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# **PhotoScript**

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## PHOTOSCRIPT

### 1.1 What is PhotoScript

PhotoScript provides a python wrapper around Apple Photos applescript interface. With PhotoScript you can interact with Photos using python. Runs only on MacOS. Tested on MacOS Catalina.

### 1.2 Installation

PhotoScript uses setuptools, thus simply run:

```
python3 setup.py install
```

### 1.3 Example

```
""" Simple example showing use of photoscript """

import photoscript

photoslib = photoscript.PhotosLibrary()

photoslib.activate()
print(f"Running Photos version: {photoslib.version}")

album = photoslib.album("Album1")
photos = album.photos

for photo in photos:
    print(f"{photo.title}, {photo.description}, {photo.keywords}")

new_album = photoslib.create_album("New Album")
photoslib.import_photos(["/Users/rhet/Downloads/test.jpeg"], album=new_album)

photoslib.quit()
```

## 1.4 See Also

- [osxphotos](#): Python package that provides read-only access to the Photos library including all associated meta-data.

## DOCUMENTATION

## 2.1 photoscript package

### 2.1.1 photoscript module

**class** `photoscript.PhotosLibrary`

**activate** ()

activate Photos.app

**album** (\**name*, *uuid=None*, *top\_level=False*)

Album instance by name or id

**Parameters**

- **name** – name of album
- **uuid** – id of album
- **top\_level** – if True, searches only top level albums; default = False

**Returns** Album object or None if album could not be found

Raises: ValueError if both name and id passed. Must pass only name or id but not both. If more than one album with same name, returns the first one found.

**album\_names** (*top\_level=False*)

List of album names in the Photos library

**Parameters** **top\_level** – if True, returns only top-level albums otherwise also returns albums in sub-folders; default is False

**albums** (*top\_level=False*)

list of Album objects for all albums

**create\_album** (*name*, *folder=None*)

creates an album

**Parameters**

- **name** – name of new album
- **folder** – Folder object in which to create new album. If None, creates top-level album. Default is None.

**Returns** Album object for newly created album

**Raises** **AppleScriptError** if error creating the album –

**create\_folder** (*name*, *folder=None*)

creates a folder

**Parameters**

- **name** – name of new folder
- **folder** – Folder object in which to create the new folder. If None, creates top-level folder. Default is None.

**Returns** Folder object for newly created folder

**Raises** **AppleScriptError** if folder cannot be created –

**delete\_album** (*album*)

deletes album (but does not delete photos in the album)

**Parameters** **album** – an Album object for album to delete

**delete\_folder** (*folder*)

deletes folder (Not yet implemented)

**Parameters** **folder** – a Folder object for folder to delete

**property favorites**

Album object for the Favorites album

**folder** (*\*name*, *uuid=None*, *top\_level=True*)

Folder instance by name or uuid

**Parameters**

- **name** – name of folder
- **uuid** – id of folder
- **top\_level** – if True, only searches top level folders by name; default is True

**Returns** Folder object or None if folder could not be found

Raises: ValueError if both name and id passed. Must pass only name or id but not both. If more than one folder with same name, returns first one found.

**folder\_by\_path** (*folder\_path*)

Return folder in the library by path

**Parameters** **folder\_path** – list of folder names, e.g. ["Folder", "SubFolder1", "SubFolder2"]

**Returns** Folder object for folder at folder\_path or None if not found

**folder\_names** (*top\_level=False*)

List of folder names in the Photos library

**Parameters** **top\_level** – if True, returns only top-level folders otherwise also returns sub-folders; default is False

**folders** (*top\_level=True*)

list of Folder objects for all folders

**property frontmost**

True if Photos.app is front most app otherwise False

**import\_photos** (*photo\_paths*, *album=None*, *skip\_duplicate\_check=False*)

import photos

**Parameters**



- **photos** – list of file paths to import
- **album** – optional, Album object for album to import into
- **skip\_duplicate\_check** – if True, Photos will not check for duplicates on import, default is False

**property name**

name of Photos.app

**photos** (*search=None, uuid=None*)

List of Photo objects for items in the library Note: for a large library, calling photos() may run a *very* long time (minutes)

**Parameters**

- **search** – optional text string to search for (returns matching items)
- **uuid** – list of UUIDs to get
- **may pass search or uuid but not both** (*you*) –

**Returns** List of Photo objects or [] if no photos found

Raises: ValueError if both search and uuid are passed

**quit** ()

quit Photos.app

**property selection**

List of Photo objects for currently selected photos or [] if no selection

**property version**

version of Photos.app

**class** photoscript.**Album** (*uuid*)

**add** (*photos*)

add photos from the library to album

**Parameters** **photos** – list of Photo objects to add to album

**export** (*path, original=True, edited=True, timeout=120*)

Export photos in album to path

**Parameters**

- **path** – path to export to
- **original** – if True exports original photo
- **edited** – if True, exports edited version, if one exists
- **timeout** – number of seconds to timeout waiting for Photos to respond

**Returns** list of names of exported photos

**import\_photos** (*photo\_paths, skip\_duplicate\_check=False*)

import photos

**Parameters**

- **photos** – list of file paths to import
- **skip\_duplicate\_check** – if True, Photos will not check for duplicates on import, default is False

**property name**

name of album

**property parent**

Return parent Folder object

**property parent\_id**

parent container id

**path\_str** (*delim='/'*)

**Return internal library path to album as string.** e.g. "Folder/SubFolder/AlbumName"

**Parameters** *delim* – character to use as delimiter between path elements; default is "/"

**Raises** `ValueError` if *delim* is not a single character –

**property photos**

list of Photo objects for photos contained in album

**remove** (*photos*)

**Remove photos from album.** Note: Photos does not provide a way to remove photos from an album via AppleScript. This method actually creates a new Album with the same name as the original album and copies all photos from original album with exception of those to remove to the new album then deletes the old album.

**Parameters** *photos* – list of Photo objects to remove

**Returns** new Album object for the new album with photos removed.

**remove\_by\_id** (*photo\_ids*)

**Remove photos from album.** Note: Photos does not provide a way to remove photos from an album via AppleScript. This method actually creates a new Album with the same name as the original album and copies all photos from original album with exception of those to remove to the new album then deletes the old album.

**Parameters** *photo\_ids* – list of photo ids to remove

**Returns** new Album object for the new album with photos removed.

**property title**

title of album (alias for Album.name)

**property uuid**

UUID of Album

**class** `photoscript.Photo` (*uuid*)

**property altitude**

GPS altitude of photo in meters

**property date**

date of photo as timezone-naive datetime.datetime object

**property description**

description of photo

**duplicate** ()

duplicates the photo and returns Photo object for the duplicate

**export** (*path*, *original=True*, *edited=True*, *timeout=120*)

Export photo

**Parameters**

- **path** – path to export to
- **original** – if True exports original photo
- **edited** – if True, exports edited version, if one exists
- **timeout** – number of seconds to timeout waiting for Photos to respond

**Returns** name of exported photo

**property favorite**

return favorite status (boolean)

**property filename**

filename of photo

**property height**

height of photo in pixels

**property keywords**

list of keywords for photo

**property location**

The GPS latitude and longitude, in a tuple of 2 numbers or None. Latitude in range -90.0 to 90.0, longitude in range -180.0 to 180.0.

**property name**

name of photo

**property title**

title of photo (alias for name)

**property uuid**

UUID of Photo

**property width**

width of photo in pixels



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