R packages: LaTeX vignettes

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To include a PDF vignette that is compiled from a plain LaTeX file, all you need is the LaTeX file with LaTeX comments containing meta directives to R such that it will be listed as a vignette in the package. The LaTeX-based vignette file should be placed in the `vignettes/` directory of your package. If your LaTeX file includes other files such as figure files, these should also be located in the vignettes/. For instance, this PDF document was compiled from LaTeX file:

1. `vignettes/R_packages-LaTeX_vignettes.ltx`

which contains the following meta directives at the top of the file:

```
%\VignetteIndexEntry{R packages: LaTeX vignettes}
%\VignetteEngine{R.rsp::tex}

%% Optional:
%\VignetteKeyword{R}
%\VignetteKeyword{package}
%\VignetteKeyword{vignette}
%\VignetteKeyword{LaTeX}
```

Here I choose filename extension `*.ltx`, which is a lesser known LaTeX filename extension, because if one uses `*.tex`, then `R CMD check` will give a NOTE complaining that the file is a stray file that should not be part of the built package.

Also, the above first two entries are required whereas the keyword entries are optional. Note also that the `%\VignetteIndexEntry{}` controls the title shown in R's help indices as well as in online package respositories such as CRAN.

As for any type of (non-Sweave) package vignette, don't forget to specify:

```
Suggests: R.rsp
VignetteBuilder: R.rsp
```

in your package's DESCRIPTION file. That's all it takes to include a LaTeX file that will be compiled into a PDF vignette as part of the package build.