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Adding form fields INSERT

Forms example

Forms support multiple types of fields with type checking including sliders, date pickers, input fields, dropdown menus, and dropdown menus that allow input.

```
#@title Example form fields
#@markdown Forms support many types

no_type_checking = ''  #@param
string_type = 'example'  #@param {ty
slider_value = 142  #@param {type: '
number = 102  #@param {type: "numbe
date = '2010-11-05'  #@param {type:
pick_me = "monday"  #@param ['monday
select_or_input = "apples" #@param |
#@markdown ---
```

VIEW SOURCE NOTEBOOK

- **Source #1**: USAID Foreign Aid Explorer; Country S
  - What is it?: A table of all the US donations country. It is in both current USD and cons
  - The rows represent each country per a spe ['unique_id', 'country_code', 'country_name 'income_group_acronym', 'income_group_n 'transaction_type_name', 'year', 'current_an headers are fairly self-explanatory, howeve "disbursement" there is a USAID pdf Data
  - Manipulation in Excel: To ensure the data for 'unique_id' which is an excel concatena data included replications of each disburs DoD) but did not include unique $ amounts deleted all of the replications. I checked 3 the USAID dashboard FAE: Dashboard to e excel changes were made. An original has
- **Source #2**: DePaul University Quantitive Reasoni Home Page
  - What is it?: A table of all US Presidents by college, age upon taking office, occupation
  - Manipulation in Excel: I manipulated this d merge later in Python. I wanted this workb the start of USAID data (1946) and their po obligations and disbursements. As such, I and created a column for year in office (ina copied the president name and other attrib corresponding attributes with each specifi range of years). For years in which power that held office for part of the year and the change this if it's unhelpful as the incomin decision making (for the portion of the yea cases is Nov-Dec). I validated a sample of search.
  - The attributes are: ['President', 'Year', 'Age 'College'] and are all self-explanatory.
- **Source #3:** Center for Systemic Peace: Mission; 1800-2017; Excel Series

- What is it?: Per their website: "*Polity IV Pro*
  Transitions, 1800-2017, annual, cross-natic
  coding democratic and autocratic "pattern
  independent countries with total populatio
- Manipulations in Excel: I saved two versio
  sorted all data by year and deleted any ent
  USAID to match. I also created a concaten
  USAID data above. I also found two duplic
  "year" and country" columns and deleted t
  other manipulations made.
- The attributes are: ['unique_id', 'cyear', 'cco
  'democ', 'autoc', 'polity', 'polity2', 'durable', '
  'parcomp', 'exrec', 'exconst', 'polcomp', 'pric
  'bmonth', 'bday', 'byear', 'bprec', 'post', 'cha
  with variable definitions can be found here
  http://www.systemicpeace.org/inscr/p4m
- Many of the attributes contain subjective c
  reasonable given the nature of the charact
  as 'democracy') so I will need to put a bit c
  components and assumptions made. How
  data to give an idea on the level of institut
  institutionalized autocracy ('autoc')

- Next Steps: I'd like to merge data on GDP; GDP/c
  disaster status for each country by year. Also po
  institution alliances.

```
#importing pandas and reading my first file
import pandas as pd
data_aid = pd.read_excel('us_foreign_aid_cou
print(data_aid.head(3))

print(data_aid.tail(3))

print(data_aid.columns)
print(list(data_aid))
```

```
que_id country_code country_name  reg
ba1999          ABW        Aruba
ba2000          ABW        Aruba
ba2004          ABW        Aruba

me_group_acronym    income_group_name
             HIC  High Income Country
             HIC  High Income Country
             HIC  High Income Country

saction_type_name  year  current_amou
      Obligations  1999           190
      Obligations  2000           500
      Obligations  2004            10
    unique_id country_code country_na
 Zimbabwe2016          ZWE     Zimbab
 Zimbabwe2017          ZWE     Zimbab
 Zimbabwe2018          ZWE     Zimbab

income_group_acronym   income_group_n
                 LIC  Low Income Coun
                 LIC  Low Income Coun
                 LIC  Low Income Coun

transaction_type_name  year  current_
        Disbursements  2016       222
        Disbursements  2017       225
        Disbursements  2018       119
['unique_id', 'country_code', 'countr
 'income_group_acronym', 'income_grou
 'transaction_type_name', 'year', 'cu
dtype='object')
ue_id', 'country_code', 'country_name
```

```
#second file read - US president list
data_prez = pd.read_excel("Presidents_Depaul
print(data_prez.head(10))

print(data_prez.tail(10))

print(data_prez.columns)
```

```
print(list(data_prez))
```

```
             President  Year  Age at
0  Franklin Roosevelt  1933
1  Franklin Roosevelt  1934
2  Franklin Roosevelt  1935
3  Franklin Roosevelt  1936
4  Franklin Roosevelt  1937
5  Franklin Roosevelt  1938
6  Franklin Roosevelt  1939
7  Franklin Roosevelt  1940
8  Franklin Roosevelt  1941
9  Franklin Roosevelt  1942

   College
0  Harvard
1  Harvard
2  Harvard
3  Harvard
4  Harvard
5  Harvard
6  Harvard
7  Harvard
8  Harvard
9  Harvard
          President  Year  Age at in
77     Barack Obama  2010
78     Barack Obama  2011
79     Barack Obama  2012
80     Barack Obama  2013
81     Barack Obama  2014
82     Barack Obama  2015
83     Barack Obama  2016
84     Barack Obama  2017
85  Donald J. Trump  2018
86  Donald J. Trump  2019

                      College
77         Columbia University
78         Columbia University
79         Columbia University
80         Columbia University
81         Columbia University
82         Columbia University
83         Columbia University
84         Columbia University
85  University of Pennslyvania
86  University of Pennslyvania
Index(['President', 'Year', 'Age at
       'Occupation', 'College'],
```

```
      dtype='object')
['President', 'Year', 'Age at inaugu
```

```
#Third dataset - country political regime ir
data_country = pd.read_excel("country_gov_ty
print(data_country.head(5))

print(data_country.tail(5))

print(data_country.columns)
print(list(data_country))
```

```
            unique_id  cyear  ccode s
0  United States1946  21946      2
1  United States1947  21947      2
2  United States1948  21948      2
3  United States1949  21949      2
4  United States1950  21950      2

   democ  autoc    ...     interim
0     10      0    ...         NaN
1     10      0    ...         NaN
2     10      0    ...         NaN
3     10      0    ...         NaN
4     10      0    ...         NaN

   d4  sf  regtrans
0 NaN NaN       NaN
1 NaN NaN       NaN
2 NaN NaN       NaN
3 NaN NaN       NaN
4 NaN NaN       NaN

[5 rows x 37 columns]
     unique_id    cyear  ccode scode
9790  Fiji2013  9502013    950   FJI
9791  Fiji2014  9502014    950   FJI
9792  Fiji2015  9502015    950   FJI
9793  Fiji2016  9502016    950   FJI
9794  Fiji2017  9502017    950   FJI

      autoc    ...     interim  bmon
9790      4    ...         NaN     N
9791      1    ...         NaN     9
9792      1    ...         NaN     N
9793      1    ...         NaN     N
9794      1    ...         NaN     N
```

```
       d4  sf  regtrans
9790  NaN NaN       NaN
9791  1.0 NaN       3.0
9792  NaN NaN       NaN
9793  NaN NaN       NaN
9794  NaN NaN       NaN

[5 rows x 37 columns]
Index(['unique_id', 'cyear', 'ccode'
       'fragment', 'democ', 'autoc',
       'xrcomp', 'xropen', 'xconst',
       'polcomp', 'prior', 'emonth',
       'bmonth', 'bday', 'byear', 'b
       'regtrans'],
      dtype='object')
['unique_id', 'cyear', 'ccode', 'sco
```

```
#printing one instance of each dataset to er
print(data_aid.loc[2500])
print(data_prez.loc[60])
print(data_country.loc[1010])
```

```
unique_id
country_code
country_name
region_id
region_name                          We
income_group_acronym
income_group_name          Upper Middl
transaction_type_id
transaction_type_name
year
current_amount
constant_amount
Name: 2500, dtype: object
President                George Bush/B
Year
Age at inauguration
Political Party               Republic
Occupation
College
Name: 60, dtype: object
unique_id    Colombia1977
cyear             1001977
ccode                 100
```

```
ccode                100
scode                COL
country          Colombia
year                 1977
flag                    0
fragment              NaN
democ                   8
autoc                   0
polity                  8
polity2                 8
durable                20
xrreg                   3
xrcomp                  3
xropen                  4
xconst                  6
parreg                  2
parcomp                 4
exrec                   8
exconst                 6
polcomp                 9
prior                 NaN
emonth                NaN
eday                  NaN
eyear                 NaN
eprec                 NaN
interim               NaN
bmonth                NaN
bday                  NaN
byear                 NaN
bprec                 NaN
post                  NaN
change                NaN
d4                    NaN
sf                    NaN
regtrans              NaN
Name: 1010, dtype: object
```

```
#printing my variable lists to see what I ha
print(list(data_prez))
print(list(data_aid))
print(list(data_country))
```

```
['President', 'Year', 'Age at inaugu
['unique_id', 'country_code', 'count
['unique_id', 'cyear', 'ccode', 'sco
```

```
#found that the 'Year' column in my presider
data_prez=data_prez.rename(columns = {'Year'
print(list(data_prez))
```

```
['President', 'year', 'Age at inaugu
```

```
#selecting pertinent columns from my aid anc

data_aid_new = data_aid[["unique_id", "count
print(data_aid_new.head())

data_country_new = data_country[["unique_id"
print(data_country_new.sample(5))
```

```
    unique_id country_name          re
0  Aruba1999        Aruba  Western H
1  Aruba2000        Aruba  Western H
2  Aruba2004        Aruba  Western H
3  Aruba2005        Aruba  Western H
4  Aruba2006        Aruba  Western H

  transaction_type_name  current_amo
0           Obligations           19
1           Obligations           50
2           Obligations            1
3           Obligations           29
4           Obligations            1
             unique_id       country
8478         Japan2012         Japan
5253          Chad1984          Chad
3011       Albania2012       Albania
8937         Nepal2002         Nepal
4861  Sierra Leone1998  Sierra Leone
```

```
#merging country polity and aid data based c
data_aid_country = data_aid_new.merge(data_c
print(data_aid_country.sample(5))
```

```
             unique_id country_name
6560  New Zealand2013  New Zealand
343       Austria1949      Austria
8307         Chad2011         Chad
2724       France2012       France
6804       Panama2017       Panama

                income_group_name tr
6560          High Income Country
343           High Income Country
8307           Low Income Country
2724          High Income Country
6804  Upper Middle Income Country

          country  year  democ  auto
6560  New Zealand  2013     10
343       Austria  1949     10
8307         Chad  2011      1
2724       France  2012      9
6804       Panama  2017      9
```

```
#merging my third database on the 'year' col
data_aid_country_prez = data_aid_country.mer
print(data_aid_country_prez.sample(5))
```

```
                unique_id     countr
2836          Somalia1990          S
3194          Tunisia1993          T
198           Austria1954          A
4508         Pakistan2002         Pa
3813  Slovak Republic1998  Slovak Re

                income_group_name tr
2836           Low Income Country
3194  Lower Middle Income Country
198           High Income Country
4508  Lower Middle Income Country
3813          High Income Country

                country  year  democ
2836          Somalia  1990      0
3194          Tunisia  1993      1
198           Austria  1954     10
4508         Pakistan  2002      0
3813  Slovak Republic  1998      9

                    President  Age
2836              George Bush
3194  George Bush/Bill Clinton
198       Dwight D. Eisenhower
4508             George W. Bush
3813               Bill Clinton

       Occupation              Colle
2836  Businessman                 Ya
3194          NaN                  N
198       Soldier  US Military Acade
4508  Businessman                 Ya
3813      Lawyer           Georgeto
```