Applikationen erstellen mit Shiny

Jan-Philipp Kolb 24 April 2017

Das shiny Paket installieren

install.packages("shiny")



Figure 1:

Wer hat's erfunden?

```
citation("shiny")

##

## To cite package 'shiny' in publications use:
##
```

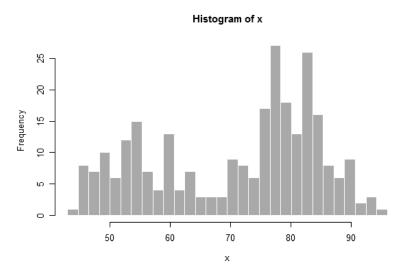
```
##
    Winston Chang, Joe Cheng, JJ Allaire, Yihui Xie and Jonathan
    McPherson (2017). shiny: Web Application Framework for R. R
##
    package version 1.0.0. https://CRAN.R-project.org/package=shiny
##
##
## A BibTeX entry for LaTeX users is
##
     @Manual{,
##
##
       title = {shiny: Web Application Framework for R},
##
       author = {Winston Chang and Joe Cheng and JJ Allaire and Yihui Xie and Jonathan McPherson},
##
       year = {2017},
##
       note = {R package version 1.0.0},
##
       url = {https://CRAN.R-project.org/package=shiny},
     }
##
```

Eine erste Beispielapp

```
library(shiny)
runExample("01_hello")
```

Hello Shiny!





```
1 show with app
Hello Shiny!
                                             server.R
                                                        ui.R
by RStudio, Inc
                                            library(shiny)
This small Shiny application demonstrates
Shiny's automatic UI updates. Move the
                                            # Define server logic required to draw a histogram
Number of bins slider and notice how the
                                            function(input, output) {
renderPlot expression is automatically
re-evaluated when its dependant,
                                               # Expression that generates a histogram. The expression is
input$bins, changes, causing a
                                               # wrapped in a call to renderPlot to indicate that:
histogram with a new number of bins to be
rendered.
                                                  1) It is "reactive" and therefore should be automatically
                                                     re-executed when inputs change
                                                 2) Its output type is a plot
```

Figure 2:

Der Start

Dem Kind einen Namen geben

Die erste App

- man muss den Run App Button drücken
- Das Ergebnis:

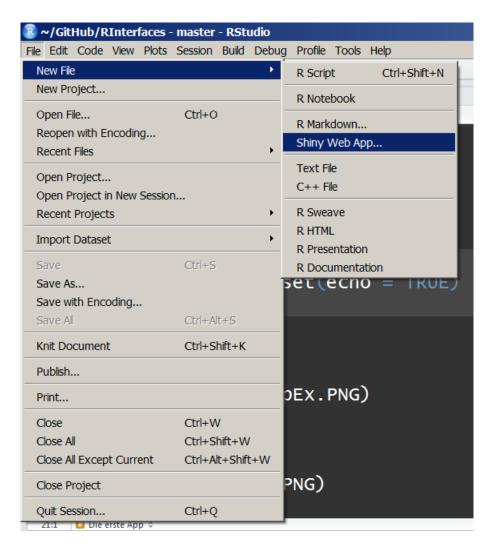


Figure 3:

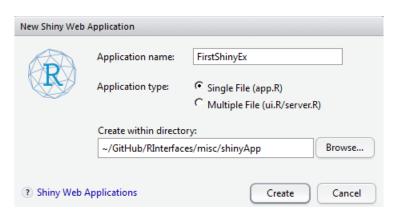


Figure 4:



Figure 5:



Old Faithful Geyser Data

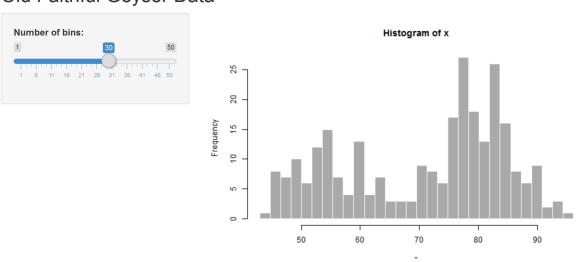


Figure 6:

Zur Erklärung

- Zumeist arbeitet man mit mindestens zwei Dateien
- Das user interface wird mit einer Datei erzeugt werden, die ui.R genannt werden muss
- Für die Server Seite brauchen wir auch ein eigenes File, dieses bennenen wir mit server.R

Eine zweite Beispiel App

```
library(shiny)
runExample("02_text")
```

Einführung in Shiny

Links

• Eine Dashboard App erzeugen

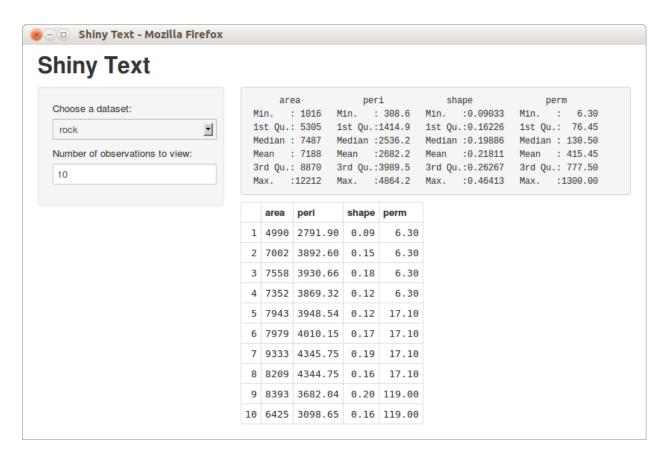


Figure 7:

Teach yourself Shiny

The How to Start Shiny video series will take you from R programmer to Shiny developer. Watch the complete tutorial here, or jump to a specific chapter by clicking a link below. The entire tutorial is two hours and 25 minutes long.

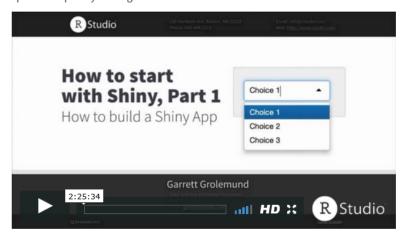


Figure 8: