Placing the Title Page Directory in Multi-column and Boxing in the Directory using Web

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1. Introduction

Version 4.2b of the Web package introduces some additional controls over the directory. This article demonstrates how to place the directory in a multi-column format. These new commands include

- \priorDirMatter and \afterDirMatter: Hooks that are placed before and after the directory
- \vspaceAfterDirName: The vertical skip that is inserted just after the directory name. The default is \vspaceAfterDirName{-3pt}.
- \priorDirList and \afterDirList: Hooks that are placed before and after the directory listing.

2. Placing Directory in Multi-column

The commands were used to created the directory listing found on the first page, one other command that was used is \addToDirList, used to add an item to the directory listing. The code found in the preamble is

```
1 \priorDirMatter{{\begin{center}{\begin{minipage}{.7\linewidth}}
2 \afterDirMatter{{\end{minipage}}{\end{center}}}
3 \renewcommand{\vspaceAfterDirName}{Opt}
4 \setlength{\multicolsep}{3pt}
5 \setlength{\columnsep}{0pt}
```
In order to get tighter, nicer looking columns, I’ve inserted \texttt{center} and \texttt{minipage} environments using \texttt{\priorDirMatter}, and closed them with \texttt{\afterDirMatter}, in lines (1) and (2). In line (3), I set the space between the directory name and the beginning of the lists to 0pt. In lines (4)–(5), I set some \texttt{multicol} parameters; adjusting the separation between the text before and \texttt{multicols}. In lines (6)–(7), we begin the \texttt{multicols} environment. Finally, we add an item to the directory list.

### 3. Boxing in the Directory

Other things can be done to the directory, if you are knowledgeable enough on \LaTeX{} and on the controls provided; for example, place a color rule box around the directory:

```
\begin{multicols}{2}
\afterDirList
\addtoDirList{The \textsc{Web} package is part of \textcolor{blue}{AeB.}}
\href{http://www.math.uakron.edu/~dpstory/webeq.html}{Get it here!}
\end{multicols}
```

The code for the above directory box is

```
\begin{multicols}{2}
\textbf{Directory}
\begin{itemize}
\item Table of Contents
\item Begin Article
\end{itemize}
\end{multicols}
```
\directoryhook{%
  \begin{center}
  \setlength{\topsep}{0pt}\
  \fcolorbox{red}{webyellow}{\parbox{.4\linewidth}{#1}}\
  \end{center}
}

Here, I have used another command \directoryhook. This command operates on the directory as a whole. The parameter #1 gets replaced by \webdirectory, which is the internal name for the directory. I've set, in line (3), \topsep to 0pt to get a tighter fit of the color box around the \parbox.

The other stuff you see in the source file are commands necessary to display the directory out of its natural environment, namely, the title page. If you place the \directoryhook code in the preamble, what you’ll get is what you see above. Notice, too, that I’ve centered the color box as well.

Now, back to my retirement.