

JSON Preprocessor – README

Overview

This utility provides preprocessing functions for JSON-like Python objects, such as normalizing dictionary keys and removing null values.

Module Description

json_preprocessor.py

Contains the JsonPreprocessor class with the following methods:

- **normalize_keys(json_obj)**

Normalizes all dictionary keys by converting them to lowercase, trimming spaces, and replacing spaces or hyphens with underscores. Works recursively on nested dictionaries and lists.

- **strip_nulls(json_obj)**

Removes all None (null) values from dictionaries and lists recursively.

How to Run the Code

1. Ensure Python 3 is installed.
2. Save the file as json_preprocessor.py.
3. Run the script from the terminal:

```
python json_preprocessor.py
```

How to Run Tests

No automated tests are included. You can test functionality by modifying the input JSON data inside the file or by calling the class methods manually in a Python interpreter.

Sample Input / Output

Sample Input:

```
{"User Name": "Alice", "Age": None, "Phone-Number": "12345"}
```

Sample Output:

```
{"user_name": "Alice", "phone_number": "12345"}
```

Notes

- Supports nested JSON structures.
- Key normalization is applied before null removal.