In [20]: 
```
!pip install pandas-profiling
```

```
Requirement already satisfied: pandas-profiling in c:\users\yvkch\anaconda4\l
ib\site-packages (2.3.0)
Requirement already satisfied: matplotlib>=1.4 in c:\users\yvkch\anaconda4\li
b\site-packages (from pandas-profiling) (3.1.3)
Requirement already satisfied: htmlmin>=0.1.12 in c:\users\yvkch\anaconda4\li
b\site-packages (from pandas-profiling) (0.1.12)
Requirement already satisfied: phik>=0.9.8 in c:\users\yvkch\anaconda4\lib\si
te-packages (from pandas-profiling) (0.9.12)
Requirement already satisfied: confuse>=1.0.0 in c:\users\yvkch\anaconda4\lib
\site-packages (from pandas-profiling) (1.1.0)
Requirement already satisfied: pandas>=0.19 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from pandas-profiling) (1.0.5)
Requirement already satisfied: missingno>=0.4.2 in c:\users\yvkch\anaconda4\l
ib\site-packages (from pandas-profiling) (0.4.2)
Requirement already satisfied: astropy in c:\users\yvkch\anaconda4\lib\site-p
ackages (from pandas-profiling) (4.0)
Requirement already satisfied: jinja2>=2.8 in c:\users\yvkch\anaconda4\lib\si
te-packages (from pandas-profiling) (2.11.1)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\yvkch\anaconda4
\lib\site-packages (from matplotlib>=1.4->pandas-profiling) (1.1.0)
Requirement already satisfied: cycler>=0.10 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from matplotlib>=1.4->pandas-profiling) (0.10.0)
Requirement already satisfied: numpy>=1.11 in c:\users\yvkch\anaconda4\lib\si
te-packages (from matplotlib>=1.4->pandas-profiling) (1.18.1)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in
c:\users\yvkch\anaconda4\lib\site-packages (from matplotlib>=1.4->pandas-prof
iling) (2.4.6)
Requirement already satisfied: python-dateutil>=2.1 in c:\users\yvkch\anacond
a4\lib\site-packages (from matplotlib>=1.4->pandas-profiling) (2.8.1)
Requirement already satisfied: scipy>=1.1.0 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from phik>=0.9.8->pandas-profiling) (1.4.1)
Requirement already satisfied: numba>=0.38.1 in c:\users\yvkch\anaconda4\lib
\site-packages (from phik>=0.9.8->pandas-profiling) (0.48.0)
Requirement already satisfied: joblib>=0.14.1 in c:\users\yvkch\anaconda4\lib
\site-packages (from phik>=0.9.8->pandas-profiling) (0.14.1)
Requirement already satisfied: pyyaml in c:\users\yvkch\anaconda4\lib\site-pa
ckages (from confuse>=1.0.0->pandas-profiling) (5.3)
Requirement already satisfied: pytz>=2017.2 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from pandas>=0.19->pandas-profiling) (2019.3)
Requirement already satisfied: seaborn in c:\users\yvkch\anaconda4\lib\site-p
ackages (from missingno>=0.4.2->pandas-profiling) (0.10.0)
Requirement already satisfied: MarkupSafe>=0.23 in c:\users\yvkch\anaconda4\l
ib\site-packages (from jinja2>=2.8->pandas-profiling) (1.1.1)
Requirement already satisfied: setuptools in c:\users\yvkch\anaconda4\lib\sit
e-packages (from kiwisolver>=1.0.1->matplotlib>=1.4->pandas-profiling) (45.2.
0.post20200210)
Requirement already satisfied: six in c:\users\yvkch\anaconda4\lib\site-packa
ges (from cycler>=0.10->matplotlib>=1.4->pandas-profiling) (1.14.0)
Requirement already satisfied: llvmlite<0.32.0,>=0.31.0dev0 in c:\users\yvkch
\anaconda4\lib\site-packages (from numba>=0.38.1->phik>=0.9.8->pandas-profili
ng) (0.31.0)
Executing shutdown due to inactivity...

2020-07-28 07:01:45,820 - INFO     - Executing shutdown due to inactivity...

Executing shutdown...
```

```
2020-07-28 07:01:50,060 - INFO     - Executing shutdown...
```

In [5]:
```python
#Package 1: Pandas_Profiling
import pandas as pd
import pandas_profiling
from pandas_profiling import ProfileReport

df=pd.read_csv("German_Credit.csv", encoding="Latin-1")
```

```
In [6]:  #Creation of report using Pandas Profiling
         pandas_profiling.ProfileReport(df)

         #Using below report, you can now toggle between variables, correlations, missi
         ng values etc
```

# Overview

## Dataset info

| | |
|---|---|
| **Number of variables** | 32 |
| **Number of observations** | 1000 |
| **Missing cells** | 5064 (15.8%) |
| **Duplicate rows** | 0 (0.0%) |
| **Total size in memory** | 250.1 KiB |
| **Average record size in memory** | 256.1 B |

## Variables types

| | |
|---|---|
| **Numeric** | 7 |
| **Categorical** | 6 |
| **Boolean** | 19 |
| **Date** | 0 |
| **URL** | 0 |
| **Text (Unique)** | 0 |
| **Rejected** | 0 |
| **Unsupported** | 0 |

## Warnings

EDUCATION  has 950 (95.0%) missing values      **Missing**

EMPLOYMENT  has 62 (6.2%) zeros      **Zeros**

Out[6]:

In [8]:
```python
#Creation of HTML report with the output generated with pandas-profiling
profile = pandas_profiling.ProfileReport(df)
profile.to_file("./German Credit DataProfiling_Report.html")
```

In [9]:
```python
#Package 2: Sweetviz
!pip install sweetviz
```

```
Collecting sweetviz
  Using cached sweetviz-1.0b5-py3-none-any.whl (325 kB)
Requirement already satisfied: jinja2>=2.11.1 in c:\users\yvkch\anaconda4\lib
\site-packages (from sweetviz) (2.11.1)
Requirement already satisfied: scipy>=1.3.2 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from sweetviz) (1.4.1)
Requirement already satisfied: numpy>=1.16.0 in c:\users\yvkch\anaconda4\lib
\site-packages (from sweetviz) (1.18.1)
Requirement already satisfied: matplotlib>=3.1.3 in c:\users\yvkch\anaconda4
\lib\site-packages (from sweetviz) (3.1.3)
Collecting importlib-resources>=1.2.0
  Using cached importlib_resources-3.0.0-py2.py3-none-any.whl (23 kB)
Requirement already satisfied: pandas!=1.0.0,!=1.0.1,!=1.0.2,>=0.25.3 in c:\u
sers\yvkch\anaconda4\lib\site-packages (from sweetviz) (1.0.5)
Requirement already satisfied: tqdm>=4.43.0 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from sweetviz) (4.48.0)
Requirement already satisfied: MarkupSafe>=0.23 in c:\users\yvkch\anaconda4\l
ib\site-packages (from jinja2>=2.11.1->sweetviz) (1.1.1)
Requirement already satisfied: cycler>=0.10 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from matplotlib>=3.1.3->sweetviz) (0.10.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\yvkch\anaconda4
\lib\site-packages (from matplotlib>=3.1.3->sweetviz) (1.1.0)
Requirement already satisfied: python-dateutil>=2.1 in c:\users\yvkch\anacond
a4\lib\site-packages (from matplotlib>=3.1.3->sweetviz) (2.8.1)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in
c:\users\yvkch\anaconda4\lib\site-packages (from matplotlib>=3.1.3->sweetviz)
(2.4.6)
Requirement already satisfied: zipp>=0.4; python_version < "3.8" in c:\users
\yvkch\anaconda4\lib\site-packages (from importlib-resources>=1.2.0->sweetvi
z) (2.2.0)
Requirement already satisfied: pytz>=2017.2 in c:\users\yvkch\anaconda4\lib\s
ite-packages (from pandas!=1.0.0,!=1.0.1,!=1.0.2,>=0.25.3->sweetviz) (2019.3)
Requirement already satisfied: six in c:\users\yvkch\anaconda4\lib\site-packa
ges (from cycler>=0.10->matplotlib>=3.1.3->sweetviz) (1.14.0)
Requirement already satisfied: setuptools in c:\users\yvkch\anaconda4\lib\sit
e-packages (from kiwisolver>=1.0.1->matplotlib>=3.1.3->sweetviz) (45.2.0.post
20200210)
Installing collected packages: importlib-resources, sweetviz
Successfully installed importlib-resources-3.0.0 sweetviz-1.0b5
```

In [10]:
```python
# importing sweetviz
import sweetviz as sv

#analyzing the dataset
advert_report = sv.analyze(df)

#display the report
advert_report.show_html('GC_SweetViz.html')

#With the report produced by Sweetviz, you can hover to see the associations a
nd other univariate statistics with var
```
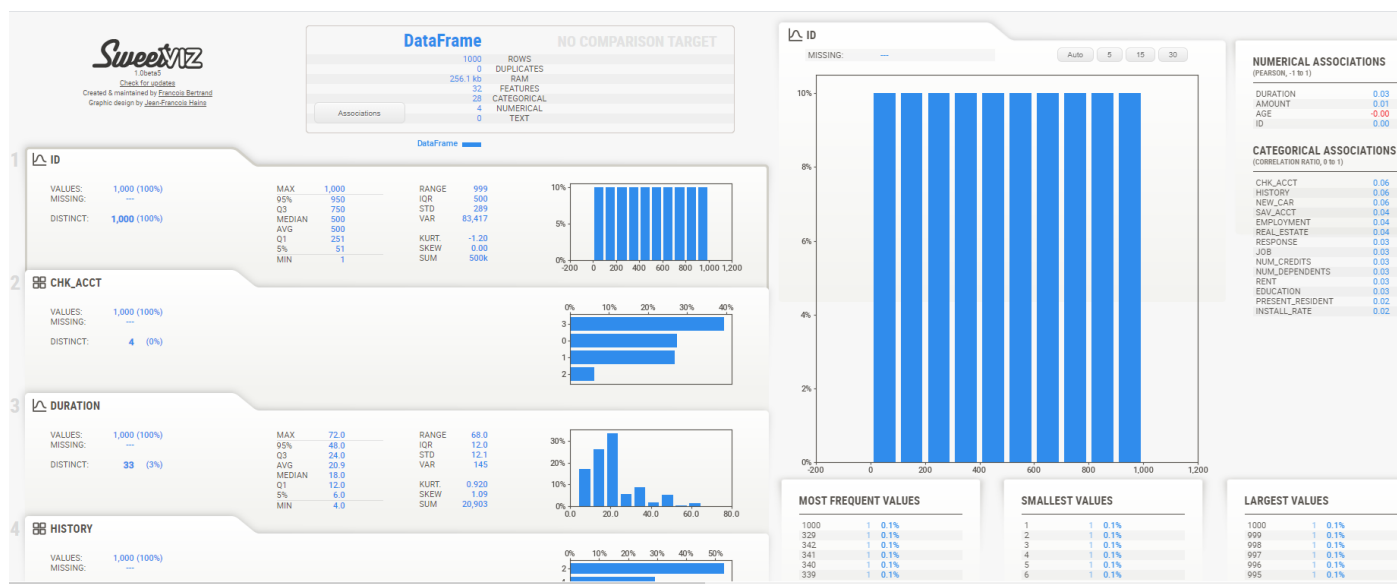
```
:FEATURES DONE:                    |██████████████████████| [100%]   00:05   ->
(00:00 left)
:PAIRWISE DONE:                    |██████████████████████| [100%]   00:00   ->
(00:00 left)

Creating Associations graph... DONE!
Report GC_SweetViz.html was generated! NOTEBOOK/COLAB USERS: no browser will
pop up, the report is saved in your notebook/colab files.
```

In [15]:
```python
#Package 3: dtale
!pip install --upgrade dtale
```

```
Collecting dtale
  Downloading dtale-1.11.0-py2.py3-none-any.whl (7.6 MB)
Requirement already satisfied, skipping upgrade: future>=0.14.0 in c:\users\y
vkch\anaconda4\lib\site-packages (from dtale) (0.18.2)
Requirement already satisfied, skipping upgrade: statsmodels in c:\users\yvkc
h\anaconda4\lib\site-packages (from dtale) (0.11.0)
Requirement already satisfied, skipping upgrade: requests in c:\users\yvkch\a
naconda4\lib\site-packages (from dtale) (2.22.0)
Requirement already satisfied, skipping upgrade: scikit-learn>='0.21.0 in
c:\users\yvkch\anaconda4\lib\site-packages (from dtale) (0.22)
Collecting dash-colorscales
  Downloading dash_colorscales-0.0.4.tar.gz (62 kB)
Requirement already satisfied, skipping upgrade: Flask>=1.0 in c:\users\yvkch
\anaconda4\lib\site-packages (from dtale) (1.1.1)
Collecting dash-bootstrap-components
  Downloading dash-bootstrap-components-0.10.3.tar.gz (107 kB)
  Installing build dependencies: started
  Installing build dependencies: finished with status 'done'
  Getting requirements to build wheel: started
  Getting requirements to build wheel: finished with status 'done'
    Preparing wheel metadata: started
    Preparing wheel metadata: finished with status 'done'
Requirement already satisfied, skipping upgrade: pandas in c:\users\yvkch\ana
conda4\lib\site-packages (from dtale) (1.0.5)
Requirement already satisfied, skipping upgrade: scipy in c:\users\yvkch\anac
onda4\lib\site-packages (from dtale) (1.4.1)
Collecting lz4; python_version > "3.0"
  Downloading lz4-3.1.0-cp37-cp37m-win_amd64.whl (162 kB)
Collecting dash>=1.5.0
  Downloading dash-1.14.0.tar.gz (70 kB)
Collecting xarray
  Downloading xarray-0.16.0-py3-none-any.whl (704 kB)
Collecting Flask-Compress
  Downloading Flask-Compress-1.5.0.tar.gz (6.5 kB)
Collecting dash-daq
  Downloading dash_daq-0.5.0.tar.gz (642 kB)
Requirement already satisfied, skipping upgrade: itsdangerous in c:\users\yvk
ch\anaconda4\lib\site-packages (from dtale) (1.1.0)
Requirement already satisfied, skipping upgrade: six in c:\users\yvkch\anacon
da4\lib\site-packages (from dtale) (1.14.0)
Collecting flask-ngrok; python_version > "3.0"
  Downloading flask_ngrok-0.0.25-py3-none-any.whl (3.1 kB)
Requirement already satisfied, skipping upgrade: numpy>=1.14 in c:\users\yvkc
h\anaconda4\lib\site-packages (from statsmodels->dtale) (1.18.1)
Requirement already satisfied, skipping upgrade: patsy>=0.5 in c:\users\yvkch
\anaconda4\lib\site-packages (from statsmodels->dtale) (0.5.1)
Requirement already satisfied, skipping upgrade: chardet<3.1.0,>=3.0.2 in
c:\users\yvkch\anaconda4\lib\site-packages (from requests->dtale) (3.0.4)
Requirement already satisfied, skipping upgrade: idna<2.9,>=2.5 in c:\users\y
vkch\anaconda4\lib\site-packages (from requests->dtale) (2.8)
Requirement already satisfied, skipping upgrade: urllib3!=1.25.0,!=1.25.1,<1.
26,>=1.21.1 in c:\users\yvkch\anaconda4\lib\site-packages (from requests->dta
le) (1.25.8)
Requirement already satisfied, skipping upgrade: certifi>=2017.4.17 in c:\use
rs\yvkch\anaconda4\lib\site-packages (from requests->dtale) (2019.11.28)
Requirement already satisfied, skipping upgrade: joblib>=0.11 in c:\users\yvk
ch\anaconda4\lib\site-packages (from scikit-learn>='0.21.0->dtale) (0.14.1)
```

```
    Requirement already satisfied, skipping upgrade: Werkzeug>=0.15 in c:\users\y
    vkch\anaconda4\lib\site-packages (from Flask>=1.0->dtale) (1.0.0)
    Requirement already satisfied, skipping upgrade: Jinja2>=2.10.1 in c:\users\y
    vkch\anaconda4\lib\site-packages (from Flask>=1.0->dtale) (2.11.1)
    Requirement already satisfied, skipping upgrade: click>=5.1 in c:\users\yvkch
    \anaconda4\lib\site-packages (from Flask>=1.0->dtale) (7.0)
    Requirement already satisfied, skipping upgrade: pytz>=2017.2 in c:\users\yvk
    ch\anaconda4\lib\site-packages (from pandas->dtale) (2019.3)
    Requirement already satisfied, skipping upgrade: python-dateutil>=2.6.1 in
    c:\users\yvkch\anaconda4\lib\site-packages (from pandas->dtale) (2.8.1)
    Requirement already satisfied, skipping upgrade: plotly in c:\users\yvkch\ana
    conda4\lib\site-packages (from dash>=1.5.0->dtale) (4.4.1)
    Collecting dash_renderer==1.6.0
      Downloading dash_renderer-1.6.0.tar.gz (1.2 MB)
    Collecting dash-core-components==1.10.2
      Downloading dash_core_components-1.10.2.tar.gz (3.4 MB)
    Collecting dash-html-components==1.0.3
      Downloading dash_html_components-1.0.3.tar.gz (187 kB)
    Collecting dash-table==4.9.0
      Downloading dash_table-4.9.0.tar.gz (1.8 MB)
    Requirement already satisfied, skipping upgrade: setuptools>=41.2 in c:\users
    \yvkch\anaconda4\lib\site-packages (from xarray->dtale) (45.2.0.post20200210)
    Collecting brotli
      Downloading Brotli-1.0.7-cp37-cp37m-win_amd64.whl (358 kB)
    Requirement already satisfied, skipping upgrade: MarkupSafe>=0.23 in c:\users
    \yvkch\anaconda4\lib\site-packages (from Jinja2>=2.10.1->Flask>=1.0->dtale)
    (1.1.1)
    Requirement already satisfied, skipping upgrade: retrying>=1.3.3 in c:\users
    \yvkch\anaconda4\lib\site-packages (from plotly->dash>=1.5.0->dtale) (1.3.3)
    Building wheels for collected packages: dash-colorscales, dash-bootstrap-comp
    onents, dash, Flask-Compress, dash-daq, dash-renderer, dash-core-components,
    dash-html-components, dash-table
      Building wheel for dash-colorscales (setup.py): started
      Building wheel for dash-colorscales (setup.py): finished with status 'done'
      Created wheel for dash-colorscales: filename=dash_colorscales-0.0.4-py3-non
    e-any.whl size=62603 sha256=74b45e8c424b24a437f66fffb1c1341c9f8c4bd5b5a09d255
    0803ff6fd8fd4e4
      Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\2f\22\7e
    \183ba2af565e3eb955021fbb4fe8fe4a6b1ed8ae3e5c03236a
      Building wheel for dash-bootstrap-components (PEP 517): started
      Building wheel for dash-bootstrap-components (PEP 517): finished with statu
    s 'done'
      Created wheel for dash-bootstrap-components: filename=dash_bootstrap_compon
    ents-0.10.3-py3-none-any.whl size=179491 sha256=696a9591c162b1a6a9d3952b79428
    64ede2d35196bd6f5a25a35fea4cf644614
      Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\7d\e7\e6
    \225ffdad437ee57f52b2d437c716f27edfe277236c7b860b7e
      Building wheel for dash (setup.py): started
      Building wheel for dash (setup.py): finished with status 'done'
      Created wheel for dash: filename=dash-1.14.0-py3-none-any.whl size=80132 sh
    a256=e583fffdbab85e00a88768dad9c50b4d82e266568e29140e1f095bb4788f7a72
      Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\77\53\27
    \031b701ce8077990289c07ea1298e5a217fab3a4639b168856
      Building wheel for Flask-Compress (setup.py): started
      Building wheel for Flask-Compress (setup.py): finished with status 'done'
      Created wheel for Flask-Compress: filename=Flask_Compress-1.5.0-py3-none-an
    y.whl size=5277 sha256=6a2b450cd3baabb8a63a5e2051cc81e2137e7d76c73dfde2097169
```

7b104ad005
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\d6\9f\c9
\4bf2abf65cceaa8d19423bc34b88443b3b063f167d2082c212
    Building wheel for dash-daq (setup.py): started
    Building wheel for dash-daq (setup.py): finished with status 'done'
    Created wheel for dash-daq: filename=dash_daq-0.5.0-py3-none-any.whl size=6
69707 sha256=6711d311850971a811e4cf77fa8acb0e004b8ab571ac82a4e5de9fad22283765
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\fe\54\53
\a8d448db5592874db4313240571ca2c069e55f6a6b29bf5847
    Building wheel for dash-renderer (setup.py): started
    Building wheel for dash-renderer (setup.py): finished with status 'done'
    Created wheel for dash-renderer: filename=dash_renderer-1.6.0-py3-none-any.
whl size=1182223 sha256=16e65f10c3c6e67fe33fc2aaf3e0e2f241cdbf09063b2bd11831f
91d2c27d802
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\37\31\d9
\3b53bbe9389c1ff7b0ac2ec25e811cf2303009e426243eaf61
    Building wheel for dash-core-components (setup.py): started
    Building wheel for dash-core-components (setup.py): finished with status 'd
one'
    Created wheel for dash-core-components: filename=dash_core_components-1.10.
2-py3-none-any.whl size=3457327 sha256=c2876ddbb2f9cd6e16f7eace017da33597b1e6
30a7c6f9fbca4ad933f8c4c84c
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\17\97\01
\848073c7de32c1381023e5cf42d66ce4d6aa1608dbb93a983a
    Building wheel for dash-html-components (setup.py): started
    Building wheel for dash-html-components (setup.py): finished with status 'd
one'
    Created wheel for dash-html-components: filename=dash_html_components-1.0.3
-py3-none-any.whl size=427310 sha256=4f8c2984c2d6b55629b5627a4b65476bed8a58ef
f755cb3c4a98fb8b02718e3a
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\36\34\f9
\c3d147461b28467d5bbd14d255be66f6728a1580ff9fbebece
    Building wheel for dash-table (setup.py): started
    Building wheel for dash-table (setup.py): finished with status 'done'
    Created wheel for dash-table: filename=dash_table-4.9.0-py3-none-any.whl si
ze=1780771 sha256=89395d4c5b4b45b7bc254f06003e14c6139d02da78b26b1c8c94bc54844
4e88c
    Stored in directory: c:\users\yvkch\appdata\local\pip\cache\wheels\44\aa\7a
\73ca1e791ccd10a7f9863fbcf7266f5f6dc1a69aedf045a3c8
Successfully built dash-colorscales dash-bootstrap-components dash Flask-Comp
ress dash-daq dash-renderer dash-core-components dash-html-components dash-ta
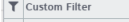ble
Installing collected packages: dash-colorscales, brotli, Flask-Compress, dash
-renderer, dash-core-components, dash-html-components, dash-table, dash, dash
-bootstrap-components, lz4, xarray, dash-daq, flask-ngrok, dtale
Successfully installed Flask-Compress-1.5.0 brotli-1.0.7 dash-1.14.0 dash-boo
tstrap-components-0.10.3 dash-colorscales-0.0.4 dash-core-components-1.10.2 d
ash-daq-0.5.0 dash-html-components-1.0.3 dash-renderer-1.6.0 dash-table-4.9.0
dtale-1.11.0 flask-ngrok-0.0.25 lz4-3.1.0 xarray-0.16.0
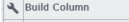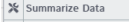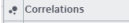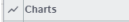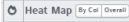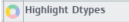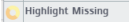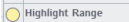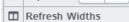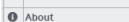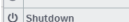
In [17]:
```python
import dtale
import pandas as pd
df = pd.read_csv('German_Credit.csv')

#Creation of report with dtale and opening in new browser
d = dtale.show(df)
d.open_browser()

#The report produced by dtales will give you an optin to plot, filter, and all
variations of univariate statistics
```

| | ID | CHK_ACCT | DURATION | HISTORY | NEW_CAR | USED_CAR | FURNITURE | RADIO/TV | EDUCATION | RETRAINING | AMOUNT | SAV_ACCT | EMPLOYMENT | INSTALL_RATE | MALE_DIV | MALE_SINGLE | MALE_MAR_or_WID | CO-APPLICANT | GUARANT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 6 | 4 | nan | nan | nan | 1.00 | nan | nan | 1169 | 4 | 4 | 4 | 0 | 1 | 0 | 0 | |
| | 1 | 48 | 2 | nan | nan | nan | 1.00 | nan | nan | 5951 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | |
| | 3 | 12 | 4 | nan | nan | nan | nan | 1.00 | nan | 2096 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | |
| | 0 | 42 | 2 | nan | nan | 1.00 | nan | nan | nan | 7882 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | |
| | 0 | 24 | 3 | 1.00 | nan | nan | nan | nan | nan | 4870 | 0 | 2 | 3 | 0 | 1 | 0 | 0 | |
| | 3 | 36 | 2 | nan | nan | nan | nan | 1.00 | nan | 9000 | 4 | 2 | 2 | 0 | 1 | 0 | 0 | |
| | 3 | 24 | 2 | nan | nan | nan | 1.00 | nan | nan | 2835 | 2 | 4 | 3 | 0 | 1 | 0 | 0 | |
| | 1 | 36 | 2 | 1.00 | nan | nan | nan | nan | nan | 6948 | 0 | 2 | 2 | 0 | 1 | 0 | 0 | |
| | 3 | 12 | 2 | nan | nan | nan | 1.00 | nan | nan | 3059 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | |
| | 1 | 30 | 4 | 1.00 | nan | nan | nan | nan | nan | 5234 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | |
| | 1 | 12 | 2 | 1.00 | nan | nan | nan | nan | nan | 1295 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | |
| | 0 | 48 | 2 | nan | nan | nan | nan | nan | 1.00 | 4308 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | |
| | | | | | nan | nan | 1.00 | nan | nan | 1567 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | |
| | | | | | nan | nan | nan | nan | nan | 1199 | 0 | 4 | 4 | 0 | 1 | 0 | 0 | |
| | | | | | nan | nan | nan | nan | nan | 1400 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | |
| | | | | | nan | nan | 1.00 | nan | nan | 1282 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | |
| | | | | | nan | nan | 1.00 | nan | nan | 2424 | 4 | 4 | 4 | 0 | 1 | 0 | 0 | |
| | | | | | nan | nan | nan | nan | 1.00 | 8070 | 4 | 1 | 2 | 0 | 1 | 0 | 0 | |
| | | | | | 1.00 | nan | nan | nan | nan | 12579 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | |
| | 3 | 24 | 2 | nan | nan | nan | 1.00 | nan | nan | 3430 | 2 | 4 | 3 | 0 | 1 | 0 | 0 | |
| | 3 | 9 | 4 | 1.00 | nan | nan | nan | nan | nan | 2134 | 0 | 2 | 4 | 0 | 1 | 0 | 0 | |
| | 0 | 6 | 2 | nan | nan | nan | 1.00 | nan | nan | 2651 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | |
| 22 | 23 | 0 | 10 | 4 | 1.00 | nan | nan | nan | nan | nan | 2241 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | |
| 23 | 24 | 1 | 12 | 4 | nan | 1.00 | nan | nan | nan | nan | 1804 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | |
| 24 | 25 | 3 | 10 | 4 | nan | nan | 1.00 | nan | nan | nan | 2069 | 4 | 2 | 2 | 0 | 0 | 1 | 0 | |
| 25 | 26 | 0 | 6 | 2 | nan | nan | 1.00 | nan | nan | nan | 1374 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | |
| 26 | 27 | 3 | 6 | 0 | nan | nan | 1.00 | nan | nan | nan | 426 | 0 | 4 | 4 | 0 | 0 | 1 | 0 | |

D-TALE

- Convert To XArray
- Describe
- Custom Filter
- Build Column
- Summarize Data
- Correlations
- Charts
- Heat Map [By Col] [Overall]
- Highlight Dtypes
- Highlight Missing
- Highlight Outliers
- Highlight Range
- Low Variance Flag
- Instances
- Code Export
- Export [CSV] [TSV]
- Refresh Widths
- About
- Shutdown

Highlight any cells for numeric columns which surpass the upper or lower bounds of a custom outlier computation. Lower bounds outliers will be on a red scale and upper bounds outliers will be on a blue scale. Also, a "★" will be prepended to any column header which contains outliers.

In [ ]: