The \texttt{lmacs} Package

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\begin{verbatim}
\begin{verbatim}
\langle \star \texttt{package} \rangle
\end{verbatim}
\end{verbatim}

\textbf{Description.} This package is used to clean up the preamble of \LaTeX\ files. Some preambles have a (large) number of definitions in them. To clean up the preamble, move the definitions in the preamble into a separate file, and use this package in import them into your preamble. Normally, \texttt{lmacs} would have a position that follows all packages for the document.

\texttt{lmacs} stands for local macros. Normally, the files referenced are in the same folder as the main source file; they should not (but can) be in the search path of \LaTeX.  

\textbf{Demo files:} \texttt{lmacs\_tst.tex} (a simple latex source) and \texttt{lmacs\_aeb.tex} (a file that uses the \texttt{web} and \texttt{exerquiz} packages). These are found in the \texttt{examples} folder.

\textbf{Documentation and Code.} We begin by requiring \texttt{kvoptions}, this package does not test for the presence of a class file, so we can use it. It allows us to define key-values as options of the package.

\begin{verbatim}
\RequirePackage{kvoptions}[2009/07/21]
\end{verbatim}

With these keys, you can specify the file with the specified extension be imported. For example, the following line

\begin{verbatim}
\usepackage[\texttt{cfg=myconf,def=mydef,js=myjs}]{lmacs}
\end{verbatim}

will import (using \texttt{\InputIfFileExists}) the files \texttt{myconf.cfg}, \texttt{mydef.def}, and \texttt{myjs.js}. Multiple specifications of the same extension is permitted, for example,

\begin{verbatim}
\usepackage[\texttt{def=mydef1,def=mydef2}]{lmacs}
\end{verbatim}

\begin{verbatim}
\let\LM@inputlist@empty
\LM@input\ inputs #1.#2, while \LM@warning issues a package warning if #1.#2 is not found.
\end{verbatim}

\begin{verbatim}
\newcommand{\LM@input}[2]{\InputIfFileExists{\texttt{#1.#2}}{\LM@warning{\texttt{#1}}{\texttt{#2}}}}
\end{verbatim}

\begin{verbatim}
\newcommand{\LM@warning}[2]{\PackageWarning{lmacs}{The file \texttt{#1.#2} cannot be found}}
\end{verbatim}

For each of these options, we add the specified file to \LM@inputlist, this will be executed at the end of the package. The three options !cfg, !def, !js do nothing, making it easy to include, or not include a file.

\begin{verbatim}
8 \define@key{lmacs}{cfg}{\g@addto@macro\LM@inputlist{\LM@input{#1}{cfg}}}
9 \define@key{lmacs}{!cfg}{}
10 \define@key{lmacs}{def}{\g@addto@macro\LM@inputlist{\LM@input{#1}{def}}}
11 \define@key{lmacs}{!def}{}
12 \define@key{lmacs}{js}{\g@addto@macro\LM@inputlist{\LM@input{#1}{js}}}
13 \define@key{lmacs}{!js}{}
14 \ProcessKeyvalOptions{lmacs}
\end{verbatim}

Once the options have been processed, we execute the command \LM@inputlist which contains a list of the files to be input.
\begin{verbatim}
15 \LM@inputlist
16 \end{verbatim}

{/package}