Eco-Friendly Lifestyle Tracker

About the Project

This project aims to promote eco-friendly practices and optimize resource consumption. It includes Python scripts and data files for analyzing environmental factors such as water consumption, recycling, and energy management.

File and Folder Structure

```
|— eco friendly tracker/
|— consumption_log.csv         # CSV file containing consumption data
|— eco_friendly_data.csv       # Eco-friendly data file
|— pythonproject/                    # Subfolder containing Python scripts
   |— main.py                # Main Python script
   |— module1_water.py       # Module related to water consumption
   |— module2_recycling.py   # Module related to recycling
   |— module3_energy.py      # Module for energy analysis
   |— performance_analysis.py # Performance analysis module
```

Install Requirements: To use the project, you need Python 3.13.1 or later version.

Required Libraries and Modules

This project utilizes several built-in and custom Python modules for functionality such as data handling, visualizations, and performance analysis. Below is a list of the libraries and modules used:

Built-in Libraries

1. **csv**
2. **datetime**
3. **random**

Third-party Libraries

1. **matplotlib.pyplot**

Custom Modules

1. **module1_water**
2. **module2_recycling**
3. **module3_energy**
4. **performance_analysis**

Download Project Files: Extract all files into a folder and set your Python working environment to this folder.

Usage

1. Run the Main Script: To ensure the program works correctly, navigate to the `finalproject` directory, where the `eco_friendly_data.csv` file is located. This ensures that the data you input will be correctly saved to the file.

   ```
   cd finalproject
   ```

2. Start the program by running the `main.py` file

   ```
   python main.py
   ```

Data Files

- **consumption_log.csv:** Logs data on water, energy, or recycling consumption.
- **eco_friendly_data.csv:** Summarizes eco-friendly actions.

Authors

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