```
    ----------------------------------------
    ERROR: Failed building wheel for fbprophet
    Running setup.py clean for fbprophet
    Building wheel for holidays (setup.py) ... done
    Created wheel for holidays: filename=holidays-0.10.2-py3-none-any.
whl size=111560 sha256=1b6ec91da8b7bf1d7aca770f95ce4ab8bea18bf4dcf4f
c28bef25af4f271e745
    Stored in directory: /Users/MariaPaz/Library/Caches/pip/wheels/90/
4e/82/f4130a57eb035c4344489ca14caff692590719b5f375540f53
    Building wheel for pymeeus (setup.py) ... done
    Created wheel for pymeeus: filename=PyMeeus-0.3.7-py3-none-any.whl
size=702876 sha256=6160d3111cca56bce08e6aec679c5a43661f2ed42cbfa657f
26699c63e9d2276
    Stored in directory: /Users/MariaPaz/Library/Caches/pip/wheels/80/
32/5f/2a67880d4ce584b9cf99146f9945e46942dfb010a9382c6ff5
Successfully built holidays pymeeus
Failed to build fbprophet
Installing collected packages: cmdstanpy, pystan, ephem, LunarCalend
ar, pymeeus, convertdate, korean-lunar-calendar, holidays, setuptool
s-git, fbprophet
    Running setup.py install for fbprophet ... done
Successfully installed LunarCalendar-0.0.9 cmdstanpy-0.4.0 convertda
te-2.2.1 ephem-3.7.7.1 fbprophet-0.6 holidays-0.10.2 korean-lunar-ca
lendar-0.2.1 pymeeus-0.3.7 pystan-2.19.1.1 setuptools-git-1.2
Note: you may need to restart the kernel to use updated packages.
```

In [26]:
```python
from fbprophet import Prophet
```

In [23]:
```python
confirmedw = df_world.groupby('ObservationDate').sum()['Confirmed'].re
set_index()
deathsw = df_world.groupby('ObservationDate').sum()['Deaths'].reset_in
dex()
recoveredw = df_world.groupby('ObservationDate').sum()['Recovered'].re
set_index()
```

In [24]:
```python
confirmedw.columns = ['ds','y']
confirmedw['ds'] = pd.to_datetime(confirmedw['ds'])
```

In [156]: `confirmedw.tail()`

Out[156]:

	ds	y
132	2020-06-02	6378238.0
133	2020-06-03	6508635.0
134	2020-06-04	6632985.0
135	2020-06-05	6764918.0
136	2020-06-06	6891213.0

In [27]:
```
m = Prophet(interval_width=0.95)
m.fit(confirmedw)
future = m.make_future_dataframe(periods=7)
future.tail()
```

```
INFO:numexpr.utils:NumExpr defaulting to 4 threads.
INFO:fbprophet:Disabling yearly seasonality. Run prophet with yearly
_seasonality=True to override this.
INFO:fbprophet:Disabling daily seasonality. Run prophet with daily_s
easonality=True to override this.
```
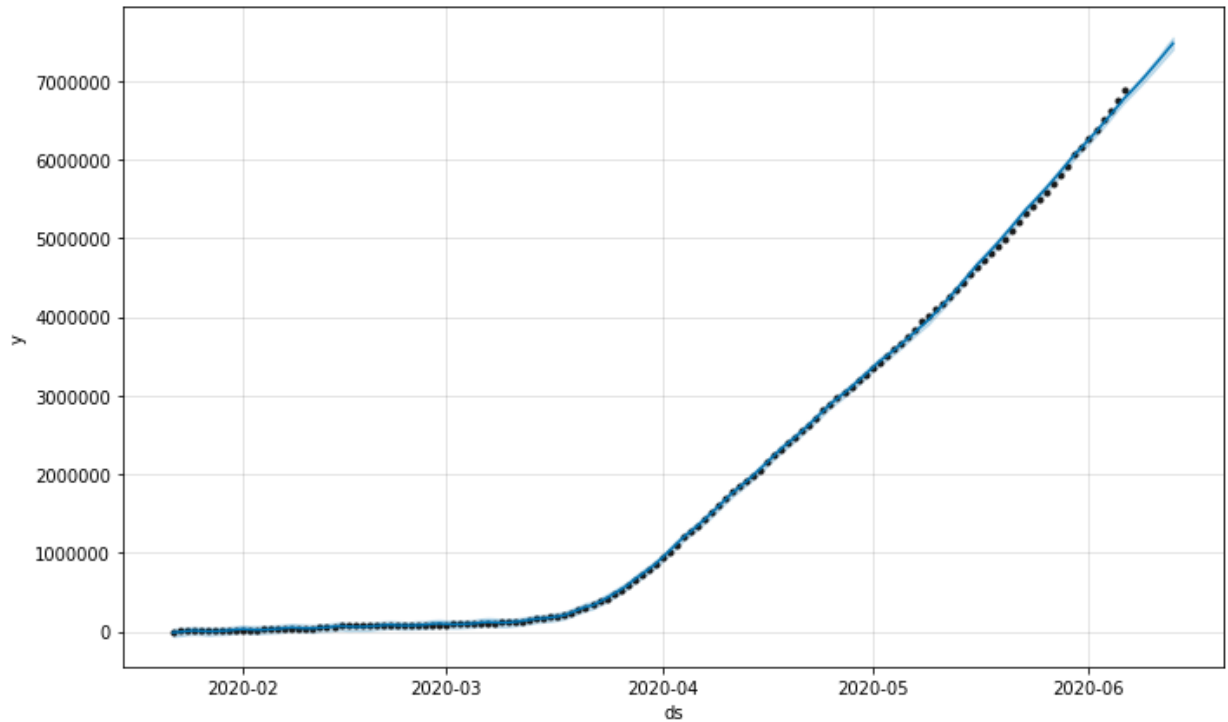
Out[27]:

	ds
139	2020-06-09
140	2020-06-10
141	2020-06-11
142	2020-06-12
143	2020-06-13

In [28]:
```
forecast = m.predict(future)
forecast[['ds','yhat','yhat_lower','yhat_upper']].tail()
```
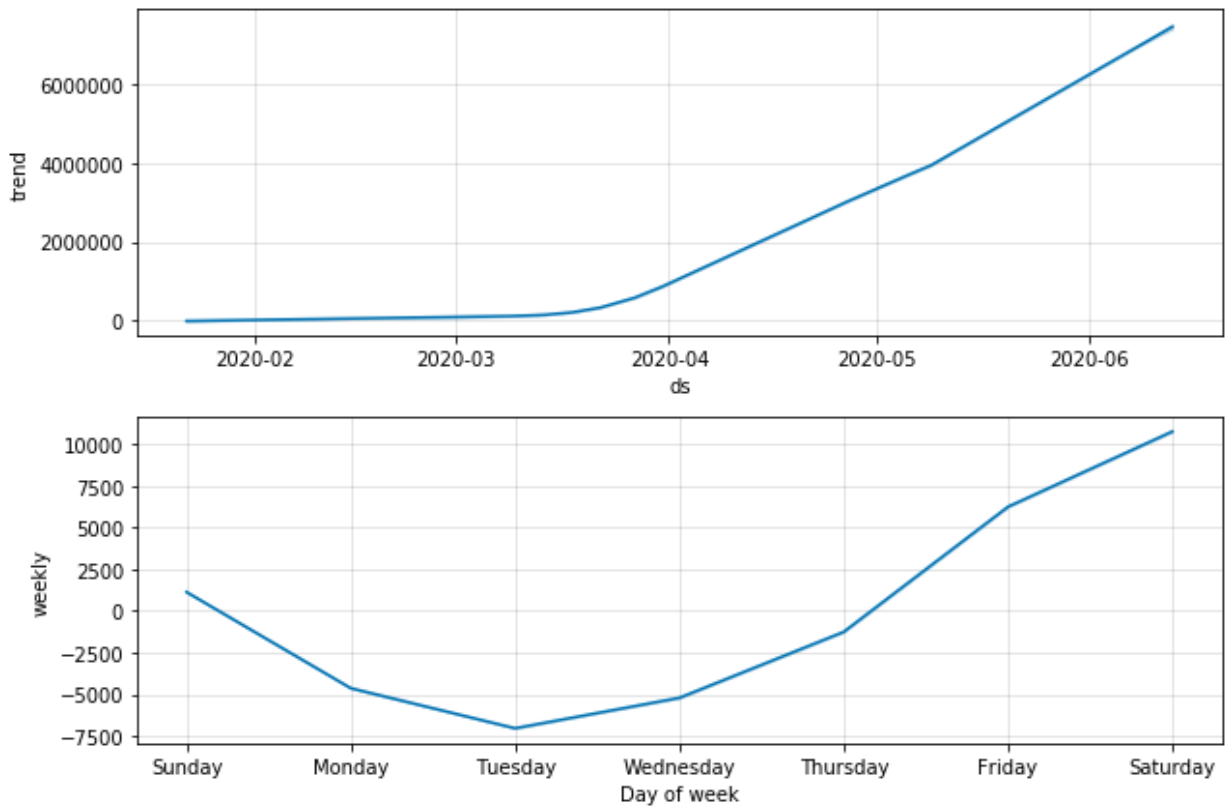
Out[28]:

	ds	yhat	yhat_lower	yhat_upper
139	2020-06-09	7.058134e+06	7.003128e+06	7.108771e+06
140	2020-06-10	7.160518e+06	7.102150e+06	7.219001e+06
141	2020-06-11	7.265030e+06	7.203072e+06	7.325119e+06
142	2020-06-12	7.373086e+06	7.303455e+06	7.450038e+06
143	2020-06-13	7.478154e+06	7.403117e+06	7.558602e+06

In [29]: `confirmed_forecast_plot = m.plot(forecast)`

In [30]: `confirmed_forecast_plot = m.plot_components(forecast)`

In [31]:
```python
ecuador = ec_timeline.groupby('ObservationDate').sum()['Confirmed'].re
set_index()
ecuador
```

Out[31]:

	ObservationDate	Confirmed
0	03/01/2020	6.0
1	03/02/2020	6.0
2	03/03/2020	7.0
3	03/04/2020	10.0
4	03/05/2020	13.0
...	...	...
93	06/02/2020	40414.0
94	06/03/2020	40966.0
95	06/04/2020	40966.0
96	06/05/2020	41575.0
97	06/06/2020	42728.0

98 rows × 2 columns

In [32]:
```python
ecuador.columns = ['ds','y']
ecuador['ds'] = pd.to_datetime(ecuador['ds'])
```

```
In [33]: m = Prophet(interval_width=0.95)
         m.fit(ecuador)
         future = m.make_future_dataframe(periods=7)
         forecast = m.predict(future)
         forecast[['ds','yhat','yhat_lower','yhat_upper']].tail()
```
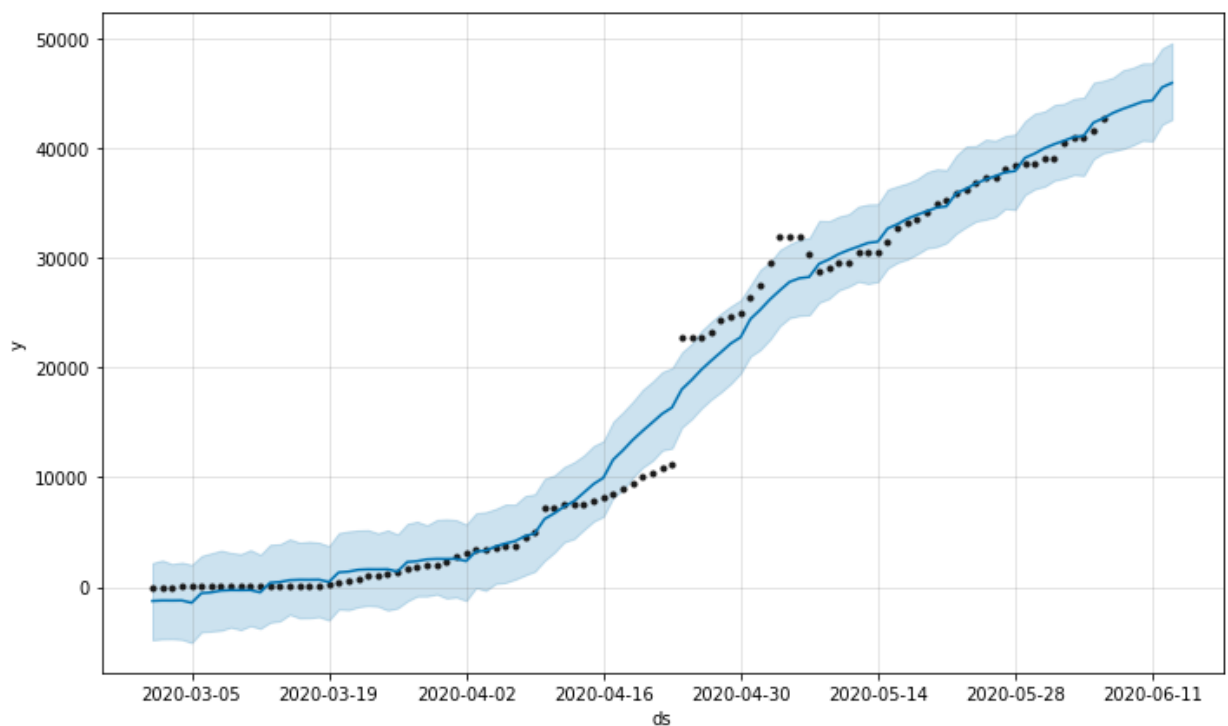
INFO:fbprophet:Disabling yearly seasonality. Run prophet with yearly
_seasonality=True to override this.
INFO:fbprophet:Disabling daily seasonality. Run prophet with daily_s
easonality=True to override this.

Out[33]:

	ds	yhat	yhat_lower	yhat_upper
100	2020-06-09	43883.769430	40273.134291	47323.905913
101	2020-06-10	44218.394359	40692.735232	47711.084615
102	2020-06-11	44332.230771	40638.212239	47726.196027
103	2020-06-12	45530.066778	42154.810450	49090.439876
104	2020-06-13	45925.248011	42599.179764	49557.141989

```
In [34]: ecuador_forecast_plot = m.plot(forecast)
```

In [35]:
```python
poland = pl_timeline.groupby('ObservationDate').sum()['Confirmed'].reset_index()
poland
```

Out[35]:

	ObservationDate	Confirmed
0	03/04/2020	1.0
1	03/05/2020	1.0
2	03/06/2020	5.0
3	03/07/2020	5.0
4	03/08/2020	11.0
...	...	...
90	06/02/2020	24395.0
91	06/03/2020	24687.0
92	06/04/2020	25048.0
93	06/05/2020	25410.0
94	06/06/2020	25986.0

95 rows × 2 columns

In [36]:
```python
poland.columns = ['ds','y']
poland['ds'] = pd.to_datetime(poland['ds'])
```

In [37]:
```python
m = Prophet(interval_width=0.95)
m.fit(poland)
future = m.make_future_dataframe(periods=7)
forecast = m.predict(future)
forecast[['ds','yhat','yhat_lower','yhat_upper']].tail()
```
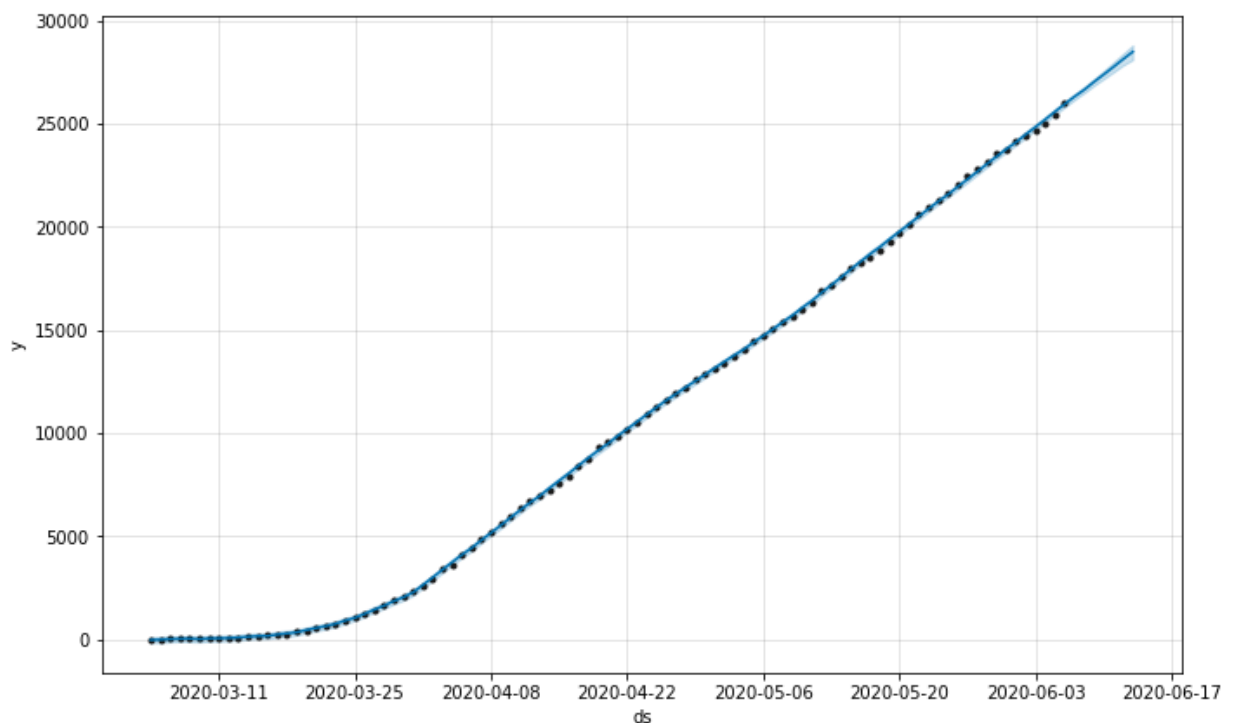
INFO:fbprophet:Disabling yearly seasonality. Run prophet with yearly
_seasonality=True to override this.
INFO:fbprophet:Disabling daily seasonality. Run prophet with daily_s
easonality=True to override this.

Out[37]:

	ds	yhat	yhat_lower	yhat_upper
97	2020-06-09	27031.015794	26857.993853	27184.986167
98	2020-06-10	27390.395549	27184.127366	27581.565264
99	2020-06-11	27754.775241	27511.402849	27997.735223
100	2020-06-12	28132.785728	27847.993047	28415.491959
101	2020-06-13	28498.176421	28114.969513	28825.533057

In [38]:
```python
poland_forecast_plot = m.plot(forecast)
```


In [ ]: