iris_data_set_vm7 (ready for html and PDF)

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1 Functions that enable captions to figures and tables

This document contains two sets of functions in the child chunk *captions_html_latex.rmd*. One set is used for html documents and the other for pdf documents. For pdf documents it does not work with the output *pdf_document* so it is necessary to use *bookdown::pdf_document2* . With the (default) Pandoc template for this output type a table of contents is produced. The table of contents can be omitted by specifying **toc:no** in the yaml header.

We use a child chunk because the code in it is also available for other documents.

2 Defines captions for plot and table

```
init_caption('Figure','Table')          # indicate prefix for figures and tables
add_caption("fig1","f","my first plot")  # define a caption for the first (an only) figure
add_caption("tab1","t","my first table") # define a caption for the first (an only) table
```

3 Libraries used

```
library(knitr)
library(pander)
library(ggplot2)
library(ggthemes)
```

4 Load data

We load the iris data set in the workspace.

```
data(iris)
```

5 List the part of the iris data set

We list the first 5 (because we set variable *numlist* to 5 in a chunck we do not present to the reader) observations in the data set. See Table 1 on page 1

```
pandoc.table(iris[1:numlist,],caption=tab_caption("tab1"))
```

Table 1: my first table

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
4.9	3	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5	3.6	1.4	0.2	setosa

6 Create a plot of the iris data set

Make a *ggplot2* plot object *p* of two variables in the iris data set and use it to create a plot that is shown in Figure 1 on page 2

```
p <- ggplot(iris, aes(Sepal.Length, Sepal.Width, colour = Species)) +
  geom_point()
p + labs(title = 'default theme')
```
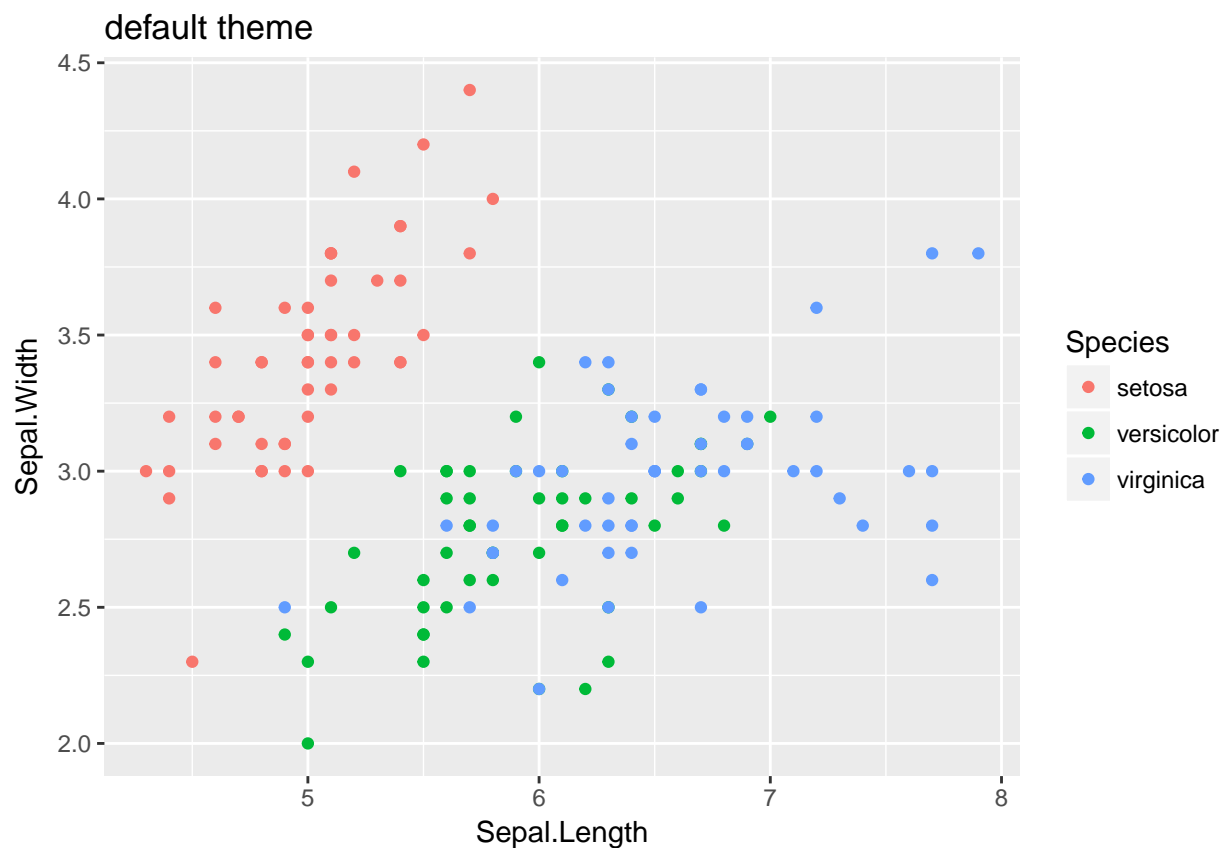

Figure 1: my first plot

7 Session Info

```
sessionInfo()
```

```
## R version 3.4.0 (2017-04-21)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 10 x64 (build 15063)
##
## Matrix products: default
##
## locale:
## [1] LC_COLLATE=English_United States.1252
## [2] LC_CTYPE=English_United States.1252
## [3] LC_MONETARY=English_United States.1252
## [4] LC_NUMERIC=C
## [5] LC_TIME=English_United States.1252
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
## [1] ggthemes_3.4.0 ggplot2_2.2.1  pander_0.6.0   knitr_1.16
## [5] xtable_1.8-2
##
## loaded via a namespace (and not attached):
##  [1] Rcpp_0.12.10      magrittr_1.5      munsell_0.4.3
##  [4] colorspace_1.2-6  rlang_0.1.1       highr_0.6
##  [7] stringr_1.2.0     plyr_1.8.4        tools_3.4.0
## [10] grid_3.4.0        gtable_0.2.0      htmltools_0.3.5
## [13] yaml_2.1.14       lazyeval_0.2.0    rprojroot_1.1
## [16] digest_0.6.12     assertthat_0.2.0  tibble_1.3.3
## [19] bookdown_0.4      evaluate_0.10     rmarkdown_1.5.9000
## [22] labeling_0.3      stringi_1.1.5     compiler_3.4.0
## [25] scales_0.4.1      backports_1.0.4
```