data_presentation

October 22, 2022

```
[ ]: import index_data
     import ipywidgets as widgets
```

```
[ ]: period_type = widgets.Dropdown(
         description = 'Period Type:',
         options = ['Months', 'Years'],
         value = 'Months',
         style = {'description_width': 'initial'}
     )

     period_length = widgets.IntSlider(
         description = 'Length of Period:',
         min = 1,
         max = 60,
         step = 1,
         value = 1,
         style = {'description_width': 'initial'}
     )

     starting_cash = widgets.BoundedIntText(
         description = 'How much would you like to initially invest?',
         min = 1,
         max = 50000,
         step = 0.1,
         value = 50,
         style = {'description_width': 'initial'}
     )

     display(period_type, period_length, starting_cash) #type:ignore
```
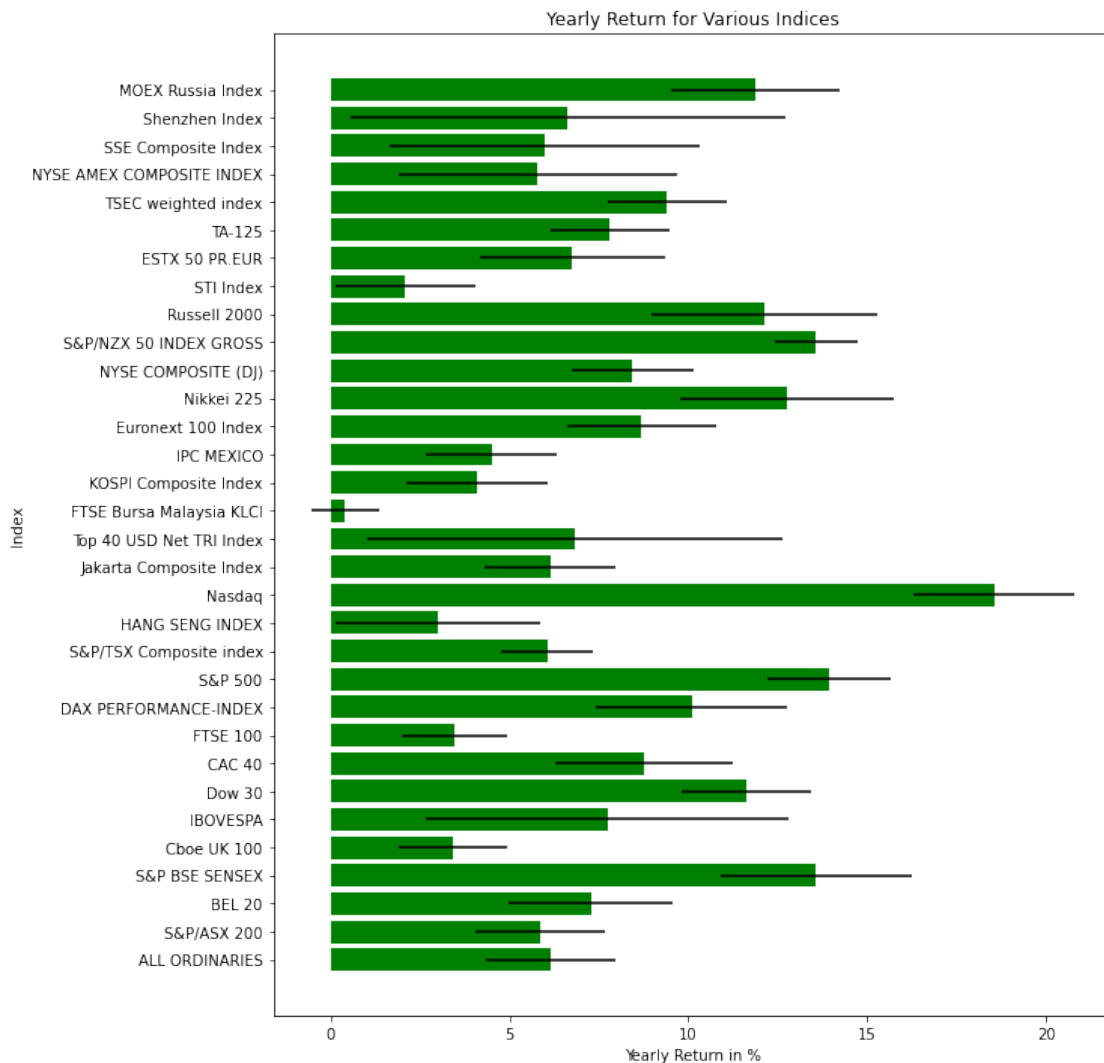
Dropdown(description='Period Type:', options=('Months', 'Years'),␣
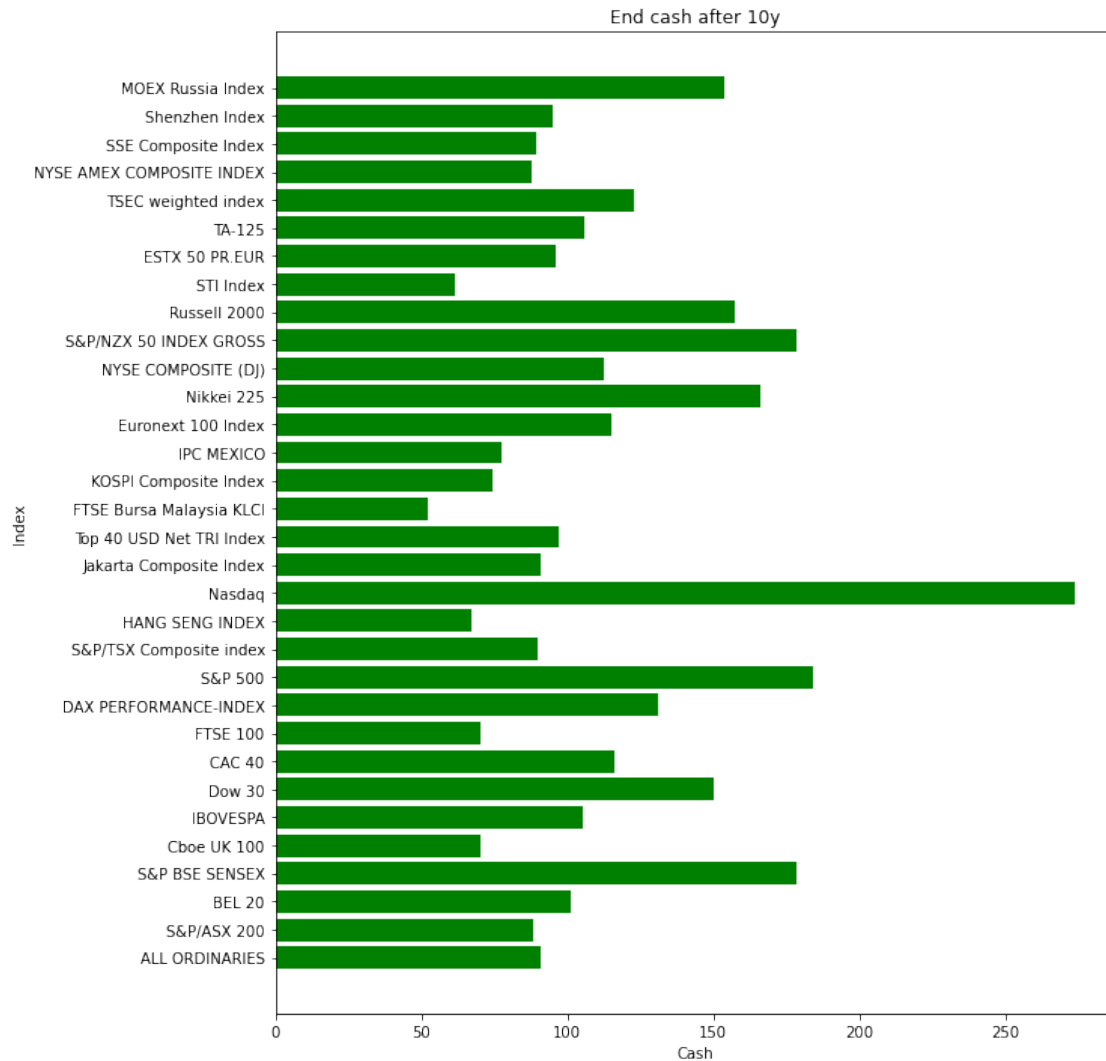 ↪style=DescriptionStyle(description_width='in…

IntSlider(value=1, description='Length of Period:', max=60, min=1,␣
 ↪style=SliderStyle(description_width='initia…

BoundedIntText(value=50, description='How much would you like to initially␣
 ↪invest?', max=50000, min=1, step=0,…

```
if period_type.value == "Months":
    period = str(period_length.value) + "mo"
else:
    period = str(period_length.value) + "y"
```

```
data = index_data.gather_data()
end_money_data = index_data.end_money(starting_cash.value, period, data)
index_data.get_graph(end_money_data, period)
```
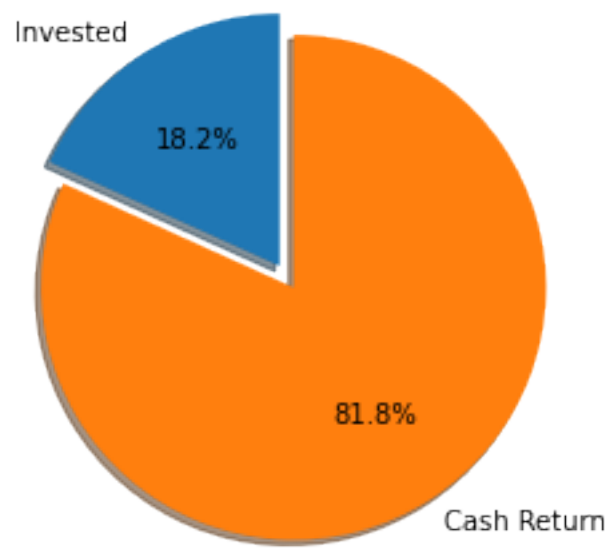

Yearly Return for Various Indices

End cash after 10y

```
index_picker = widgets.Dropdown(
    description = 'Index Details:',
    options = [index for index in data],
    style = {'description_width': 'initial'}
)

display(index_picker) #type: ignore
```

Dropdown(description='Index Details:', options=('ALL ORDINARIES', 'S&P/ASX 200',␣
↪'BEL 20', 'S&P BSE SENSEX', '…

```
dict_index = end_money_data[index_picker.value]
df = index_data.get_index_details(dict_index, starting_cash.value)
```

```
[ ]: df
```

```
[ ]:   Full Exchange Name Ticker  Current Price
    0         Nasdaq GIDS  ^IXIC      10614.844
```