graphiT

An interactive, user-friendly tool to produce graphics based on the grammar of graphics' principles

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UseR Brussels, July 2017
Load data

1) Data

a) Load data

b) Subset data

2) Plot

3) Export

4) Script

subset based on variable:
none

subset individuals with value

<table>
<thead>
<tr>
<th>haircolor</th>
<th>hairpattern</th>
<th>sex</th>
<th>weight</th>
<th>age</th>
<th>foodtype</th>
<th>name</th>
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</thead>
<tbody>
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</table>
Plot 1 variable X

The image displays a histogram plot with the variable 'weight' selected for the x-axis. The plot is part of a larger interface titled 'graphiT', with a link to the presentation: https://analytics.huma-num.fr/Lise.Vaudor/graphiT/.

The interface includes options for selecting data and plotting, with a dropdown menu showing variables such as 'weight', 'none', 'haircolor', 'hairpattern', 'sex', and others. The selected variable 'weight' is highlighted in yellow.
Plot 2 variables X and Y

Info  1) Data  2) Plot  3) Export  4) Script

X and Y

X
age

Y
weight

geom_point
displays points, as for a scatterplot.
Plot 2 variables X and Y

https://analytics.huma-num.fr/Lise.Vaudor/graphiT/
Choose the geom(s)
Parameterize your plot...

Here you can specify some graphic features such as:

- size (in pixels) of your graphic as it appears in the application
- axes transforms and bounding
- facets, i.e., if you wish to produce different graphs for different data subsets (defined by the levels of one of the categorical variables in the dataset)
- theme: general appearance
- axis labels and title
... according to a variable (mapping)
A (tiny) graphiT gallery...
Facetting

graphiT

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https://analytics.huma-num.fr/Lise.Vaudor/graphiT/
Export graphics

3) Export

a) Name and format
   file name: age_weight
   format: png

b) Choose size
   height: 500
   width: 500

c) Save file
   ▲ Save

https://analytics.huma-num.fr/Lise.Vaudor/graphiT/
Get the R script!!!

Read and prepare data
Create ggplot2 object
Add layers of geoms
Change general parameters
Plot the result

=> graphiT is compatible with a « reproducible research » workflow!!
graphiT

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https://analytics.huma-num.fr/Lise.Vaudor/graphiT/

How is that useful?

graphiT isn’t useful to yourself if you’re a R+ggplot superstar

but it could be useful if:

- you are not too familiar with R/ggplot (for now)
- you are starting to feel at ease with it but need some reminders or some kind of « interactive cheatsheet »

- you teach R/ggplot to people
- you help people with their graphics
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