Package 'enviro'

February 7, 2025

Title Displays data of pimoroni enviro from prometheus

Version 0.0.0.9000

Description Displays data of pimoroni enviro and pimoroni enviro + exported from prometheus

Depends shiny,shinydashboard,httr,jsonlite,xts,zoo,plotly

License GPL

Encoding UTF-8

LazyData true

Author Dimitrios Zacharatos [aut, cre]

Maintainer Dimitrios Zacharatos <dimitrios@psycholate.com>

RoxygenNote 7.3.2

Contents

`get_data` *Get Data from Prometheus*

Description

Get Data from Prometheus

Usage

```
get_data(
  start_time = format(Sys.time() - 60 * 60 * 24 * 7, "%Y-%m-%dT%H:%M:%SZ"),
  end_time = format(Sys.time(), "%Y-%m-%dT%H:%M:%SZ"),
  urlq = prometheus_url[1]
)
```

Arguments

start_time	start time in this format: "2025-01-31T11:48:08Z"
end_time	end time in this format: "2025-02-07T11:48:33Z"
urlq	Prometheus url

Examples

```
prometheus_url=c("http://pip1.crabdance.com:1507/api/v1/query_range",
                 "http://pip1.crabdance.com:1505/api/v1/query_range")
start_time<-format(Sys.time()-60*60*24*7,"%Y-%m-%dT%H:%M:%SZ")
end_time<-format(Sys.time(),"%Y-%m-%dT%H:%M:%SZ")
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[2])
head(filtered_df)
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[1])
head(filtered_df)
```

---

pimoroni *enviro*

Description

enviro

Usage

```
pimoroni(prometheus_url, timezone = "Europe/Bucharest")
```

Arguments

prometheus_url	prometheus url
timezone	the timezone prometheus exports data

Examples

```
pimoroni(prometheus_url=c("http://pip1.crabdance.com:1507/api/v1/query_range",
                          "http://pip1.crabdance.com:1505/api/v1/query_range"))
```

---

plot_gauge *Plot Gauge*

Description

Plot Gauge

Usage

```
plot_gauge(data = filtered_df, variable = "Temperature")
```

Arguments

data	dataframe
variable	one of "Temperature" "Humidity" "Pressure" "Lux" "Proximity" "NH3" "Reducing" "Oxidising" "PM1" "PM2.5" "PM10"

Examples

```
prometheus_url=c("http://pip1.crabdance.com:1507/api/v1/query_range",
                 "http://pip1.crabdance.com:1505/api/v1/query_range")
start_time<-format(Sys.time()-60*60*24*7,"%Y-%m-%dT%H:%M:%SZ")
end_time<-format(Sys.time(),"%Y-%m-%dT%H:%M:%SZ")
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[2])
head(filtered_df)
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[1])
head(filtered_df)
plot_gauge(data=filtered_df,variable="Temperature")
plot_gauge(data=filtered_df,variable="Humidity")
plot_gauge(data=filtered_df,variable="Pressure")
plot_gauge(data=filtered_df,variable="Lux")
plot_gauge(data=filtered_df,variable="Proximity")
plot_gauge(data=filtered_df,variable="NH3")
plot_gauge(data=filtered_df,variable="Reducing")
plot_gauge(data=filtered_df,variable="Oxidising")
plot_gauge(data=filtered_df,variable="PM1")
plot_gauge(data=filtered_df,variable="PM2.5")
plot_gauge(data=filtered_df,variable="PM10")
```

---

plot_time_series *Plot Time Series*

Description

Plot Time Series

Usage

```
plot_time_series(
  data = filtered_df,
  variable = "Temperature",
  scale = "",
  k = 30
)
```

Arguments

data	start time in this format: "2025-01-31T11:48:08Z"
variable	one of "Temperature" "Humidity" "Pressure" "Lux" "Proximity" "NH3" "Reducing" "Oxidising" "PM1" "PM2.5" "PM10"
scale	scale
k	integer width of the rolling window. Must be odd for rollmedian

Examples

```
prometheus_url=c("http://pip1.crabdance.com:1507/api/v1/query_range",
                 "http://pip1.crabdance.com:1505/api/v1/query_range")
start_time<-format(Sys.time()-60*60*24*7,"%Y-%m-%dT%H:%M:%SZ")
end_time<-format(Sys.time(),"%Y-%m-%dT%H:%M:%SZ")
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[2])
head(filtered_df)
filtered_df<-get_data(start_time=start_time,end_time=end_time,urlq=prometheus_url[1])
head(filtered_df)
plot_time_series(data=filtered_df,variable="Temperature")
plot_time_series(data=filtered_df,variable="Humidity")
plot_time_series(data=filtered_df,variable="Pressure")
plot_time_series(data=filtered_df,variable="Lux")
plot_time_series(data=filtered_df,variable="Proximity")
plot_time_series(data=filtered_df,variable="NH3")
plot_time_series(data=filtered_df,variable="Reducing")
plot_time_series(data=filtered_df,variable="Oxidising")
plot_time_series(data=filtered_df,variable="PM1")
plot_time_series(data=filtered_df,variable="PM2.5")
plot_time_series(data=filtered_df,variable="PM10")
```

Index