

app url and login url: <https://hw9-sendleil.ue.r.appspot.com/>

Portfolio Assignment: Final Project

CS 493: Cloud Application Development

Fall 2022

Oregon State University

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Change log.....	2
Data Model.....	3
Create an Album.....	5
Get an Album.....	9
View all Albums.....	11
Edit an Album PUT.....	14
Edit an Album PATCH.....	18
Delete an Album.....	22
Create a Photo.....	23
Get a Photo.....	27
View all Photos.....	29
Edit a Photo PUT.....	32
Edit a Photo PATCH.....	35
Delete a Photo.....	39
Assign a Photo to an Album.....	40
Remove a Photo from an Album.....	42

Change log

Version	Change	Date
1.0	Initial version	Nov. 25, 2022

Data Model

This app stores three kinds of entities in Datastore, Albums, Photos, and Users. An Album can hold an unlimited amount of Photos, but a Photo may only be in one Album. Photos and Albums are owned by Users. You must be the owner of an Album or a Photo to add, edit, or delete them or to view private albums. Public albums can be viewed by anyone. A Photo and an Album must belong to the same owner for a Photo to get added or removed from an Album. Owners are represented by the “sub” property returned with the JWT object upon login. All properties shown here are required properties.

Albums

Property	Data Type	Notes
id	Integer	The id of the album. Datastore automatically generates it. Don't add it yourself as a property of the entity.
name	String	Name of the album. Must be unique.
description	String	Description of what the album contains.
date_added	String	The date the album was added.
public	Boolean	Whether or not the album is publicly available or private.
photos	List	A list of the photos that are currently in the album. The list will be full of dictionaries containing the values for the ids of the photos in the album. If the album is empty, this will be an empty list.
owner	String	The unique id of the person who owns the album. Also found in the 'sub' property from the JWT.

Photos

Property	Data Type	Notes
id	Integer	The id of the photo. Datastore automatically generates it. Don't add it yourself as a property of the entity.
name	String	Name of the photo. Must be unique.
description	String	Description of what is in the photo.

date added	String	The date the photo was added.
album	Dictionary	An object containing the id of the album the photo is currently in. Will be None if the photo is not in an album.
owner	String	The unique id of the person who owns the photo. Also found in the 'sub' property from the JWT.

Users

Property	Data Type	Notes
id	Integer	The id of the user. Datastore automatically generates it. Don't add it yourself as a property of the entity.
user_id	String	The unique user id returned in the 'sub' property from the JWT upon sign in.

Create an Album

Allows you to create a new album. Requires a valid JWT in request auth header.

Allowed chars for name and description:

```
[  
'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z',  
'A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V','W','X','Y','Z','0','1','2',  
'3','4','5','6','7','8','9',  
'-','_',' ','/','\','!',':',';','?'  
]
```

Allowed chars for date_added:

```
[  
'0','1','2','3','4','5','6','7','8','9',  
'/'  
]
```

POST /albums

Request

Path Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the album.	Yes
description	A description of what is in the album.	Yes
date_added	The date the album was added.	Yes
public	Whether or not the album is publicly accessible.	Yes

Request Body Example

```
{
  "name": "Fall 2022",
  "description": "Sendlein family's fall memories",
  "date_added": "11/25/2022",
  "public": false
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if at least one of the attributes is missing, if the album name, description, or date_added is not a string, if the public attribute is not a boolean value, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	The album name is already in use.
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

Status: 201 Created

```
{
  "id": 123,
  "name": "Fall 2022",
  "description": "Sendlein family's fall memories",
  "date_added": "11/25/2022",
}
```

```
{
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02"
  "self": ":app_url/albums/123"
}
```

Failure

Status: 400 Bad Request

```
{
  "Error": "At least one of the request attributes is invalid."
}

{
  "Error": "Album name is invalid format: Allowed formats: str"
}

{
  "Error": "Album name is invalid length. Max length: 50 chars"
}

{
  "Error": "Album name used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \', !, ?, ., ,]"
}

{
  "Error": "Album description is invalid format: Allowed formats: str"
}

{
  "Error": "Album description is invalid length. Max length: 500 chars"
}

{
  "Error": "Album description used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \', !, ?, ., ,]"
}

{
  "Error": "Album date_added is invalid format: Allowed formats: str"
}

{
  "Error": "Album date_added is invalid length. Max length: 10 chars"
}

{
  "Error": "Album date_added used invalid char. Allowed chars: 0-9, /"
}
```

<pre>{ "Error": "The album 'public' attribute is an invalid format. Allowed formats: bool" }</pre>
Status: 401 Unauthorized <pre>{ "Error": "Missing or invalid JWT" }</pre>
Status: 403 Forbidden <pre>{ "Error": "This album name is already in use" }</pre> <pre>{ "Error": "This album is owned by someone else or the album_id is invalid" }</pre>
Status: 405 Method Not Allowed <pre>{ "Error": "Method not allowed. Allowed methods: POST, GET" }</pre>
Status: 406 Not Acceptable <pre>{ "Error": "The Accept header for this request is not 'application/json'" }</pre>
Status: 415 Unsupported Media Type <pre>{ "Error": "The request Content-Type is not 'application/json'" }</pre>

Get an Album

If the album you are requesting belongs to you or if it is public, this method will allow you to view that album. Private albums can only be viewed if you are the owner of the album and provide a valid JWT.

GET /albums/:album_id

Request

Path Parameters

Name	Description
album_id	id of the album

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	404 Not Found	No album with this album_id exists
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'

Response Examples

Success

Status: 200 OK

```
{
  "id": 1234,
  "name": "Fall 2022",
  "description": "Sendlein family's fall memories",
  "date_added": "11/18/2022",
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/1234"
}
```

Failure

Status: 401 Unauthorized

```
{
```

<pre>"Error": "Missing or invalid JWT" }</pre>
<pre>Status: 404 Not Found { "Error": "No album with this album_id exists" }</pre>
<pre>Status: 406 Not Acceptable { "Error": "The Accept header for this request is not 'application/json'" }</pre>

View All Albums

If the provided JWT is invalid, this method will return all public albums regardless of owner. If the JWT is valid, it will return all public and private albums belonging to the owner. Implements pagination by use of a “next” value. This value is returned with the list of albums and contains a link to the next page.

**Next will only be created if a next page actually exists. The returned object will also contain a “total_items” value containing the total number of items in *this person’s* entire collection of albums.

GET/albums/:album_id

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	405 Method Not Allowed	Method not allowed. Allowed methods: POST, GET
Failure	406 Not Acceptable	The Accept header for this request is not ‘application/json’

Response Examples

Success

Status: 200 OK

```
{
  "albums": [
    {
      "id": 123,
      "name": "Fall 2022",
      "description": "Sendlein family's fall memories",
      "date_added": "11/18/2022",
      "public": false,
      "photos": [],
      "owner": "auth0|636d880771f11c36cf876e02",
      "self": ":app_url/albums/123"
    }
  ],
}
```

```
{
  "id": 456,
  "name": "Winter 2022",
  "description": "Sendlein family's winter memories",
  "date_added": "11/18/2022",
  "public": true,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/456"
},
{
  "id": 789,
  "name": "Spring 2022",
  "description": "Sendlein family's spring memories",
  "date_added": "11/18/2022",
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/789"
}
{
  "id": 101112,
  "name": "Summer 2022",
  "description": "Sendlein family's summer memories",
  "date_added": "11/18/2022",
  "public": true,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/101112"
},
{
  "id": 131415,
  "name": "My Birthday",
  "description": "Happy birthday to me",
  "date_added": "11/18/2022",
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/131415"
}
],
"next": ":app_url/albums?limit=5&offset=5"
"total_length": 6
}
```

Failure

Status: 405 Method Not Allowed

```
{
```

<pre>"Error": "Method not allowed. Allowed methods: POST, GET" }</pre>
<pre>Status: 406 Not Acceptable { "Error": "The Accept header for this request is not 'application/json'" }</pre>

Edit an Album PUT

Allows you to edit an album that you are the owner of. Will send back the location of the changed object in the response's "Location" header. Requires a valid JWT in request auth header

Allowed chars for name and description:

```
[  
'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z',  
'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z', '0', '1', '2',  
'3', '4', '5', '6', '7', '8', '9',  
'-', '_', '!', '/', '\', '!', ':', ',', '?'  
]
```

Allowed chars for date_added:

```
[  
'0', '1', '2', '3', '4', '5', '6', '7', '8', '9',  
'/'  
]
```

PUT/albums/:album_id

Request

Path Parameters

Name	Description
album_id	id of the album

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the album.	Yes
description	A brief description of the album.	Yes
date_added	The date the album was added.	Yes
public	Whether or not the album can be publicly viewed.	Yes

Request Body Example

```
{
  "name": "Fall 2022",
  "description": "We went to the pumpkin patch",
  "date_added": "11/18/2022",
  "public": false
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	The new location of this resource is accessible in the response's "Location" header.
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if at least one of the attributes is missing, if the album name, description, or date_added is not a string, if the public attribute is not a boolean value, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This album is owned by someone else or the album_id is invalid or the album name is already in use
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

```
Status: 303 See Other
{
```

```
{
  "id": 1234,
  "name": "Fall 2022",
  "description": "We went to the pumpkin patch",
  "date_added": "11/18/2022",
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/1234"
}
```

Failure

Status: 400 Bad Request

```
{
  "Error": "At least one of the request attributes is invalid."
}

{
  "Error": "Album name is invalid format: Allowed formats: str"
}

{
  "Error": "Album name is invalid length. Max length: 50 chars"
}

{
  "Error": "Album name used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \', !, ?, ., ,]"
}

{
  "Error": "Album description is invalid format: Allowed formats: str"
}

{
  "Error": "Album description is invalid length. Max length: 500 chars"
}

{
  "Error": "Album description used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \', !, ?, ., ,]"
}

{
  "Error": "Album date_added is invalid format: Allowed formats: str"
}

{
  "Error": "Album date_added is invalid length. Max length: 10 chars"
}
```


<pre>{ "Error": "Album date_added used invalid char. Allowed chars: 0-9, /" }</pre> <pre>{ "Error": "The album 'public' attribute is an invalid format. Allowed formats: bool" }</pre>
Status: 401 Unauthorized <pre>{ "Error": "Missing or invalid JWT" }</pre>
Status: 403 Forbidden <pre>{ "Error": "This album name is already in use" }</pre> <pre>{ "Error": "This album is owned by someone else or the album_id is invalid" }</pre>
Status: 406 Not Acceptable <pre>{ "Error": "The Accept header for this request is not 'application/json'" }</pre>
Status: 415 Unsupported Media Type <pre>{ "Error": "The request Content-Type is not 'application/json'" }</pre>

Edit an Album PATCH

Allows you to edit a boat that you are the owner of. Requires a valid JWT in request auth header

Allowed chars for name and description:

```
[  
'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z',  
'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z', '0', '1', '2',  
'3', '4', '5', '6', '7', '8', '9',  
'-', '_', ' ', '/', '\', '!', ':', ',', '?'  
]
```

Allowed chars for date_added:

```
[  
'0', '1', '2', '3', '4', '5', '6', '7', '8', '9',  
'/'  
]
```

PATCH /albums/:album_id

Request

Path Parameters

Name	Description
album_id	id of the album

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the album.	No
description	A brief description of the album.	No
date_added	The date the album was added.	No
public	Whether or not the album is publicly viewable.	No

Request Body Example

{

```
{
  "name": "The Pumpkin Patch Trip"
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if the album name, description, or date_added is not a string, if the public attribute is not a boolean value, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This album is owned by someone else or the album_id is invalid or the album name is already in use
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

```
Status: 200 OK
{
  "id": 1234,
  "name": "The Pumpkin Patch Trip",
  "description": "We went to the pumpkin patch",
  "date_added": "11/18/2022",
  "public": false,
  "photos": [],
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/albums/1234"
```

}

Failure

Status: 400 Bad Request

```
{
  "Error": "At least one of the request attributes is invalid."
}

{
  "Error": "Album name is invalid format: Allowed formats: str"
}

{
  "Error": "Album name is invalid length. Max length: 50 chars"
}

{
  "Error": "Album name used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \, !, ?, ., ,]"
}

{
  "Error": "Album description is invalid format: Allowed formats: str"
}

{
  "Error": "Album description is invalid length. Max length: 500 chars"
}

{
  "Error": "Album description used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \, !, ?, ., ,]"
}

{
  "Error": "Album date_added is invalid format: Allowed formats: str"
}

{
  "Error": "Album date_added is invalid length. Max length: 10 chars"
}

{
  "Error": "Album date_added used invalid char. Allowed chars: 0-9, /"
}

{
  "Error": "The album 'public' attribute is an invalid format. Allowed formats: bool"
}
```

Status: 401 Unauthorized

<pre>{ "Error": "Missing or invalid JWT" }</pre>
Status: 403 Forbidden <pre>{ "Error": "This album name is already in use" }</pre> <pre>{ "Error": "This album is owned by someone else or the album_id is invalid" }</pre>
Status: 406 Not Acceptable <pre>{ "Error": "The Accept header for this request is not 'application/json'" }</pre>
Status: 415 Unsupported Media Type <pre>{ "Error": "The request Content-Type is not 'application/json'" }</pre>

Delete an Album

Allows you to delete an album that you are the owner of. Note that if the album currently contains photos, all the photos currently in the album will be removed from the album but not deleted. Requires a valid JWT in request auth header.

DELETE /albums/:album_id

Request

Path Parameters

Name	Description
album_id	the id of the album

Request Body

None

Response

No Body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This album is owned by someone else or the album_id is invalid

Response Examples

Success

Status: 204 No Content

Failure

Status: 401 Unauthorized

<pre>{ "Error": "Missing or invalid JWT" }</pre>
--

Status: 403 Forbidden

<pre>{ "Error": "This album is owned by someone else or the album_id is invalid" }</pre>
--

Create a Photo

Allows you to create a new photo. Requires a valid JWT in request auth header.

Allowed chars for name and description:

```
[  
'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z',  
'A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V','W','X','Y','Z','0','1','2',  
'3','4','5','6','7','8','9',  
'-','_',' ','/','\\','!',':',';','?'  
]
```

Allowed chars for date_added:

```
[  
'0','1','2','3','4','5','6','7','8','9',  
'/'  
]
```

POST /photos

Request

Path Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the photo.	Yes
description	A brief description of the photo.	Yes
date_added	The date the photo was added.	Yes

Request Body Example

```
{  
  "name": "Fred and George",  
  "description": "From Disney World Vacation",  
  "date_added": "11/18/2022"
```

```
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if at least one of the attributes is missing, if the photo name, description, or date_added is not a string, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This album is owned by someone else or the album_id is invalid
Failure	405 Method Not Allowed	Method not allowed. Allowed methods: POST, GET
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

```
Status: 201 Created
{
  "id": 123,
  "name": "Fred and George",
  "description": "From Disney World Vacation",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02"
  "self": ":app_url/photos/123"
}
```


Failure

Status: 400 Bad Request

```
{
  "Error": "At least one of the request attributes is invalid."
}

{
  "Error": "Photo name is invalid format: Allowed formats: str"
}

{
  "Error": "Photo name is invalid length. Max length: 50 chars"
}

{
  "Error": "Photo name used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _ ' ' \', !, ?, ., ,]"
}

{
  "Error": "Photo description is invalid format: Allowed formats: str"
}

{
  "Error": "Photo description is invalid length. Max length: 500 chars"
}

{
  "Error": "Photo description used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _ ' ' \', !, ?, ., ,]"
}

{
  "Error": "Photo date_added is invalid format: Allowed formats: str"
}

{
  "Error": "Photo date_added is invalid length. Max length: 10 chars"
}

{
  "Error": "Photo date_added used invalid char. Allowed chars: 0-9, /"
}
```

Status: 401 Unauthorized

```
{
  "Error": "Missing or invalid JWT"
}
```

Status: 403 Forbidden

```
{
```

<pre> "Error": "This photo name is already in use" } { "Error": "This photo is owned by someone else or the photo_id is invalid" } </pre>
Status: 405 Method Not Allowed <pre> { "Error": "Method not allowed. Allowed methods: POST, GET" } </pre>
Status: 406 Not Acceptable <pre> { "Error": "The Accept header for this request is not 'application/json'" } </pre>
Status: 415 Unsupported Media Type <pre> { "Error": "The request Content-Type is not 'application/json'" } </pre>

Get a Photo

Allows you to view a photo if you are the owner of the photo. Requires a valid JWT in request auth header.

GET /photos/:photo_id

Request

Path Parameters

Name	Description
photo_id	id of the photo

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'

Response Examples

Success

Status: 200 OK

```
{
  "id": 123,
  "name": "Fred and George",
  "description": "From Disney World Vacation",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02"
  "self": ":app_url/photos/123"
}
```

Failure

Status: 401 Unauthorized

```
{
  "Error": "Missing or invalid JWT"
}
```

Status: 406 Not Acceptable

```
{  
  "Error": "The Accept header for this request is not 'application/json'"  
}
```

View All Photos

Allows you to view all the photos that you own. Requires a valid JWT in request auth header. Implements pagination by use of a “next” value. This value is returned with the list of photos and contains a link to the next page. **Next will only be created if a next page actually exists. The returned object will also contain a “total_items” value containing the total number of items in *this person’s* entire collection of photos.

GET /photos

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	405 Method Not Allowed	Method not allowed. Allowed methods: POST, GET
Failure	406 Not Acceptable	The Accept header for this request is not ‘application/json’

Response Examples

Success

Status: 200 OK

```
{
  "photos": [
    {
      "id": 123,
      "name": "Sunset Drive",
      "description": "On Beach Blvd",
      "date_added": "11/18/2022",
      "album": None,
      "owner": "auth0|636d880771f11c36cf876e02",
      "self": ":app_url/photos/123"
    },
  ],
}
```

```
{
  "id": 456,
  "name": "Burger and Fries",
  "description": "Lunch at Johnny Rockets!",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/photos/456"
},
{
  "id": 789,
  "name": "Mt. Washington",
  "description": "NH Trip 2022",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/photos/789"
}
{
  "id": 101112,
  "name": "Gaming Friends",
  "description": "At PAX East 2022",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/photos/101112"
},
{
  "id": 131415,
  "name": "Beach Bums",
  "description": "In the Keys",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02",
  "self": ":app_url/photos/131415"
}
],
"next": ":app_url/photos?limit=5&offset=5"
"total_length": 6
}
```

Failure

Status: 405 Method Not Allowed

```
{
  "Error": "Method not allowed. Allowed methods: POST, GET"
}
```

Status: 406 Not Acceptable

```
{
```

```
{
  "Error": "The Accept header for this request is not 'application/json'"
}
```

Edit a Photo PUT

Allows you to edit a photo that you are the owner of. Will send back the location of the changed object in the response's "Location" header. Requires a valid JWT in request auth header.

Allowed chars for name and description:

```
[  
'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z',  
'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z', '0', '1', '2',  
'3', '4', '5', '6', '7', '8', '9',  
'-', '_', '!', '/', '\', '!', ':', ',', '?'  
]
```

Allowed chars for date_added:

```
[  
'0', '1', '2', '3', '4', '5', '6', '7', '8', '9',  
'/'  
]
```

PUT /photos/:photo_id

Request

Path Parameters

Name	Description
photo_id	id of the photo

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the photo	Yes
description	A brief description of the photo.	Yes
date_added	The date the photo was added	Yes

Request Body Example

<pre>{ "id": 123,</pre>

```
{
  "name": "Fred and George",
  "description": "From Disney World Vacation",
  "date_added": "11/18/2022"
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	The new location of this resource is accessible in the response's "Location" header.
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if at least one of the attributes is missing, if the photo name, description, or date_added is not a string, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This photo is owned by someone else or the photo_id is invalid
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

```
Status: 303 See Other
{
  "id": 123,
  "name": "Fred and George",
  "description": "From Disney World Vacation",
  "date_added": "11/18/2022",
  "album": None,
}
```

```
{
  "owner": "auth0|636d880771f11c36cf876e02"
  "self": ":app_url/photos/123"
}
```

Failure

Status: 401 Unauthorized

```
{
  "Error": "Missing or invalid JWT"
}
```

Status: 403 Forbidden

```
{
  "Error": "This photo name is already in use"
}
```

```
{
  "Error": "This photo is owned by someone else or the photo_id is invalid"
}
```

Status: 406 Not Acceptable

```
{
  "Error": "The Accept header for this request is not 'application/json'"
}
```

Status: 415 Unsupported Media Type

```
{
  "Error": "The request Content-Type is not 'application/json'"
}
```

Edit a Photo PATCH

Allows you to edit a boat that you are the owner of. Requires a valid JWT in request auth header.

Allowed chars for name and description:

```
[  
'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z',  
'A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V','W','X','Y','Z','0','1','2',  
'3','4','5','6','7','8','9',  
'-', '_', ' ', '/', '\', '!', ':', ',', '?'  
]
```

Allowed chars for date_added:

```
[  
'0','1','2','3','4','5','6','7','8','9',  
'/'  
]
```

PATCH /photos/:photo_id

Request

Path Parameters

Name	Description
photo_id	id of the photo

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Description	Required?
name	The name of the photo.	No
description	A brief description of the photo.	No
date_added	The date the photo was added	No

Request Body Example

```
{  
  "name": "Hermione and Ginny"  
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	Sent if at least one of the request attributes is invalid, if the photo name, description, or date_added is not a string, if the name is longer than 50 characters, the description is longer than 500 characters, the date_added is longer than 10 characters, or the name, description, or date_added attributes contain characters not specified in the above allowed characters lists.
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This photo name is already in use or the photo_id is invalid
Failure	406 Not Acceptable	The Accept header for this request is not 'application/json'
Failure	415 Unsupported Media Type	The request Content-Type is not 'application/json'

Response Examples

Success

```
Status: 200 OK
{
  "id": 123,
  "name": "Hermione and Ginny",
  "description": "From Disney World Vacation",
  "date_added": "11/18/2022",
  "album": None,
  "owner": "auth0|636d880771f11c36cf876e02"
  "self": ":app_url/photos/123"
}
```

Failure

```
Status: 400 Bad Request
{
  "Error": "At least one of the request attributes is invalid."
}
```

<pre> } { "Error": "Photo name is invalid format: Allowed formats: str" } { "Error": "Photo name is invalid length. Max length: 50 chars" } { "Error": "Photo name used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \, !, ?, ., ,]" } { "Error": "Photo description is invalid format: Allowed formats: str" } { "Error": "Photo description is invalid length. Max length: 500 chars" } { "Error": "Photo description used invalid char. Allowed chars: A-Z, a-z, 0-9, [-, _, ' ', \, !, ?, ., ,]" } { "Error": "Photo date_added is invalid format: Allowed formats: str" } { "Error": "Photo date_added is invalid length. Max length: 10 chars" } { "Error": "Photo date_added used invalid char. Allowed chars: 0-9, /" } </pre>
Status: 401 Unauthorized <pre> { "Error": "Missing or invalid JWT" } </pre>
Status: 403 Forbidden <pre> { "Error": "This photo name is already in use" } { "Error": "This photo is owned by someone else or the photo_id is invalid" } </pre>

}
Status: 406 Not Acceptable { "Error": "The Accept header for this request is not 'application/json'" }
Status: 415 Unsupported Media Type { "Error": "The request Content-Type is not 'application/json'" }

Delete a Photo

Allows you to delete a photo that you are the owner of. Note that if the photo is currently in an album, it will be removed from the album. Requires a valid JWT in request auth header.

DELETE /photos/:photo_id

Request

Path Parameters

Name	Description
photo_id	id of the photo

Request Body

None

Response

No Body

Response Body format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This photo is owned by someone else or the photo_id is invalid

Response Examples

Success

Status: 204 No Content

Failure

Status: 401 Unauthorized { "Error": "Missing or invalid JWT" }
Status: 403 Forbidden { "Error": "This photo is owned by someone else or the photo_id is invalid" }

Assign a Photo to an Album

Put a Photo that you own are the owner of into an album that you are the owner of. Photos cannot be assigned to multiple albums. Requires a valid JWT in request auth header.

PUT /albums/:album_id/:photo_id

Request

Path Parameters

Name	Description
album_id	id of the album
photo_id	id of the photo

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	This album is owned by someone else, the album_id is invalid, this photo is owned by someone else, or the photo_id is invalid
Failure	405 Method Not Allowed	Method not allowed. Allowed methods: PUT, DELETE

Response Examples

Success

Status: 204 No Content

Failure

Status: 401 Unauthorized

```
{
  "Error": "Missing or invalid JWT"
}
```

Status: 403 Forbidden


```
{  
  "Error": "This album is owned by someone else or the album_id is invalid"  
}
```

```
{  
  "Error": "This photo is owned by someone else or the photo_id is invalid"  
}
```

Status: 405 Method Not Allowed

```
{  
  "Error": "Method not allowed. Allowed methods: PUT, DELETE"  
}
```

Remove a Photo from an Album

Remove a Photo that you own are the owner of from an album that you are the owner of. Requires a valid JWT in request auth header.

```
DELETE /albums/:album_id/:photo_id
```

Request

Path Parameters

Name	Description
album_id	id of the album
photo_id	id of the photo

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	Missing or invalid JWT
Failure	403 Forbidden	No album with this album_id contains the photo with this photo_id, no album with this album_id contains the photo with this photo_id, the photo with this photo_id belongs to someone else, or the album with this album_id belongs to someone else.
Failure	405 Method Not Allowed	Method not allowed. Allowed methods: PUT, DELETE

Response Examples

Success

```
Status: 204 No Content
```

Failure

```
Status: 401 Unauthorized
```

<pre>{ "Error": "Missing or invalid JWT" }</pre>
<p>Status: 403 Forbidden</p> <pre>{ "Error": "No album with this album_id contains the photo with this photo_id" }</pre> <pre>{ "Error": "This album is owned by someone else" }</pre> <pre>{ "Error": "No album with this album_id contains the photo with this photo_id" }</pre> <pre>{ "Error": "This album is owned by someone else or the album_id is invalid" }</pre>
<p>Status: 405 Method Not Allowed</p> <pre>{ "Error": "Method not allowed. Allowed methods: PUT, DELETE" }</pre>