File not found error*

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1 Introduction

When \LaTeX 2 ε is unable to find a file it will ask for an alternative file name. However, sometimes the problem is only noticed by TEX, and in that case TEX insists on getting a valid file name; any other attempt to leave this error loop will fail. Many users try to respond in the same way as to normal error messages, e.g. by typing $\langle return \rangle$, or s or x, but TEX will interpret this as a file name and will ask again.

To provide a graceful exit out of this loop, we define a number of files which emulate the normal behavior of T_FX in the error loop as far as possible.

After installing these files the user can respond with h, q, r, s, e, x, and on some systems also with $\langle return \rangle$ to T_EX 's missing file name question.

2 The documentation driver

This code will generate the documentation. Since it is the first piece of code in the file, the documentation can be obtained by simply processing this file with \LaTeX \LaTeX \LaTeX

- $1 \langle *driver \rangle$
- 2 \documentclass{ltxdoc}
- 3 \begin{document} \DocInput{fileerr.dtx} \end{document}
- 4 (/driver)

3 The files

3.1 Asking for help with h

When the user types h in the file error loop T_EX will look for the file h.tex. In this file we put a message informing the user about the situation (we use J to start

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¹On some systems, T_EX accepts a special character denoting the end of file to return from this loop, e.g. Control-D on UNIX or Control-Z on DOS.

new lines in the message) and then finish with a normal \errmessage command thereby bringing up TeX's normal error mechanism.

```
5 \langle *help \\
6 \newlinechar='\^^J
7 \message{! The file name provided could not be found.^^J%
8 Use '<enter>' to continue processing,^^J%
9 'S' to scroll future errors^^J%
10 'R' to run without stopping,^^J%
11 'Q' to run quietly,^^J%
12 or 'X' to terminate TeX}
13 \errmessage{}
14 \langle /help \rangle
```

3.2 Scrolling this and further errors with s

For the response s we put a message into the file s.tex and start \scrollmode to scroll further error messages in this run. On systems that allow .tex as a file name we can also trap a single $\langle return \rangle$ from the user.

```
\begin{array}{lll} 15 & \langle +scroll \, | \, return \, | \, run, batch \rangle & message{File ignored} \\ 16 & \langle +scroll \rangle & scrollmode \\ 17 & \langle +run \rangle & nonstopmode \\ 18 & \langle +batch \rangle & batchmode \\ \end{array}
```

3.3 Exiting the run with x or e

If the user enters x or e to stop TEX, we need to put something into the corresponding file which will force TEX to give up. We achieve this by turning off terminal output and then asking TEX to stop: first by using the internal IATEX name \@Qend, and if that doesn't work because something other than IATEX is used, by trying the TEX primitive \end. The \errmessage is there to ensure that TEX's internal "history" variable is set to error_message_issued. This in turn will hopefully set the exit code on those operating systems that implement return codes (though there is no guarantee for this).

```
19 (+edit | exit) \batchmode \errmessage{}\csname @@end\endcsname \end
```

We end every file with an explicit \endinput which prevents the docstrip program from putting the character table into the generated files.

 $20 \setminus endinput$