Getfame

names series expressions

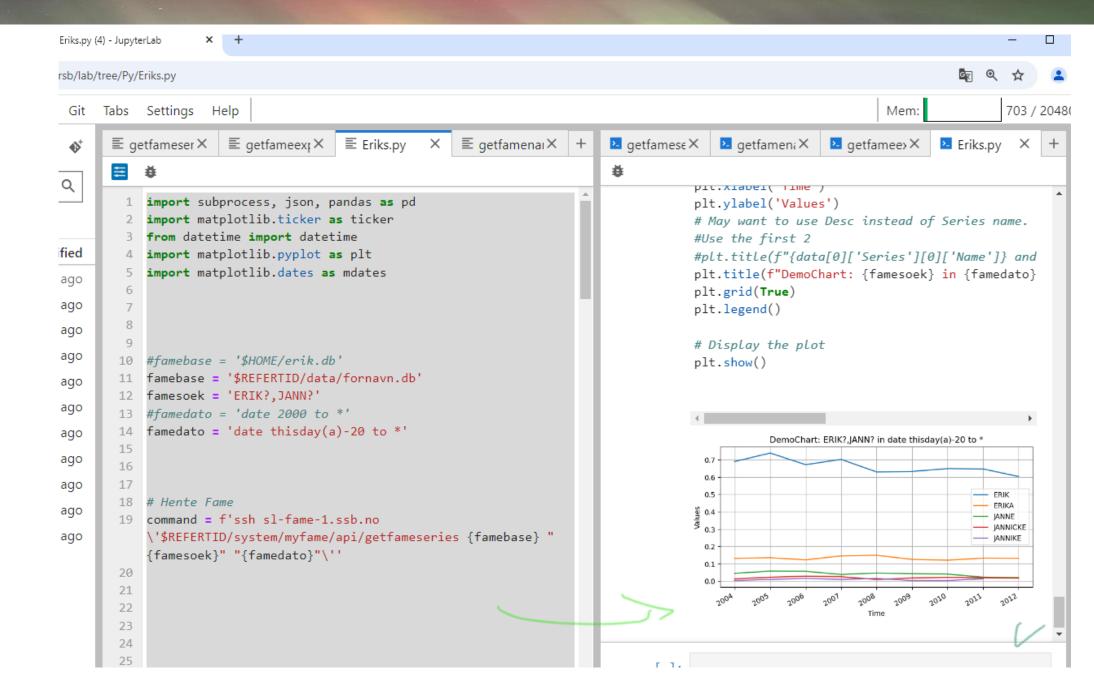
FAME Json api 2024 / 2025

Erik

From Xterm (start here to understand)

```
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sl-fame-1:/ssb/bruker/refertid/system/myfame/api) /ssb/bruker/refertid/system/myfame/api) /ssb/bruker/refertid/system/myfame/api) "date 2023 to *"
 [{"Getfame,jsonapi": "ErikSSB",
 "Version": "Kampala20241001",
 "Executed": "2024-10-09T12:21:25",
 "Famever": "11.53",
 "Database": "/ssb/bruker/refertid/data/kpi_publ.db",
 "Result": "$HOME/,GetFAME/getfameexpr,json",
  "Series":[
 {"Name": "PCT(TOTAL.IPR)",
  "Desc": "pct(total.ipr)",
 "Daterange": "2023 TO *",
 "Frequency": "MONTHLY",
 "Observations":[
 {"Date":"2023-01-01", "Value":0.1588562, "Epo":[1672531200000, 0.1588562]},
 {"Date":"2023-02-01", "Value":0.3965107, "Epo":[1675209600000, 0.3965107]},
 {"Date":"2023-03-01", "Value":0.7898894, "Epo":[1677628800000, 0.7898894]},
 {"Date":"2023-04-01", "Value":1.097179, "Epo":[1680307200000, 1.097179]},
 {"Date":"2023-05-01", "Value":0.4651163, "Epo":[1682899200000, 0.4651163]},
 {"Date":"2023-06-01", "Value":0.617284, "Epo":[1685577600000, 0.617284]},
 {"Date": "2023-07-01", "Value": 0.3834356, "Epo": [1688169600000, 0.3834356]},
 {"Date":"2023-08-01", "Value":-0.7639419, "Epo":[1690848000000, -0.7639419]}
 {"Date":"2023-09-01", "Value":-0.07698229, "Epo":[1693526400000, -0.07698229]},
 {"Date": "2023-10-01", "Value": 1.001541, "Epo": [1696118400000, 1.001541]},
 {"Date":"2023-11-01", "Value":0.5339436, "Epo":[1698796800000, 0.5339436]},
 {"Date":"2023-12-01", "Value":0.07587253, "Epo":[1701388800000, 0.07587253]},
 {"Date":"2024-01-01", "Value":0.07581501,
                                           "Epo":[1704067200000, 0.07581501]},
 {"Date": "2024-02-01", "Value": 0,2272727, "Epo": [1706745600000, 0,22727271},
 {"Bate":"2024-03-01", "Value":0.2267574, "Epo":[1709251200000, 0.2267574]},
 {"Date":"2024-04-01", "Value":0.8295626, "Epo":[1711929600000, 0.8295626]};
 {"Date": "2024-05-01", "Value": -0.1495886, "Epo": [1714521600000, -0.1495886]},
 {"Date":"2024-06-01", "Value":0.2247191, "Epo":[1717200000000, 0.2247191]},
 {"Date":"2024-07-01", "Value":0.5231689, "Epo":[1719792000000, 0.52316891},
 {"Date":"2024-08-01", "Value":-0.8921933, "Epo":[1722470400000, -0.8921933]}
  "Elapsed_time_seconds":0.257
  sl-fame-1:/ssb/bruker/refertid/system/myfame/api>
```

From jupyter using py:



1. getfamenames \$REFERTID/system/myfame/api/getfamenames

• List FAME series & formulas with **metadata**, from fame database(s) given a list of series/wildcards:

```
$REFERTID/system/myfame/api/getfamenames "$REFERTID/data/cpi.db, erik.db" "K011?.ipr, k09?.ipr"
"Series":[
{"Name":"CPI'K011.IPR","Class":"SERIES","Observed":"AVERAGED","Desc": "Food","Created":"2017-01-
18T18:28:28","Updated":"2024-09-10T08:54:45"},
{"Name":"CPI'K0111.IPR","Class":"SERIES","Observed":"AVERAGED","Desc":"Bread pris","Created":"2017-01-
18T18:28:28","Updated":"2024-09-10T08:54:45"},
{"Name":"CPI'K01111.IPR","Class":"SERIES","Observed":"AVERAGED","Desc":"Rice_index price","Created":"2017-01-
18T18:28:28","Updated":"2024-09-10T08:54:44"},
{"Name":"CPI'K01111_11111.IPR","Class":"SERIES","Observed":"AVERAGED","Desc":"Ris_indeks pris","Created":"2017-
01-18T18:28:28","Updated":"2024-09-10T08:54:44"},
{"Name":"CPI'K01112.IPR","Class":"SERIES","Observed":"AVERAGED","Desc":"Mel og andre kornprodukter_indeks
pris","Created":"2017-01-18T19:24:41","Updated":"2024-09-10T08:54:44"},
{"Name":"CPI'K01112_11121.IPR","Class":"SERIES","Observed":"AVERAGED","Desc":"Mel_indeks pris","Created":"2017-
01-18T18:28:28","Updated":"2024-09-10T08:54:44"}
```

2. getfameseries \$REFERTID/system/myfame/api/getfameseries

Data-observations, from a fame database given a list of wildcards, and optional daterange:

getfameseries "/ssb/bruker/refertid/data/kpi_publ.db, \$HOME/kpi.db" "K01199?.ipr, K8?" "freq m; date jul24 to aug24; deci 1"

```
"Series": [
{"Name": "K01199.IPR",
"Desc": "Andre matvarer ikke ellers nevnt_indeks pris",
"Daterange": "JUL24 TO AUG24",
"Frequency": "MONTHLY",
"Observations":[
{"Date":"2024-07-01", "Value":142.4, "Epo":[1719792000000, 142.4]},
{"Date":"2024-08-01", "Value":135.3, "Epo":[1722470400000, 135.3]}
]} ,
{"Name": "K01199_11991.IPR",
"Desc": "Supper og kraft_indeks pris",
"Daterange": "JUL24 TO AUG24",
"Frequency": "MONTHLY",
"Observations":[
{"Date":"2024-07-01", "Value":151.6, "Epo":[1719792000000, 151.6]},
{"Date": "2024-08-01", "Value": 143.3, "Epo": [1722470400000, 143.3]}
]} ,
```

3. getfameexpr \$REFERTID/system/myfame/api/getfameexpradvanced mode

• Data-observations, from FAME database(s) given a fame-expression:

```
getfameexpr " $REFERTID/data/fornavn.db " "mave(ERIK,2)" "date 2000 to 2010"
getfameexpr " $REFERTID/data/fornavn.db " "Lsum(ERIK,EIRIK)" "date 2000 to *"
getfameexpr " $REFERTID/data/kpi_publ.db,mycpi.db " "convert(total.ipr,annual,constant)" "date *; deci 1 "
getfameexpr " $REFERTID/data/kpi_publ.db,mycpi.db " "PCT(mycpi'K09.IPR)" "date 2025; deci 1"
```

Produces same json outp..ut as getfameseries

Samples (shows help info, when no arguments passed)

- 1. \$REFERTID/system/myfame/api/getfamenames
- 2. \$REFERTID/system/myfame/api/getfameseries
- 3. \$REFERTID/system/myfame/api/getfameexpr

For **jupyterlab** sample, see:

 https://github.com/statisticsnorway/getfame-jsonapi/blob/main/sample.py

More getfameseries samples:

\$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr" \$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr " "date 2024 " \$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr" "freq m; date thisday(m)-5 to *" \$REFERTID/system/myfame/api/getfameseries \$REFERTID/data/fornavn.db "?ERIK,KRISTIN,JIM?}" "date 2010 to 2012" \$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/fornavn.db "?JAN?" "date 2000 to 2005" \$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/fornavn.db "JI?" "date 2000 to *; deci 1"

\$REFERTID/system/myfame/api/getfameseries "fornavn.db, name.db" "JI? ,MATT?" "date 2000 to *; deci 2«

\$REFERTID/system/myfame/api/getfameseries «cpi1.db,cpi2.db,cpi form.db" «Total.ipr" "date 2025; deci 2"

More getfameexpr expressions

\$REFERTID/system/myfame/api/getfameexpr \$REFERTID/data/fornavn.db "mave(ERIK,2)" "date 2000 to 2010 "

\$REFERTID/system/myfame/api/getfameexpr \$REFERTID/data/fornavn.db "Lsum(ERIK,EIRIK)" "date 2000 to * "

\$REFERTID/system/myfame/api/getfameexpr \$REFERTID/data/kpi_publ.db "convert(total.ipr,annual,constant)" "date 2020 to * "

--use of custom common **cb** basis to set base-year to 2010 (instead of current 2015)

\$REFERTID/system/myfame/api/getfameexpr getfameexpr /ssb/bruker/refertid/data/kpi_publ.db "cb(total.ipr,2010)" "date 2010 to 2020"

\$REFERTID/system/myfame/api/getfameexpr \$REFERTID/data/kpi_publ.db "total.ipr" "freq m; date jan20 to feb20; deci 0 " \$REFERTID/system/myfame/api/getfameexpr «cpi1.db,cpi2.db,cpi_form.db" "cpi1'Total.ipr" "date 2025; deci 2"

\$REFERTID/system/myfame/api/getfameexpr \$REFERTID/data/fornavn.db "ERIK+EIRIK" "date 2000 to 2010; deci 1"

Using R from Jupiterlab

```
r_2series.ipynb
st.ipynb
                       PySample.ipynb
                                                                                                       R \bigcirc
                                Code
        options(repr.plot.width = 16, repr.plot.height = 6) # Adjust the width and height as neede
        ggplot(df_all, aes(x = Date, y = Value, color = Series)) +
      geom_line() +
      scale_x_datetime(labels = date_format("%b%y"), date_breaks = "1 year") +
      labs(title = paste("ChaRt: ", "CPI % Changes"),
           x = "month/year", y = "% Changes of CPI") +
      theme_minimal() +
      theme(axis.text.x = element text(angle = 45, hjust = 1)) +
      guides(color = guide_legend(title = "")) +
      scale y continuous(labels = scales::comma)
      else {
        cat("\nNo data to plot.\n")
      ChaRt: CPI % Changes
                                                                                       PCT/CONVERT/TOTAL IPR ANN CON END
                                                                                       YTYPCT(TOTAL.IPR)
```

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