GitHub

2023/4

BIA DASHBOARD PROJECT

VISUALIZE YOUR BIA - .CSV REPORTS

LEGENDA

- ## Problem to Solve
- ## WebApp Structure
- ## Quick Guide

Additional Infos

This personal project is currently available at: **https://bia-dashboard-visualizer.streamlit.app/**

You can find the source code and my contacts on my **GitHub Repository** at: **https://github.com/francescom839/BIA-Dashboard-Visualizer**

Don't forget to download the **"Correctly Formatted Dataset"** in the user guide to try the service yourself!

All my contacts are found here: **https://bia-dashboard-visualizer.streamlit.app/Contacts**

Problem to Solve

I am currently following a nutritionist to get the most out of my weightlifting training.

Every month, I do a **Bioelectrical Impedance Analysis (BIA)** and every time I receive a hard-to-understand .**csv** file with 44 columns.

After searching online for a tool that would allow me to visually see my data, I was unable to find an **easy-to-use** option. That's why I took it upon myself to create a web app that could help me visualize my data.
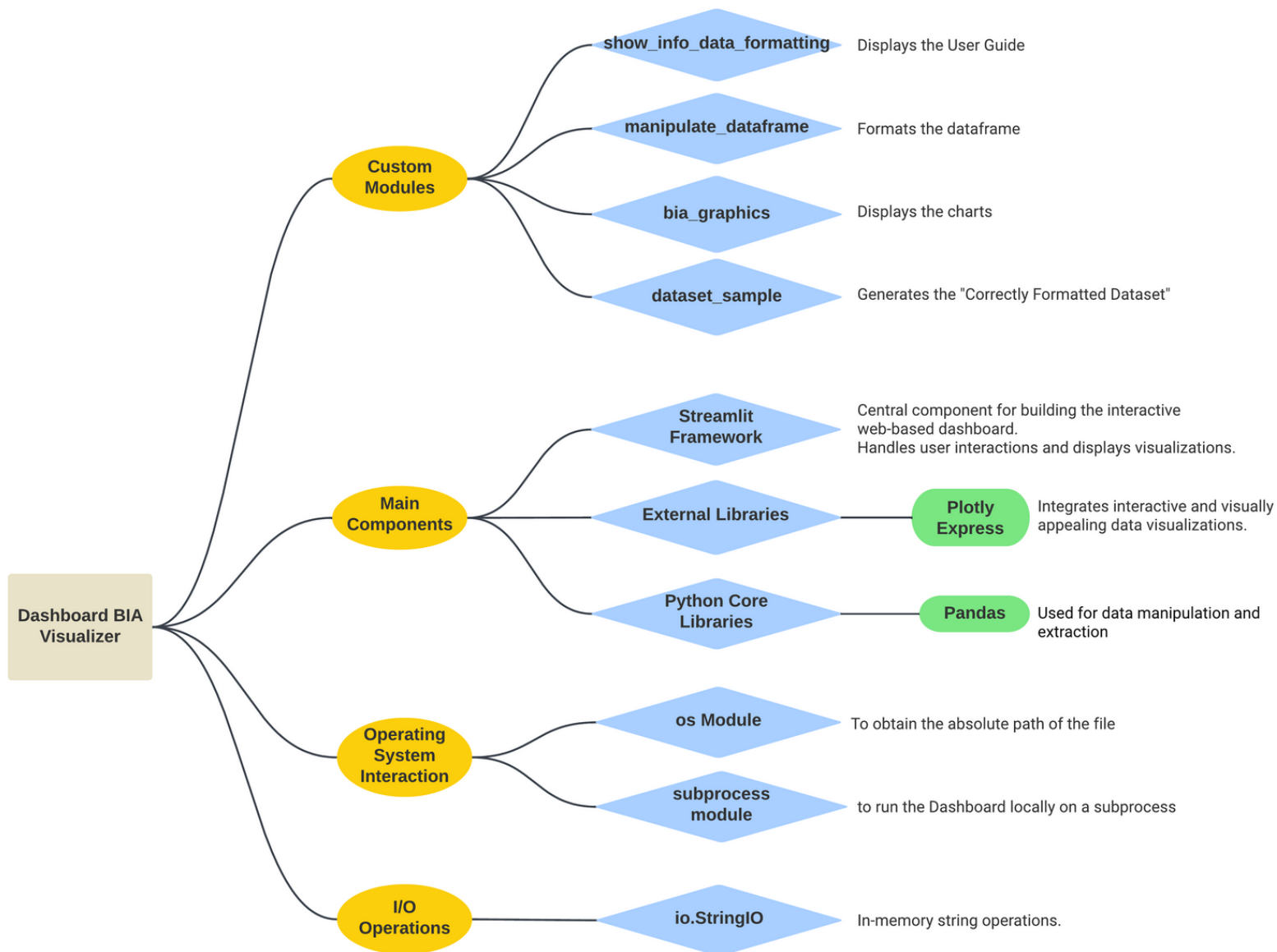
BIA Dashboard Visualizer is designed to easily display a person's overall progress with their body and can be used by anyone.

The web app allows you to visually see:

1. **Weight** progress **(bar chart/line chart)**
2. **Fat Mass (FM)** and **Fat-Free Mass (FFM)** ratio **(pie chart)**
3. **Intra-Cellular-Weight (ICW)** and **Extra-Cellular-Weight (ECW)** ratio **(line chart)**
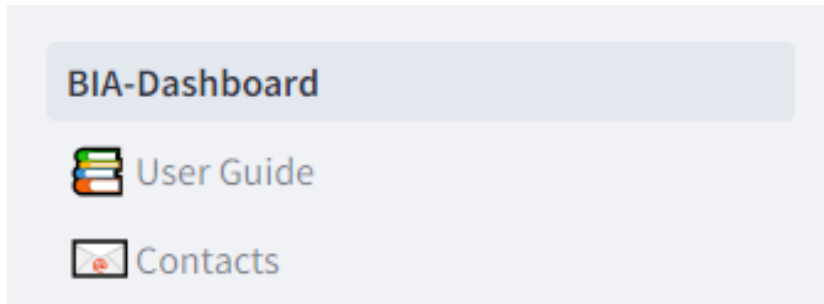4. **Body Metabolism Rate (BMR)** and its last change **(gauge)**

Users can download a **"Correctly Formatted Dataset"** to see how their data needs to be formatted and allow them to easily approach the app.
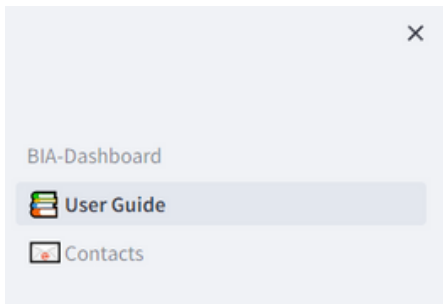
WebApp Structure

Dashboard BIA Visualizer

Custom Modules
- **show_info_data_formatting** — Displays the User Guide
- **manipulate_dataframe** — Formats the dataframe
- **bia_graphics** — Displays the charts
- **dataset_sample** — Generates the "Correctly Formatted Dataset"

Main Components
- **Streamlit Framework** — Central component for building the interactive web-based dashboard. Handles user interactions and displays visualizations.
- **External Libraries** — **Plotly Express** — Integrates interactive and visually appealing data visualizations.
- **Python Core Libraries** — **Pandas** — Used for data manipulation and extraction

Operating System Interaction
- **os Module** — To obtain the absolute path of the file
- **subprocess module** — to run the Dashboard locally on a subprocess

I/O Operations
- **io.StringIO** — In-memory string operations.

Quick Guide

Navigate through pages

BIA-Dashboard

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📧 Contacts

Check the format guide

BIA-Dashboard

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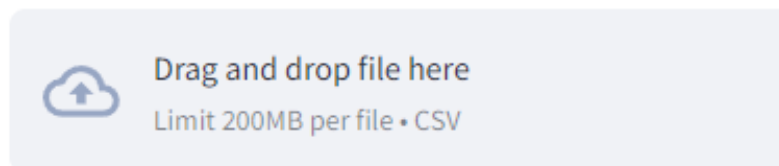
×

How to format your Data

⬇ Download: Correctly formatted Dataset

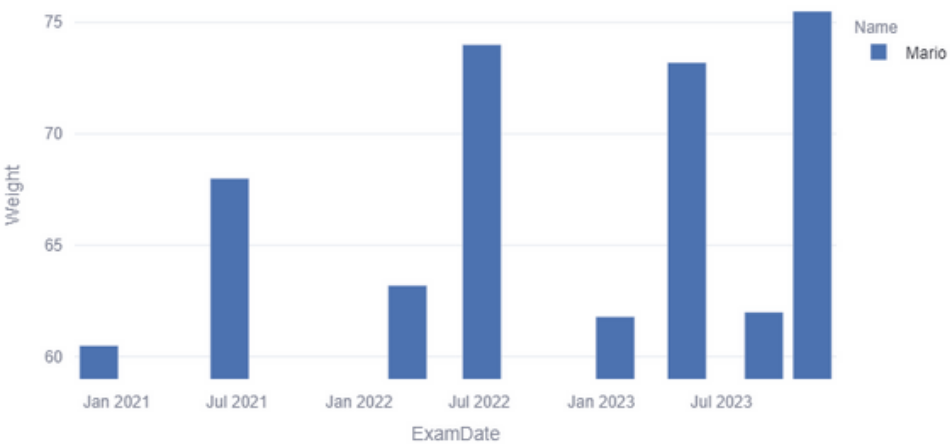❗ *Your table headers need to be written the same way as shown in this example*
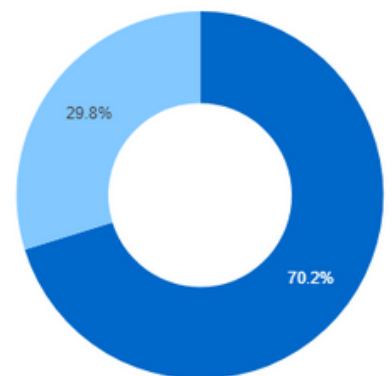
Upload your .CSV file

☁ Drag and drop file here
Limit 200MB per file • CSV

ⓘ To see the Dashboard, you need to upload a file

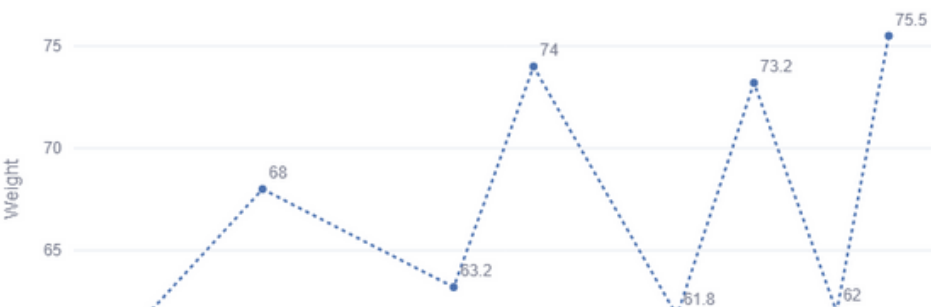# Visualize your Dashboard!

Barchart Weight - Exam Date

Fat Mass % and Fat Free Mass % ratio (Most Recent)

Body weight per Examdate Dynamics

Intra-Cellular-Weight (ICW) and Extra-Cellular-Weight (ECW) Over Time