The \texttt{fontsize} package

\textit{A small package to change the font size}

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The \texttt{fontsize} package allows you to set arbitrary sizes for the main font of the document, through the \texttt{fontsize=\langle size\rangle} option. The value for the \texttt{\langle size\rangle} can be given in any unit recognized by TeX (for example: \texttt{6mm}, \texttt{1ex}, \texttt{11.5pt}). If the unit is not declared it defaults to \texttt{pt}. So \texttt{fontsize=11} is the same as \texttt{fontsize=11pt}. See the example below.

\section*{Caveat}

Although effective with any value for the \texttt{\langle size\rangle} (as long as the font is scalable!), the package is meant for small font size changes. For truly optimal results you should not use this package at all. Rather, a \texttt{.clo} file should be defined for each main size, even if this is pretty hard work. Particularly, you should define \texttt{\parindent} accordingly to the used size.

\section*{Credits}

The code is a minimal part of the \texttt{scrextend}, with few minor changes to make it completely independent of the Koma bundle (see [1]).

\section*{An example}

\texttt{\usepackage[fontsize=10.5]{fontsize}}

The \texttt{\tiny} size is: \texttt{5.25 pt}.
The \texttt{\scriptsize} size is: \texttt{7.00005 pt}.
The \texttt{\baselineskip} is \texttt{8.40002pt}.
The \texttt{\footnotesize} size is: \texttt{8.7501 pt}.
The \texttt{\baselineskip} is \texttt{10.50009pt}.
The \texttt{\small} size is: \texttt{9.58131 pt}.
The \texttt{\baselineskip} is \texttt{11.49754pt}.
The \texttt{\normalsize} size is: \texttt{10.5 pt}.
The \texttt{\baselineskip} is \texttt{12.59996pt}.

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The \texttt{\Large} size is: \texttt{15.12003 \textit{pt}}.
The \texttt{\baselineskip} is \texttt{18.14398pt}

The \texttt{\LARGE} size is: \texttt{18.14397 \textit{pt}}.
The \texttt{\baselineskip} is \texttt{21.77269pt}

The \texttt{\huge} size is: \texttt{21.77705 \textit{pt}}.
The \texttt{\baselineskip} is \texttt{26.13239pt}

The \texttt{\Huge} size is: \texttt{26.12407 \textit{pt}}.
The \texttt{\baselineskip} is \texttt{31.3488pt}

References


1 The Code

\begin{verbatim}
1 \@ifpackageloaded{xkeyval}{}{\RequirePackage{xkeyval}}
2 \@ifpackageloaded{etoolbox}{}{\RequirePackage{etoolbox}}

Here begins the \texttt{scrextend} code. Only a few names have changed. The value for \texttt{\fontsizefilebase} is set to \texttt{custom} instead of \texttt{scrsiz}.
3 \providecommand*{\@fontsizefilebase}{custom}
4 \DeclareOptionX{fontsize}[10]{%
5 \expandafter\@defaultunits\expandafter\@tempdima#1 \textit{pt}\relax\@nnil
6 \edef\@tempa{#1}%
7 \setlength{\@tempdimb}{\@tempdima}%
8 \edef\@tempb{\strip@pt\@tempdimb}%
9 \addtolength{\@tempdimb}{-10\p@}%
10 \edef\@ptsize{\strip@pt\@tempdimb}%
\end{verbatim}
The command `\ctm@setlength` has the same definition as `\scr@setlength` of `scrextend.sty`.

```latex
\newcommand*{\ctm@setlength}[4]{
  \ifdim #2<\ifdim #2=\z@ \z@ \else \p@\fi
  \ifdim #3<\ifdim #3=\z@ \z@ \else \p@\fi
  \ifdim #4<\ifdim #4=\z@ \z@ \else \p@\fi
  \setlength{#1}{\p@ \@plus\p@ \@minus\p@}\
  \else
  \setlength{#1}{\p@ \@plus\p@ \@minus#4}\
  \fi
  \else
  \setlength{#1}{\p@ \@plus#3 \@minus\p@}\
  \else
  \setlength{#1}{\p@ \@plus#3 \@minus\p@}\
  \fi
  \else
  \setlength{#1}{\p@ \@plus\p@ \@minus\p@}\
  \else
  \setlength{#1}{\p@ \@plus\p@ \@minus#4}\
  \fi
  \else
  \setlength{#1}{\p@ \@plus#3 \@minus\p@}\
  \else
  \setlength{#1}{\p@ \@plus#3 \@minus\p@}\
  \fi
  \fi
  \fi
  \fi
}
```

The command `\changefontsize` has the same definition as `\changefontsizes` of `scrextend.sty`.

```latex
\providecommand*{\changefontsize}[2][1.2]{\@tempdima}{% 
  \@defaultunits\@tempdima#2pt\relax\@nnil
  \setlength{\@tempdimc}{\@tempdima}\
```

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Change History

v0.1
General: First public release ... 1

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