Covid-19 dashboard final

May 30, 2020

[1]:
```
# importing libraries
import pandas as pd
import numpy as np
```

[2]:
```
# loading data from the source:
confirmed_df = pd.read_csv("https://raw.githubusercontent.com/CSSEGISandData/
 ↪COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/
 ↪time_series_covid19_confirmed_global.csv")
death_df = pd.read_csv("https://raw.githubusercontent.com/CSSEGISandData/
 ↪COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/
 ↪time_series_covid19_deaths_global.csv")
recovered_df = pd.read_csv("https://raw.githubusercontent.com/CSSEGISandData/
 ↪COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/
 ↪time_series_covid19_recovered_global.csv")
country_df = pd.read_csv("https://raw.githubusercontent.com/CSSEGISandData/
 ↪COVID-19/web-data/data/cases_country.csv")
```

[3]:
```
confirmed_df.head()
```

[3]:

	Province/State	Country/Region	Lat	Long	1/22/20	1/23/20	1/24/20	\
0	NaN	Afghanistan	33.0000	65.0000	0	0	0	
1	NaN	Albania	41.1533	20.1683	0	0	0	
2	NaN	Algeria	28.0339	1.6596	0	0	0	
3	NaN	Andorra	42.5063	1.5218	0	0	0	
4	NaN	Angola	-11.2027	17.8739	0	0	0	

	1/25/20	1/26/20	1/27/20	…	5/20/20	5/21/20	5/22/20	5/23/20	\
0	0	0	0	…	8145	8676	9216	9998	
1	0	0	0	…	964	969	981	989	
2	0	0	0	…	7542	7728	7918	8113	
3	0	0	0	…	762	762	762	762	
4	0	0	0	…	52	58	60	61	

	5/24/20	5/25/20	5/26/20	5/27/20	5/28/20	5/29/20
0	10582	11173	11831	12456	13036	13659
1	998	1004	1029	1050	1076	1099
2	8306	8503	8697	8857	8997	9134

```
3      762      763      763      763      763      764
4       69       70       70       71       74       81

[5 rows x 133 columns]
```

[4]:
```
#death_df.head()
```

[5]:
```
#recovered_df.head()
```

[6]:
```
#country_df.head()
```

[7]:
```
# data cleaning

# converting df column names to lowercase

country_df.columns = map(str.lower, country_df.columns)
confirmed_df.columns = map(str.lower, confirmed_df.columns)
death_df.columns = map(str.lower, death_df.columns)
recovered_df.columns = map(str.lower, recovered_df.columns)
```

[8]:
```
# changing province/state to state and country/region to country

confirmed_df = confirmed_df.rename(columns={'province/state': 'state', 'country/
↪region': 'country'})
recovered_df = confirmed_df.rename(columns={'province/state': 'state', 'country/
↪region': 'country'})
death_df = death_df.rename(columns={'province/state': 'state', 'country/region':
↪ 'country'})
country_df = country_df.rename(columns={'country_region': 'country'})
```

[9]:
```
#Sorting confirmed cases using descending order
sorted_country_df = country_df.sort_values('confirmed', ascending= False)
```

[11]:
```
## conda install -c https://conda.anaconda.org/plotly plotly  (use this if␣
↪plotply is not installed in your system)
import plotly.express as px
```

[14]:
```
fig= px.bar(
    sorted_country_df.head(10),
    x = "country",
    y = "confirmed",
    title= "Top 10 worst affected countries", # the axis names
    color = "country"
)
fig.update_layout(template='plotly_dark')
fig.show()
```

[15]:
```
country_df.head()
```

[15]:

	country	last_update	lat	long_	confirmed	deaths	recovered	active	incident_rate	people_tested	people_hospitalized	mortality_rate	uid	iso3
0	Australia	2020-05-30 08:32:43	-25.0000	133.0000	7185.0	103.0	6606.0	476.0	28.221071	NaN	NaN	1.433542	36	AUS
1	Austria	2020-05-30 08:32:43	47.5162	14.5501	16655.0	668.0	15347.0	640.0	184.924054	NaN	NaN	4.010808	40	AUT
2	Canada	2020-05-30 08:32:43	60.0010	-95.0010	90909.0	7063.0	47905.0	35941.0	240.146121	NaN	NaN	7.769308	124	CAN
3	China	2020-05-30 08:32:43	30.5928	114.3055	84123.0	4638.0	79383.0	102.0	5.988782	NaN	NaN	5.513355	156	CHN
4	Denmark	2020-05-30 08:32:43	56.2639	9.5018	11793.0	568.0	10438.0	787.0	203.601290	NaN	NaN	4.816417	208	DNK

[16]:
```
country_df.drop(['lat', 'long_', 'last_update', 'incident_rate',␣
↪'people_tested', 'people_hospitalized','mortality_rate', 'uid',  'iso3'],␣
↪axis=1).sort_values('confirmed', ascending = False).reset_index(drop=True).
↪style.bar(align='left', width=98, color='green')
```

[16]:
```
<pandas.io.formats.style.Styler at 0x7f148a284a90>
```

[ ]:
```

```