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texblog

because LaTeX matters

LaTeX syntax highlighting examples

11. June 2011 by tom — 9 Comments

Syntax highlighting in LaTeX using the `listings` package is very powerful. Below, I will provide a few examples for your convenience.

First, let me briefly summarize the usage of the `listings` package.

```
1  %Preamble
2  \usepackage{listings}
3  \usepackage{color}
4  \definecolor{name}{rgb}{0.5,0.5,0.5}
5  \lstset{key1=value1,key2=value2} % Define listings style
6
7  %Document body
8  \begin{lstlisting}
9  % Add code here
10 \end{lstlisting}
11
12 % Or load from file
13 \lstinputlisting{filename.java}
```

So below you'll find a few complete code examples to reuse and modify for your purposes:

“The Pseudo Code Box”

```

3 \lstset{
4   numbers=left,
5   stepnumber=1,
6   numbersep=5pt,
7   numberstyle=\small\color{black},
8   basicstyle=\ttfamily,
9   keywordstyle=\color{black},
10  commentstyle=\color{black},
11  stringstyle=\color{black},
12  frame=single,
13  tabsize=2,
14  backgroundcolor=\color{lightpurple},
15  caption=Fibonacci numbers pseudo code}

```

Listing 1: Fibonacci numbers pseudo code

```

1 WRITE 'Input the limit'
2 READ N
3 FOR i = 1 TO N DO
4   IF (i = 1)
5     F1 = 1
6     WRITE (F1)
7   ELSE IF (i = 2)
8     F2 = 1
9     WRITE (F2)
10  ELSE
11    F3 = F1 + F2
12    WRITE (F3)
13    F1 = F2
14    F2 = F3
15  END IF-ELSE
16 END FOR

```

This code was taken from [here](#).

“Java/Eclipse style”

```

1 \definecolor{javared}{rgb}{0.6,0,0} % for strings
2 \definecolor{javagreen}{rgb}{0.25,0.5,0.35} % comments
3 \definecolor{javapurple}{rgb}{0.5,0,0.35} % keywords
4 \definecolor{javadocblue}{rgb}{0.25,0.35,0.75} % javadoc
5
6 \lstset{language=Java,
7   basicstyle=\ttfamily,
8   keywordstyle=\color{javapurple}\bfseries,
9   stringstyle=\color{javared},
10  commentstyle=\color{javagreen},
11  morecomment=[s][\color{javadocblue}][/**}{*/},
12  numbers=left,
13  numberstyle=\tiny\color{black},
14  stepnumber=2,
15  numbersep=10pt,
16  tabsize=4}

```

```

1  /**
   * HelloWorldApp class prints
3  * "Hello World!" to standard output.
   */
5  public class HelloWorldApp {
        public static void main (String argv[])
7      {
            // Display string
9            System.out.println("Hello World!");
        }
11 }

```

“The Trickiest: LaTeX”

```

1  \definecolor{lightgrey}{rgb}{0.9,0.9,0.9}
2  \definecolor{darkgreen}{rgb}{0,0.6,0}
3
4  \lstset{language=[LaTeX]TeX,
5  texcsstyle=*\bfbf\color{blue},
6  numbers=none,
7  breaklines=true,
8  keywordstyle=\color{darkgreen},
9  commentstyle=\color{red},
10 otherkeywords={$, \{, \}, \[, \]},
11 frame=none,
12 tabsize=2,
13 backgroundcolor=\color{lightgrey},
14 caption=LaTeX example}

```

Listing 2: LaTeX example

```

\documentclass[12pt]{article}
%options include 12pt or 11pt or 10pt
%classes include article, report, book, letter, thesis
\title{This is the title}
\author{Author One \& Author Two}
\date{\today}
\begin{document}
\maketitle
This is the content of this document.
This is the 2nd paragraph.
Here is an inline formula:

$$V = \frac{4}{3} \pi r^3$$

And appearing immediately below
is a displayed formula:

$$V = \frac{4}{3} \pi r^3$$

\end{document}

```

The LaTeX code was copied from [here](#).

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9 Comments



sokai

4. September 2011 at 8:34

Hi tom!

Thanks for your code examples. Have you seen that white lines/stripes between the lines of code? – Do you know a solution for disabling them?

Best regards!

Reply



tom

4. September 2011 at 8:52

Hi Kai,

Thanks for your comment. I am aware of the problem. I found the following solution on stackoverflow and modified it slightly adding

```
2 \usepackage[pdftex]{xcolor}
3 \usepackage[a4paper,hmargin=6cm]{geometry}
4 \usepackage{listings}
5 \usepackage{framed}
6 \lstset{numbers=left,
7 stepnumber=1,
8 numbersep=1pt,
9 numberstyle=\color{black},
10 basicstyle=\ttfamily}
11 \begin{document}
12 \definecolor{shadecolor}{named}{gray}
13 \begin{shaded}
14 \begin{lstlisting}
15   if (a < b)
16   {
17     printf("&quot;A is smaller than B!\n&quot;
18   }
19   a = b;
20 \end{lstlisting}
21 \end{shaded}
22 \end{document}
```

Best, Tom.

Reply



sokai

6. September 2011 at 7:55

Thanks, Tom! – I have seen this on so, too. But the shaded box is (a little bit) ugly... 😞

I have seen some examples that use “backgroundcolor” for the listings _without_ the white lines. Also I found an answer on tex.sx... But my listings are always striped... 😞



Christian Straube

25. October 2011 at 17:37

I like the Java theme... could you create one for xml :-)? The existing is not very nice :-/

Reply



tom

26. October 2011 at 8:07

Hi Christian,

This question and the answers on [stackexchange](#) about XML syntax highlighting may be what you are looking for. The result looks really nice.

Cheers, Tom.

Reply



Christian Straube

26. October 2011 at 8:26

Thank you for that link! I've created a new question concerning this:

<http://tex.stackexchange.com/q/32767/5065>

Reply



D555

8. February 2012 at 13:32

Reblogged this on [KRIPTUSA's Blog](#) and commented:

[Reply](#)



[Ade Malsasa Akbar](#)

[23. October 2013 at 6:10](#)

Thank you.

[Reply](#)



[Awesome](#)

[20. February 2014 at 1:12](#)

Thank you!

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Okay, thanks

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