R package `rrtable`

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If you are a data scientist or researcher, you will certainly be interested in reproducible research. R package `rrtable` makes it possible to make reports with HTML, LaTex, MS word or MS Powerpoint formats from a table of R codes.

Package Installation

You can install R package `rrtable` with the following command.

```
if(!require(devtools)){ install.packages("devtools") }
devtools::install_github("cardiomoon/rrtable")
```

Package Loading

You can load the `rrtable` package with the following R command.

```
require(rrtable)
```

Sample Data

Sample data sampleData3 is included in rrtable package. You can see the sampleData3 by folllowing R command.

```
str(sampleData3)
```

```
'data.frame':   22 obs. of  5 variables:
 $ type  : chr  "title" "subtitle" "author" "" ...
 $ title : chr  "" "" "" "" ...
 $ text  : chr  "R package `rrtable`" "Reproducible Research with a Table of R codes" "Keon-Woong Moon"
 $ code  : chr  "" "" "" "" ...
 $ option: chr  "" "" "" "" ...
```

Or you can make a table of this data

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:21 2018

	type	title	text	code	option
18				df2flextable2(sampleData3)	

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mytable object

You can add mytable object with the following R code.

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:21 2018

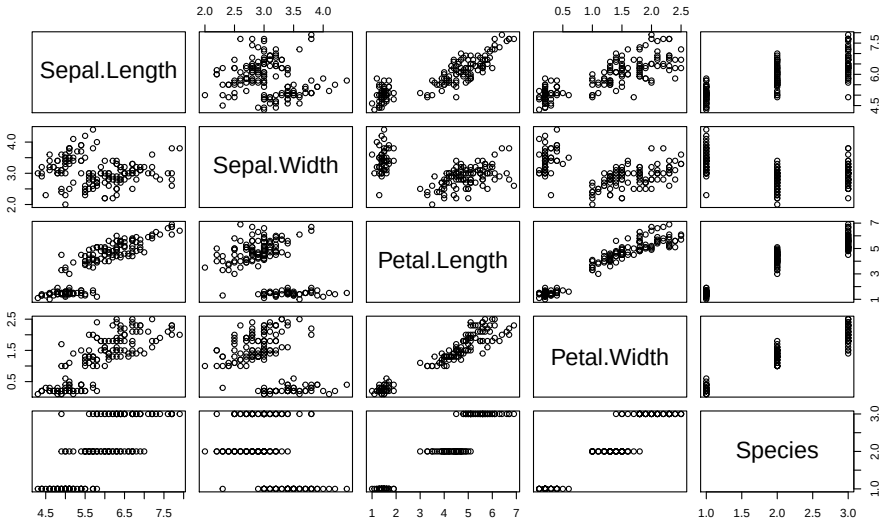
	type	title	text
11	title		R package ‘rrtable‘
13	subtitle		Reproducible Research with a Table of R codes
12	author		Keon-Woong Moon
25			If you are a data scientist or researcher, you will certainly be interested in reproduc
14	header2	Package Installation	You can install R package ‘rrtable‘ with the following command.
15	header2	Package Loading	You can load the ‘rrtable‘ package with the following R command.
16	header2	Sample Data	Sample data sampleData3 is included in rrtable package. You can see the sampleDa
17			Or you can make a table of this data
18			
19	header3	mytable object	You can add mytable object with the following R code.
1	mytable		
2	header3	Plot	You can insert a plot into your document.
3	plot		
20	header3	ggplot	You can insert a ggplot into a document
4	ggplot		
21	header3	R code	You can insert the result of R code. For example, you can insert the result of regres
24	Rcode		
22	header3	Two ggplots	You can insert two parallel ggplots with the following code.
8	2ggplots		
23	header3	Two plots	You can insert two parallel plots with the following code.
10	2plots		
26	header2	HTML Report	You can get report with HTML format(this file) by following R command.

	type	title	text	code	option
1	mytable			mytable(Dx~.,data=acs)	

Plot

You can insert a plot into your document.

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:21 2018



ggplot

You can insert a ggplot into a document

	NSTEMI (N=153)	STEMI (N=304)	Unstable Angina (N=400)	p
age	64.3 ± 12.3	62.1 ± 12.1	63.8 ± 11.0	0.073
sex				0.012
Female	50 (32.7%)	84 (27.6%)	153 (38.2%)	
Male	103 (67.3%)	220 (72.4%)	247 (61.8%)	
cardiogenicShock				0.000
No	149 (97.4%)	256 (84.2%)	400 (100.0%)	
Yes	4 (2.6%)	48 (15.8%)	0 (0.0%)	
entry				0.001
Femoral	58 (37.9%)	133 (43.8%)	121 (30.2%)	
Radial	95 (62.1%)	171 (56.2%)	279 (69.8%)	
EF	55.0 ± 9.3	52.4 ± 9.5	59.2 ± 8.7	0.000
height	163.3 ± 8.2	165.1 ± 8.2	161.7 ± 9.7	0.000
weight	64.3 ± 10.2	65.7 ± 11.6	64.5 ± 11.6	0.361
BMI	24.1 ± 3.2	24.0 ± 3.3	24.6 ± 3.4	0.064
obesity				0.186
No	106 (69.3%)	209 (68.8%)	252 (63.0%)	
Yes	47 (30.7%)	95 (31.2%)	148 (37.0%)	
TC	193.7 ± 53.6	183.2 ± 43.4	183.5 ± 48.3	0.057
LDLC	126.1 ± 44.7	116.7 ± 39.5	112.9 ± 40.4	0.004
HDLC	38.9 ± 11.9	38.5 ± 11.0	37.8 ± 10.9	0.501
TG	130.1 ± 88.5	106.5 ± 72.0	137.4 ± 101.6	0.000
DM				0.209
No	96 (62.7%)	208 (68.4%)	249 (62.2%)	
Yes	57 (37.3%)	96 (31.6%)	151 (37.8%)	
HBP				0.002
No	62 (40.5%)	150 (49.3%)	144 (36.0%)	
Yes	91 (59.5%)	154 (50.7%)	256 (64.0%)	
smoking				0.000
Ex-smoker	42 (27.5%)	66 (21.7%)	96 (24.0%)	
Never	50 (32.7%)	97 (31.9%)	185 (46.2%)	
Smoker	61 (39.9%)	141 (46.4%)	119 (29.8%)	

	type	title	text	code	option
3	plot			plot(iris)	

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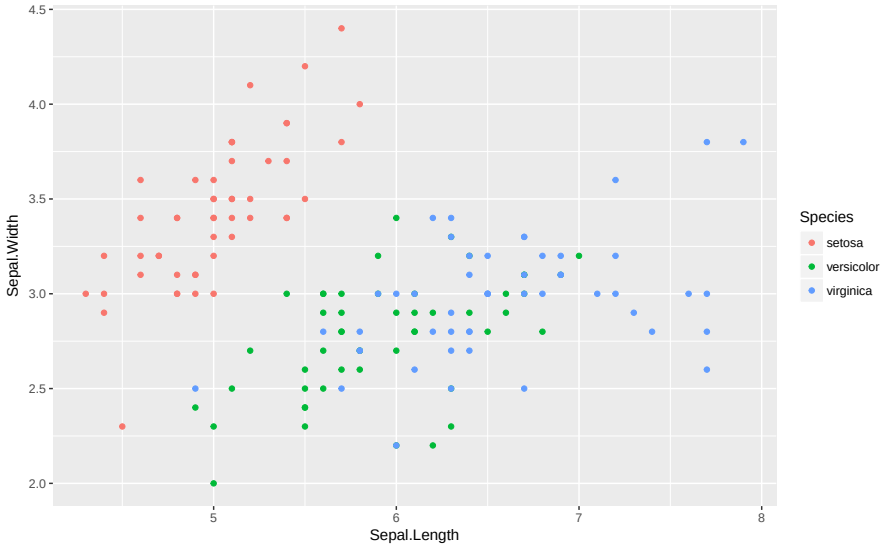
	type	title	text	code	option
4	ggplot			ggplot(iris,aes(x=Sepal.Length,y=Sepal.Width,color=Species))+geom_point()	



R code

You can insert the result of R code. For example, you can insert the result of regression analysis.

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:23 2018

	type	title	text	code	option
24	Rcode			fit=lm(mpg~wt*hp,data=mtcars);summary(fit)	

```
fit=lm(mpg~wt*hp,data=mtcars);summary(fit)
```

```
Call:
lm(formula = mpg ~ wt * hp, data = mtcars)

Residuals:
    Min      1Q  Median      3Q     Max
-3.0632 -1.6491 -0.7362  1.4211  4.5513

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 49.80842    3.60516  13.816 5.01e-14 ***
wt          -8.21662    1.26971  -6.471 5.20e-07 ***
hp          -0.12010    0.02470  -4.863 4.04e-05 ***
wt:hp        0.02785    0.00742   3.753 0.000811 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

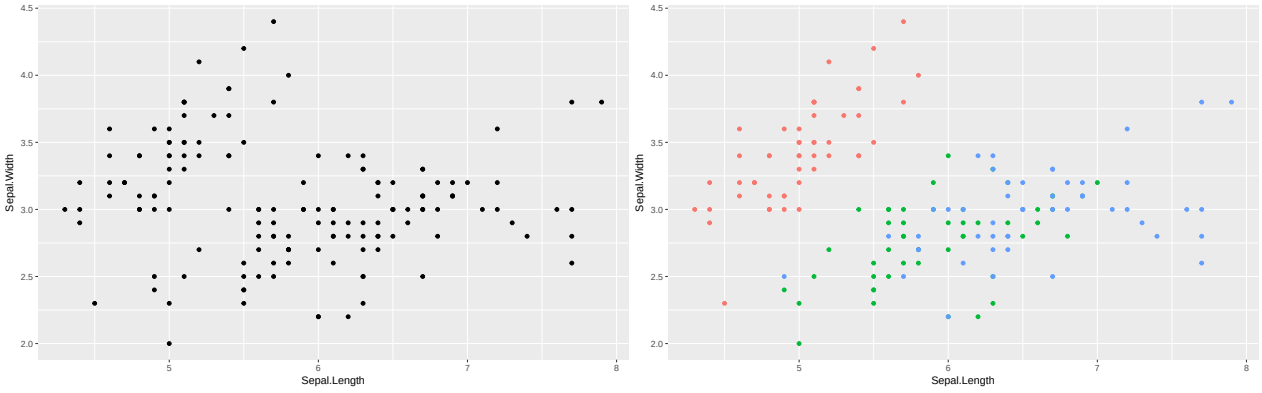
```
Residual standard error: 2.153 on 28 degrees of freedom
Multiple R-squared:  0.8848,    Adjusted R-squared:  0.8724
F-statistic: 71.66 on 3 and 28 DF,  p-value: 2.981e-13
```

Two ggplots

You can insert two parallel ggplots with the following code.

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:23 2018

	type	title	text	code
8	2ggplots			ggplot(iris,aes(Sepal.Length,Sepal.Width))+geom_point() ggplot(iris,aes(Sepal.Length,Sepal.V

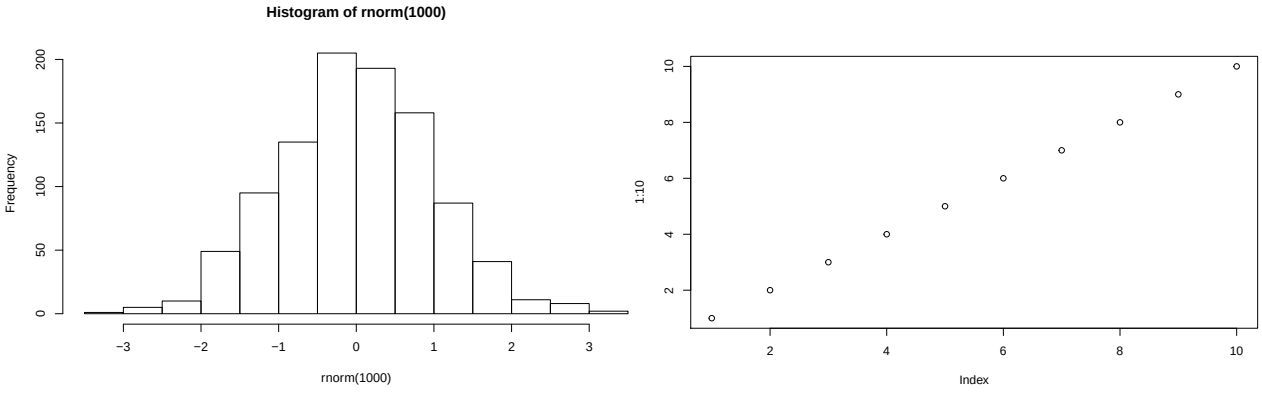


Two plots

You can insert two parallel plots with the following code.

% latex table generated in R 3.4.3 by xtable 1.8-2 package % Thu Apr 5 15:05:24 2018

	type	title	text	code	option
10	2plots			hist(rnorm(1000)) plot(1:10)	



HTML Report

You can get report with HTML format(this file) by following R command.

```
data2HTML(sampleData3)
```