**Image to Base64 Converter for Dashboards**

**Overview**

This repository provides a Python script that converts images from a local folder into Base64 format and stores the data in CSV and Parquet formats. The processed data can be used in dashboards, including Power BI, for easy visualization.

**Features**

* Downloads and stores country flags in a structured format.
* Provides access to raw image files for direct use.
* Converts images to Base64 encoding for embedding in dashboards.
* Extracts ISO 3166-1 numeric codes for country identification.
* Saves the processed data in CSV and Parquet formats.
* Handles encoding issues for seamless data processing.

**Requirements**

Make sure you have the following dependencies installed:

bash

CopyEdit

pip install pandas pycountry pyarrow

**Usage**

1. Place the country flag images in the specified local directory.
2. Ensure the CSV file contains the correct image file paths and country names.
3. Run the script to generate the Base64-encoded data.
4. The output files (.csv and .parquet) will be saved in the same directory.

**Output Files**

* Country\_Flags\_Base64.csv: Contains country names, ISO codes, and Base64-encoded images.
* Country\_Flags\_Base64.parquet: Optimized format for large datasets.

**Sample Data Structure**

| **Country Name** | **ISOCountrycode** | **Base64** |
| --- | --- | --- |
| USA | 840 | iVBOR... |
| India | 356 | iVBOR... |

**License**

This project is licensed under the MIT License.

**Contributions**

Feel free to fork this repository and submit pull requests for improvements!

**Contact**

For any issues or suggestions, open an issue on GitHub.