Form Letter Macros

John S. Garavelli
University of Illinois at Chicago

In reference to the query from Mr. John Lee concerning a program for generating form letters, here is a fairly straightforward and unsophisticated TeX program which I have written. This program, which I call FORMLETTER.TEX, asks the user to provide two file names. The first file contains a list of file names, one file name per line, each of which is an address file to be described later. The second file contains the TeX form letter. The TeX form letter must end with \vfill\eject rather than \bye and may freely use the following macros.

\title	for example Dr. or Ms.
\firstname	the first name
\middle	the middle name or initial
\lastname	the last name
\firstline	the first line from the address
\secondline	the second line from the address
\thirdline	the third line from the address
\fourthline	the fourth line from the address
\fifthline	the fifth line from the address

The address files must, unfortunately, have a standard format. The first line of each address file must have four entities delimited by spaces corresponding to the first four macros listed above, and they must occur in that order. If one of these entities does not exist in an address file it must be replaced by an empty box; for example, the line

Dr. John {} {von Neumann}

would be parsed to yield the equivalent of

```
\def\title{Dr.}
\def\firstname{John}
\def\middle{}
\def\lastname{von Neumann}
```

There must be at least one line, the first line, in each address file, and if any of the other lines are empty then the corresponding macros are empty boxes. Non-address information, such as phone numbers, can be stored in these address files on any lines after the fifth.

This is the file FORMLETTER.TEX.

```
\def\reveal#1{\immediate\write1{#1}}
\def\lineup#1 #2 #3 #4 {%
    \def\title{\string #1}
    \def\firstname{\string #2}
    \def\middle{\string #3}
    \def\lastname{\string #4}}
%                    Redefine \loop
\long\def\loop#1\repeat{%
    \def\body{#1}\iterate}
\newread\afile
\newread\listfile
\newread\letfile
\newif\ifnotdone

\reveal{}
\message{Filename of file list: }
\read-1 to\filename
\openin\listfile=\filename
\ifeof\listfile \message{The file
    \filename does not exist.}\end\fi
\message{Filename of letter file: }
\read-1 to\letfile
\loop
  \read\listfile to \filename
  \ifeof\listfile \notdonefalse
  \else \notdonetrue \fi
  \ifnotdone
    \openin\afile=\filename
    \ifeof\afile \message{The file
        \filename does not exist.}\end\fi
    \reveal{Reading \filename}
    \read\afile to \firstline
    \read\afile to \secondline
    \read\afile to \thirdline
    \read\afile to \fourthline
    \read\afile to \fifthline
    \closein\afile
    \expandafter\lineup\firstline
    \input \letfile
\repeat
\closein\listfile
\bye
```