par\add@fancy@format\medskip}%
177   \par\bigskip
178   \endgroup
179 }%
180
```

`\MarkedPar` The definition of `\MarkedPar`.

```
181 %%%% marked %%%%%%%%%%%%%%%
182 \newcommand*\MarkedPar[2][]{%
183   \begingroup
184   \setkeys[FP]{fancypar}{#1}
185   \renewcommand\FancyPreFormat{}
186   \renewcommand\FancyFormat{%
187     \noindent%
188     \FancyMarkPosition\par%
189   }%
190   \par\medskip%
191   \vbox{#2\par\add@fancy@format}%
192   \par\medskip%
193   \endgroup
194 }
195
```

`\UnderlinedPar` And last, but not least, the definition of `\UnderlinedPar`.

```
196 %%%% underlined %%%%%%%%%%%%%%%
```



```

197 \newcommand*\UnderlinedPar[2][ ]{
198   \begingroup
199   \setkeys[FP]{fancy}{#1}
200   \renewcommand\FancyPreFormat{ }%
201   \renewcommand\FancyFormat{ }%
202   \box\linebox\color{\FancyUColor}\hrule
203   \smallskip
204 }
205 \par\medskip%
206 \vbox{\noindent#2\par\add@fancy@format}
207 \par\medskip%
208 \endgroup
209 }
210

```

`\add@fancy@format` The simple, yet powerful macro that makes use of `\lastbox` to dissect a paragraph; this macro is the core of this package; it is invoked in each one of the five predefined styles (and must be used in newly defined ones). A description can be found in [2].

```

211 \newsavebox\linebox%
212 \def\add@fancy@format{%
213   \setbox\linebox\lastbox
214   \ifvoid\linebox\FancyPreFormat\else
215     \unskip
216     \unpenalty
217     {\add@fancy@format}%
218     \FancyFormat
219   \fi
220 }
221

```

`\AddFancyFormat` A copy of `\add@fancy@format` which the user can employ to apply new styles defined with the two commands below.

```

222 \let\AddFancyFormat\add@fancy@format
223

```

`\FancyPreFormat` These two commands will allow the user to define his/her own styles.

```

\FancyFormat 224 \newcommand\FancyPreFormat{ }%
225 \newcommand\FancyFormat{ }%

```

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