

# The mindflow package

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## 1 Introduction

The `mindflow` package provides you a way to write your ideas, annotations or writing plans. For example (with option `linenumber` and `rightmarker`):

- 
- 1 What to write next:
  - 2
    - usage;
    - some internal macros;
    - the complete code.
  - 3
  - 4

## 2 Usage

Simply load the package with `\usepackage{mindflow}`. By default it has no line numbers or markers. You can use the following options:

- `linenumber`    Enable line numbers
- `leftmarker`    Enable left marker, by default it is a “\*”
- `rightmarker`    Enable right marker, by default it is a “\*”
- `off`    Hide all the `mindflow` environments

`mindflow` Then you can use the `mindflow` environment as

```
\begin{mindflow}
...
\end{mindflow}
```

## 3 Some technical details

`\mindflowFont`    The font for texts and line numbers within the `mindflow` environments can be specified by redefining `\mindflowFont` and `\mindflowNumFont`. By default they are defined as:

```
\newcommand{\mindflowFont}{\normalfont\footnotesize}
\newcommand{\mindflowNumFont}{\normalfont\scriptsize\ttfamily}
```

`\mindflowLeft`    The left and right marker can be changed by redefining `\mindflowLeft` and `\mindflowRight`. Both have the default value as “\*”.

And finally, the color of `mindflow` environments is called `mindflow`. By default, it is the current text color with opacity 30%.

## 4 Implementation

Below is the complete source code of this package.

```
1 \RequirePackage{kvoptions}
2 \SetupKeyvalOptions{%
3     family = @mindflow,
4     prefix = @mindflow@
5 }
6 \DeclareBoolOption[false]{off}           % Turn off mindflow
7 \DeclareBoolOption[false]{leftmarker}    % Left marker
8 \DeclareBoolOption[false]{rightmarker}   % Right marker
9 \DeclareBoolOption[false]{linenumber}    % Line numbers
10
11 \ProcessKeyvalOptions*\relax
12
13 %%=====
14 %% Initialization
15 %%=====
16 \newcommand{\mindflowFont}{\normalfont\footnotesize}
17 \newcommand{\mindflowNumFont}{\normalfont\scriptsize\ttfamily}
18
19 \RequirePackage{lineno}
20 \RequirePackage{xcolor}
21
22 \colorlet{mfSavedColor}{.}
23 \colorlet{mindflow}{mfSavedColor!30}
24
25 \newcommand{\mindflowLeft}{%
26     \if@mindflow@leftmarker%
27         {*}%
28     \fi%
29 }
30 \newcommand{\mindflowRight}{%
31     \if@mindflow@rightmarker%
32         {*}%
33     \fi%
34 }
35
36 %%=====
37 %% The mindflow environment
38 %%=====
39 \newif\ifLNturnsON
40
41 \newcommand*{\mfSepLine}{%
42     \parskip=0pt
43     \LNturnsONfalse%
44     \ifLNturnsONtrue\fi\nolinenumbers%
45     \par\noindent\nopagebreak%
46     \makebox[\linewidth]{\rule{\paperwidth}{0.4pt}}%
47     \nopagebreak\par%
48     \ifLNturnsON\linenumbers\fi%
49 }
```

```

50
51 \newcounter{recordLN}
52 \newcounter{mfLN}
53 \setcounter{mfLN}{1}
54
55 \if@mindflow@off
56   \RequirePackage{verbatim}
57   \let\mindflow=\comment
58   \let\endmindflow=\endcomment
59 \else
60   \newenvironment{mindflow}
61 {%
62   \setcounter{recordLN}{\value{linenumber}}
63   \setcounter{linenumber}{\value{mfLN}}
64   \LNTurnsONfalse%
65   \ifLineNumbers\LNTurnsONtrue\fi\nolinenumbers%
66   \mindflowFont\color{mindflow}%
67   \mfSepLine%
68   \linenumbers%
69   \renewcommand\makeLineNumber{%
70     \hss\color{mindflow!25}%
71     \if@mindflow@linenumber%
72       \mindflowNumFont\LineNumber%
73     \fi%
74     \mindflowLeft\hspace{1em}\rlap{\hskip\textwidth\hspace{1em}}\mindflowRight}%
75   }%
76 }
77 {%
78   \par%
79   \vspace{-0.5\baselineskip}\mfSepLine%
80   \ifLNTurnsON\linenumbers\fi%
81   \setcounter{mfLN}{\value{linenumber}}
82   \setcounter{linenumber}{\value{recordLN}}
83 }
84 \fi

```