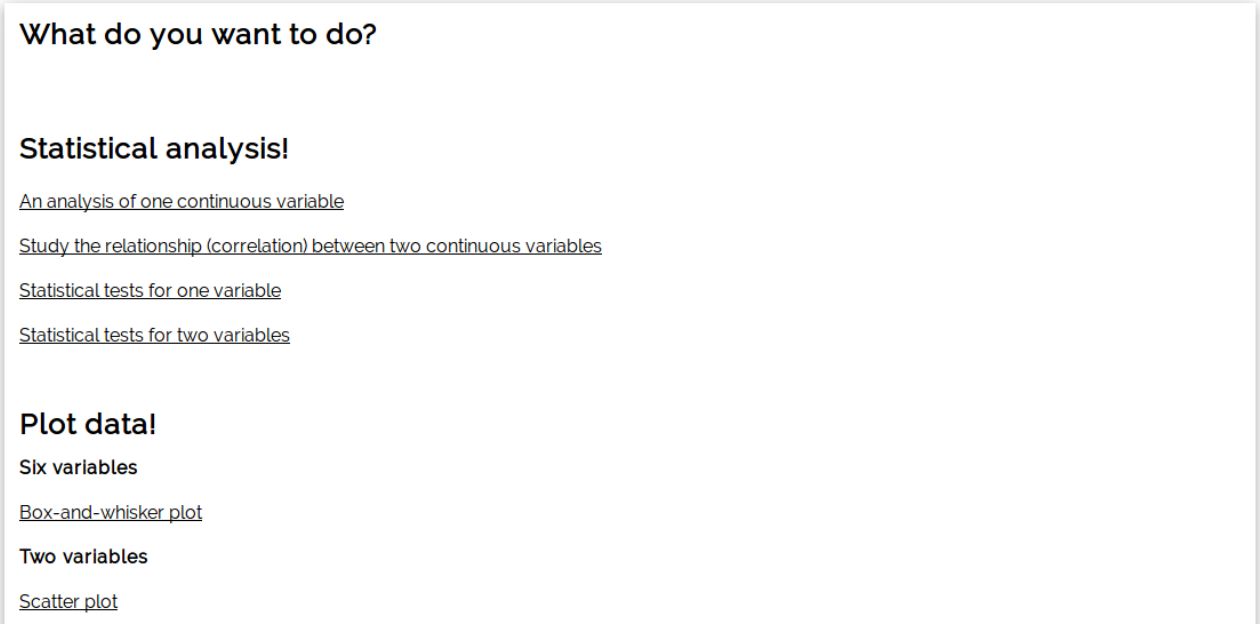
SELFY!

Simple statistical app for everyone



Ruth Barrral Arca,Msc

Final python project

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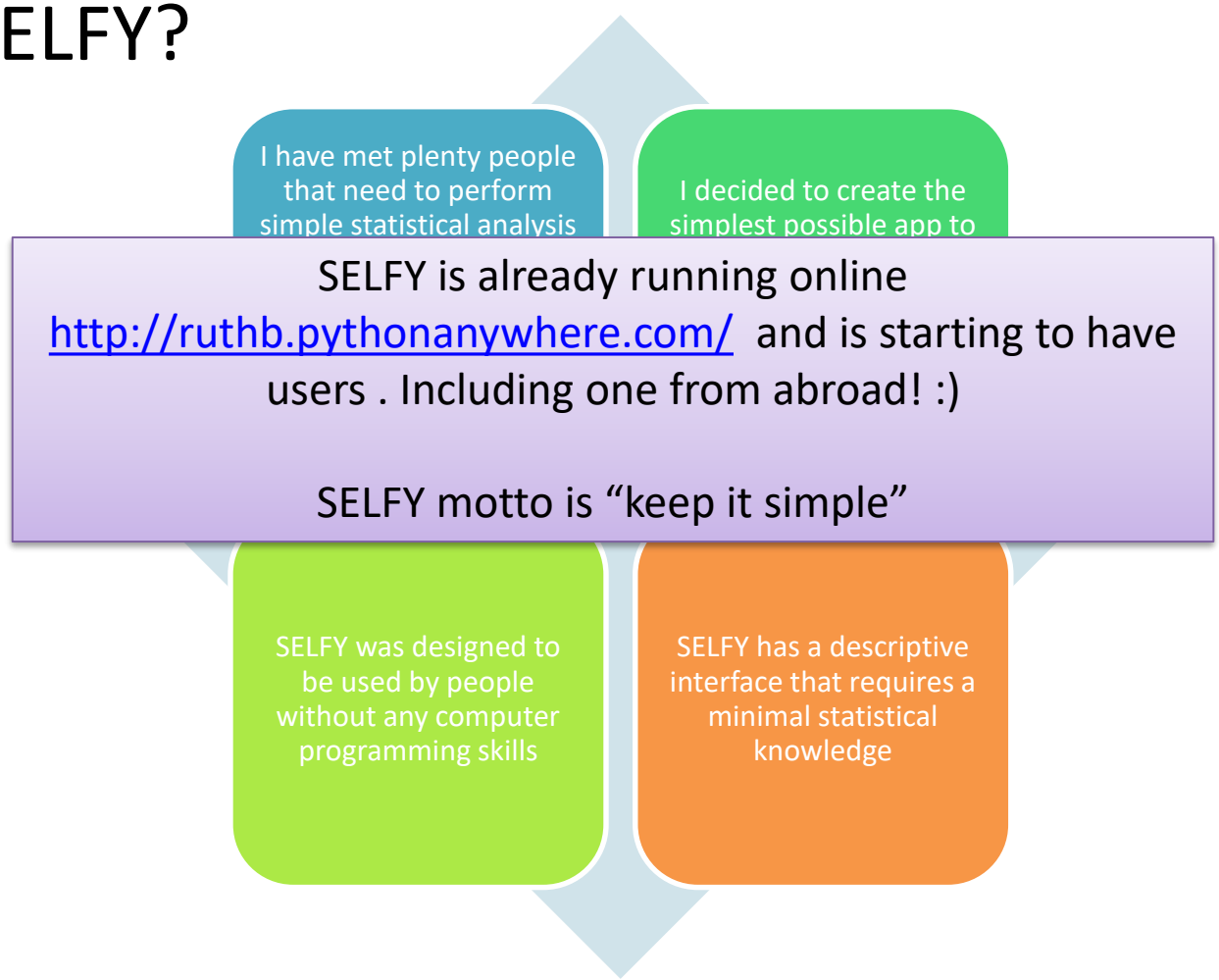
WHAT is SELFY?



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Program structure

SELFY is a flask-python web app

SELFY input is data copied from an excel column or separated by enter

The decimal symbol MUST BE DOT . NOT COMMA ,

SELFY main script is flask_app.py which contains functions that are divided in the following parts

- Analysis of one continuous variable: contains functions to calculate the mean , the median and so on
- Analysis of the correlation between two variables
- Plot creation : pie charts, bar plots, density plots etc
- Statistical test for one variable
- Statistical test for two variables
- Contact

SELFY has one module called statisticstools.py that contains the majority of functions for statistical analysis used by selfy. The module was created in order to make the code «easier» to read and modify

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Difficulties

The main difficulty was to publish SELFY online I tried several hosting options but no one seem to work properly , even though in my computer selfy worked perfectly . But when running online SELFY crashed or yielded odd errors . Finally when I was starting to think about giving up I came across the host service https://www.pythonanywhere.com which wake the hosting process really straight. And SELFY is now ready to use!

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EXAMPLES OF USE

Group	weight
T1	34.6
T1	60.2
T1	72.2
T1	20.8
T1	63.3
T1	63.4
T1	47.6
T1	48.0
T1	49.0
T2	66.9
T2	60.9
T2	62.2
T2	74.3
T2	87.7
T2	79.3
T2	77.7
T2	71.7
T2	72.7

Unpaired Two-Samples T Test in SELFY

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How to test data proportions with selfy?

	survived	died
Treatment 1	1659	120
Treatment2	1333	48

Ruth's app for easy data analysis, #SELFY #KEEPITSIMPLE

Please copy your 1st numeric variable directly from your excel column:

1659
120

Please copy your 2nd numeric variable directly from your excel column:

1333
48

- ○ Test for the equality of two means when data FOLLOW a normal distribution and variances are equal
- ○ Test for the equality of two means when data FOLLOW a normal distribution and variances are different
- ○ Test for the equality of two means when data DO NOT follow a normal distribution (each sample should have n > 20)
- ○ Test for the equality of two means with paired samples when data FOLLOW a normal distribution
- ○ Test for the equality of two means with paired samples when data DO NOT follow a normal distribution (each sample should have n > 20)
- ○ Test for the equality of variances when data FOLLOW a normal distribution (Bartlett Test)
- ○ Test for the equality of variances when data DO NOT follow a normal distribution (Levene Test)
- ◉ Test for equality of proportions (your variables must be the rows of a 2x2 contingency table)

Let's do it!

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Do you like SELFY? Do you have any suggestion? Please if you ever have any question or suggestion, don't hesitate to get in touch. SELFY is my very first app , it was handmade with love and I crave for feedback :)
Drop me an email!!