

Photo Metadata Extractor Tool - Python Coding Standards

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1. Function naming:

- a. Function names will be descriptive of the intended purpose of the given function.
- b. Well formed examples:

```
def send_request():    def get_auth_token() -> str:
```

2. Type Hinting:

- a. When possible a colon will follow a variable definition and then the type of the variable.
- b. This should be especially used when defining the parameters of a function.
- c. Well formed examples:

```
index: int    def get_auth_token(client_secret: str):
```

3. Public variable naming:

- a. Public variables will start with a lowercase letter and use complete but concise words to describe the purpose of the variable.
- b. Variables should be unique and not reused.
- c. Well formed examples:

```
author_last_name: str    publication_date: datetime
```

4. Private variable naming:

- a. Private variables will start with two underscores and follow the other naming conventions for public variables. Python does not implement the traditional access types such as public, private, or protected, therefore this rule must be respected to properly maintain the code.
- b. Well formed examples:

```
__client_id: str    __client_secret: str
```

5. Comments:

- Function Signatures will be included at the start of each function and describe its purpose, parameters, possible return values.
- Ambiguous code will include commented clarifications beforehand.
- Well formed examples:

```
def get_oauth_token(client_id: str, client_secret: str) -> str:
    """
    Sends an authentication request to the OCLC token server and
    returns the given token. Returns an empty string if the
    request fails.

    :param client_id: The Client ID portion of the API key, which
    should be 80 characters long
    :param client_secret: The Client Secret Key, which should be
    32 characters long
    :return:
    """
```

6. Indentation & Spacing:

- A space will follow commas and surround arithmetic operators, except when using increment or decrement operators.
- Distinct function declarations will be separated by exactly two newlines.
- Tabs will be defined as four white space characters.
- Well formed examples:

| | | |
|-----------------------|--------|-----|
| x = (a + b) % (c - d) | i += 1 | i++ |
|-----------------------|--------|-----|

7. Concise function length:

- Complex routines should be simple operations or be broken down into other functions.