Pet Shelter: API Spec

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URL to application: https://pet-adoption-api.wl.r.appspot.com

Change log

Page	Change	Date
	Initial version.	December 1, 2020

Data Models

Shelter

Name	Required?	Type	Description
id	No (automatically generated by Datastore)	String	The ID of the animal shelter. Datastore will automatically generate the ID when creating a new shelter entity. Examples of generated ID: "6647954576244736", "5124132861640704", "5029241800359936"
name	Yes	String	Refers to the name of the animal shelter. Examples of valid values: "Greenhill Humane Society", "Adopt a Pet", "Pet Adoption Agency"
address	Yes	String	Refers to the address of the animal shelter. Examples of valid values: "123 Main St.", "483 51st St.", "987 Willow Ave."
capacity	Yes	Integer	Refers to number of animals that can be housed at the animal shelter. Integer should be in the range of $1 - 500$. Examples of valid values: 50, 400, 25
owner	No (owner value is gotten from JWT entered by the user)	String	Refers to an identifier for the owner of the animal shelter. This is the sub property for the JWT. Examples of valid values: "auth0|5fcc526bf440c0006e1fe9cf", "auth0|5fcc548302570c006e9b805e", "auth0|5fcc54e2804107007611e74e"

pets	No (automatically created when shelter is created)	List of objects	Represents the pets that are currently at the animal shelter. Each object contains keys for the ID and name of the pet.
			Example of valid value:
			`[`
			`    {`
			`        "id": "02468",`
			`        "name": "Andy"`
			`    }`
			`]`

Pet

Name	Required?	Type	Description
id	No (automatically generated by Datastore)	String	The ID of the pet. Datastore will automatically generate the ID when creating a new pet entity. Examples of generated IDs: "5277197375897600", "4941911559241728", "5239329790099456"
name	Yes	String	Refers to the name of the pet. Examples of valid values: "Andy", "Oreo", "Bella"

species	Yes	String	Refers to the species of the pet. Examples of valid values: "Dog", "Cat", "Turtle"
age	Yes	Float	Refers to the age of the pet in years. Must be in the range of 1-25. Examples of valid values: 1.5, 10, 15.75
adopted	No (automatically created when pet is created)	Boolean	Refers to whether the pet has been adopted. Examples of valid values: true, false

shelter	No (automatically created when pet is created)	Object	Represents the animal shelter that the pet is at. If at a shelter, the object will contain the name and ID of the shelter.
			Example of valid value:
			`{`
			`    "id": "123456",`
			`    "name": "Greenhill Humane Society"`
			`}`

User

Name	Required?	Type	Description
id	No (automatically generated by Datastore)	String	The Datastore ID of the user. Datastore will automatically generate the ID when creating a new user entity. Examples of generated IDs: "4691066074693632", "4747766823649280", "5927073977729024"
email	Yes	String	Refers to the email of the user. Examples of valid values: "test@test.com", "abc@gmail.com", "asdf@oregonstate.edu"
auth0_id	No (automatically found and placed in Datastore when new account is created)	String	Refers to the Auth0 ID of the user. This will act as the unique identifier for a user. Examples of valid values: "auth0|5fcc526bf440c0006e1fe9cf", "auth0|5fcc548302570c006e9b805e", "auth0|5fcc54e2804107007611e74e"

Model of the User Entity

The unique identifier for a user is the Auth0 ID of the user, which is represented by the auth0_id property within the User entity. The Shelter and User have a one-to-many relationship, in which a user can have multiple shelters, but a shelter belongs to only one user. Once a shelter is created, the Auth0 ID of the user will be stored within the shelter under the "owner" property. Requests do not need to supply the unique identifier for the user and only a valid JWT for the user needs to be entered. When the JWT is entered, the "sub" value of the JWT, which is the unique identifier of the user, will be compared to the value of the owner property within a shelter to determine if the identity of the user making the request is the same as the user who created the shelter. Therefore, comparison of the "sub" value and the "owner" value will be used to identify and authenticate the user.

There are currently two users within the database. However, more users can be created through the account creation page.

1. One user has the username "test@test.com" and their password is "test". Their Auth0 ID is "auth0|5fcec76438518f006f2b2225".

2. The second user has the username "test2@test.com" and their password is "test". Their Auth0 ID is "auth0|5fcec79bb27d8a0068a86881".

Relationship Between Shelter and Pet

A pet can be placed within a shelter, which causes a relationship to form between the pet and shelter. This will be a one-to-many relationship between the shelter and pet, in which there can be multiple pets in a shelter but a pet can only be in one shelter. The relationship will be represented by the "pets" property in a shelter entity and the "shelter" property in a pet entity.

Create a Shelter

Creates a new animal shelter in Datastore. The new shelter will not have any pets. This endpoint is protected and a valid JWT of a user must be entered as the bearer token.

POST /shelters

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the shelter.	Yes
address	String	The address of the shelter.	Yes
capacity	Integer	The capacity of the shelter.	Yes

Request Body Example

```
{
  "name": "Greenhill Humane Society",
  "address": "1234 Animal St.",
  "capacity": 50,
  "owner": "auth0|5eb70257"
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing any of the required attributes, then the shelter will not be created. A 400 status is also caused by an incorrect data type for an attribute's value, an attribute in the request body that is not one of the attributes in the shelter entity, a name or address that is too long, or a capacity that is not in the range of 1-500.
Failure	401 Unauthorized	If the request has a missing or invalid JWT, then the shelter will not be created.
Failure	403 Forbidden	If an attempt to change the ID of a shelter is made or the shelter's name is not unique, then the shelter will not be created.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON then the shelter will not be created.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the shelter will

		not be created.

Response Examples

Success in application/json

Status: 201 Created

```
{
    "id": "123456",
    "name": "Greenhill Humane Society",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

Failure

Missing one of the required attributes

Status: 400 Bad Request

```
{
    "Error": "The request object is missing at least one of the required attributes"
}
```

Incorrect data type for an attribute's value

Status: 400 Bad Request

```
{
    "Error": "The data type for at least one of the values is incorrect"
}
```

Invalid attribute entered

Status: 400 Bad Request

```
{
    "Error": "An attribute not valid for the request body was entered"
}
```

Shelter name or address is too long

Status: 400 Bad Request

```
{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Capacity is not within the range of 1-500

Status: 400 Bad Request

```
{
    "Error": "A shelter's capacity must be in the range of 1 to 500"
}
```

Missing or invalid JWT

Status: 401 Unauthorized

```
{
    "Error": "JWT is missing or invalid"
}
```

Attempt to change ID

Status: 403 Forbidden

```
{
    "Error": "The ID attribute cannot be changed"
}
```

Shelter name is not unique

Status: 403 Forbidden

```
{
    "Error": "The name of the shelter is not unique"
}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{
    "Error": "application/json is the only supported content type"
}
```

Request body is not application/JSON

Status: 415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data"
}
```

Get a Shelter

Gets an animal shelter that exists within Datastore. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

GET /shelters/:shelter_id

Request

Request Parameters

Name	Type	Description	Required?
shelter_id	String	ID of the shelter.	Yes

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	If the JWT is missing or invalid, then the shelter will not be displayed.
Failure	403 Forbidden	If the JWT is valid but the no shelter with the shelter_id exists or the shelter belongs to someone else, then the shelter will not be displayed
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the shelter will not be created.

Response Examples

Success

```
Status: 200 OK

{
    "id": "123456",
    "name": "Greenhill Humane Society",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [
        {
        "id": "02468",
        "name": "Andy",
        "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
        }
    ],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

Status: 401 Unauthorized

```
{

    "Error":  "JWT is missing or invalid"

}
```

Shelter belongs to someone else

Status: 403 Forbidden

```
{

    "Error":  "This shelter belongs to someone else"

}
```

Shelter does not exist

Status: 403 Forbidden

```
{

    "Error":  "No shelter with this shelter_id exists"

}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{

    "Error":  "application/json is the only supported content type"

}
```

List all Shelters of a User

List all the shelters owned by a user within the Datastore. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token. The "sub" property within the JWT will be used to get the shelters owned by the user.

GET /shelters

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	If the JWT is missing or invalid, then the shelters will not be listed.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the shelters will not be listed.

Response Examples

Success

```
Status: 200 OK

{
    "items": [
        {
            "id": "123456",
            "name": "Greenhill Humane Society",
            "address": "1234 Animal St. Eugene, OR 97401",
            "capacity": 50,
            "owner": "auth0|5eb70257",
            "pets": [
                    "id": "02468",
                    "name": "Andy",
            ],
            "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
        },
        {
            "id": "234567",
            "name": "Pet Adoption Agency",
            "address": "321 Adopt Ave. Portland, OR 97035",
            "capacity": 100,
            "owner": "auth0|5eb70257",
            "pets": [
                    "id": "13579",
```

```
            "name": "Oreo",
        ],
        "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/234567"
    },
    {
        "id": "345678",
        "name": "Happy Tails Adoption",
        "address": "9876 Willow St. Corvallis, OR 97330",
        "capacity": 75,
        "owner": "auth0|5eb70257",
        "pets": [
            "id": "98765",
            "name": "Bella",
        ],
        "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/345678"
    }
],
"Total shelters": 3
}
```

Failure

Missing or invalid JWT

```
Status: 401 Unauthorized


{
    "Error": "JWT is missing or invalid"
}
```

Requested content type for response is not application/JSON

```
Status: 406 Not Acceptable


{
    "Error": "application/json is the only supported content type"
}
```

Delete a Shelter

Deletes a shelter from Datastore. If any pets are within a shelter, then the pets are updated to reflect the change. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

DELETE /shelters/:shelter_id

Request

Request Parameters

Name	Type	Description	Required?
shelter_id	String	ID of the shelter.	Yes

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	The JWT is missing or invalid.
Failure	403 Forbidden	Valid JWT but a shelter with this shelter_id does not exist or belongs to someone else.

Response Examples

Success

Status: 204 No Content

Failure

Missing or invalid JWT

```
Status: 401 Unauthorized


{
    "Error": "JWT is missing or invalid"
}
```

Shelter belongs to someone else

```
Status: 403 Forbidden


{
    "Error": "This shelter belongs to someone else"
}
```

Shelter does not exist

Status: 403 Forbidden

```
{
    "Error": "No shelter with this shelter_id exists"
}
```

Edit All of a Shelter's Attributes

Edits all attributes of a shelter that exists in Datastore. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

PUT /shelters/:shelter_id

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the shelter.	Yes
address	String	The address of the shelter.	Yes
capacity	Integer	The capacity of the shelter.	Yes

Request Body Example

```
{
  "name": "Greenhill Humane Society",
  "address": "1234 Animal St.",
  "capacity": 50,
  "owner": "auth0|5eb70257"
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	Link to the edited shelter is provided in the response header. When redirected to this link, then the redirect response will have a 200 status code and the shelter information will be displayed.
Failure	400 Bad Request	If the request is missing any of the required attributes, then the shelter will not be edited. A 400 status is also caused by an incorrect data type for an attribute's value, an attribute in the request body that is not one of the attributes in the shelter entity, a name or address that is too long, or a capacity that is not in the range of 1-500.
Failure	401 Unauthorized	If the request has a missing or invalid JWT, then the shelter will not be edited.
Failure	403 Forbidden	If an attempt to change the ID of a shelter is made or the shelter's name is not unique, then the shelter will not be created. This status code also occurs with a valid JWT but a shelter with this

		shelter_id does not exist or belongs to someone else.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON then the shelter will not be created.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the shelter will not be created.

Response Examples

Success

Before redirect

```
Status: 303 See Other

{
    "id": "123456",
    "name": "Pet Rescue Shelter",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

After link to redirect is followed

```
Status: 200 OK

{
    "id": "123456",
    "name": "Pet Rescue Shelter",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

Failure

Missing one of the required attributes

```
Status: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

Incorrect data type for an attribute's value

```
Status: 400 Bad Request

{
    "Error": "The data type for at least one of the values is incorrect"
}
```

Invalid attribute entered

```
Status: 400 Bad Request
```

15

```
{
    "Error": "An attribute not valid for the request body was entered"
}
```

Shelter name or address is too long

Status: 400 Bad Request

```
{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Capacity is not within the range of 1-500

Status: 400 Bad Request

```
{
    "Error": "A shelter's capacity must be in the range of 1 to 500"
}
```

Missing or invalid JWT

Status: 401 Unauthorized

```
{
    "Error": "JWT is missing or invalid"
}
```

Shelter belongs to someone else

Status: 403 Forbidden

```
{
    "Error": "This shelter belongs to someone else"
}
```

Shelter does not exist

Status: 403 Forbidden

```
{
    "Error": "No shelter with this shelter_id exists"
}
```

Attempt to change ID

Status: 403 Forbidden

```
{
    "Error": "The ID attribute cannot be changed"
}
```

Shelter name is not unique

Status: 403 Forbidden

```
{
    "Error": "The name of the shelter is not unique"
}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{
    "Error": "application/json is the only supported content type"
}
```

Request body is not application/JSON

Status: 415 Unsupported Media Type

```
{
    "Error":  "Server only accepts application/json data"
}
```

Edit One or More of a Shelter's Attributes

Edits one or more attributes in a shelter that exists in Datastore. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

PATCH /shelters/:shelter_id

Request

Request Parameters

Name	Type	Description	Required?
shelter_id	String	ID of the shelter.	Yes

Request Body

Required

Request Body Format

application/json

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the shelter.	No
address	String	The address of the shelter.	No
capacity	Integer	The capacity of the shelter.	No

Request Body Example

```
{
  "name": "Pet Rescue Center"
}
```

Response

Response Body Format

application/json

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	Link to the edited shelter is provided in the response header. When redirected to this link, then the redirect response will have a 200 status code and the shelter information will be displayed.
Failure	400 Bad Request	In a request, if the attribute's value has an incorrect data type, an attribute is in the request body that is not one of the attributes in the shelter entity, the name or address for the shelter is too long, or the capacity is not within the range of 1-500, then the shelter will not be edited.
Failure	401 Unauthorized	The JWT is missing or invalid.
Failure	403 Forbidden	If an attempt to change the ID or owner of a shelter is made or the name of the shelter is not unique, then the shelter will not be edited. This status code also occurs with a valid JWT but a shelter with this shelter_id does not exist or belongs to someone else.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the shelter will not be created.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the shelter will

		not be edited.	

Response Examples

Success

Before redirect

```
Status: 303 See Other

{
    "id": "123456",
    "name": "Pet Rescue Shelter",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

After link to redirect is followed

```
Status: 200 OK

{
    "id": "123456",
    "name": "Pet Rescue Shelter",
    "address": "1234 Animal St.",
    "capacity": 50,
    "owner": "auth0|5eb70257",
    "pets": [],
    "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
}
```

Failure

Incorrect data type for an attribute's value

```
Status: 400 Bad Request

{
    "Error": "The data type for at least one of the values is incorrect"
}
```

Invalid attribute entered

```
Status: 400 Bad Request

{
    "Error": "An attribute not valid for the request body was entered"
}
```

Shelter name or address is too long

```
Status: 400 Bad Request

{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Capacity is not within the range of 1-500

```
Status: 400 Bad Request
```

```
{
    "Error": "A shelter's capacity must be in the range of 1 to 500"
}
```

Missing or invalid JWT

Status: 401 Unauthorized

```
{
    "Error": "JWT is missing or invalid"
}
```

Shelter belongs to someone else

Status: 403 Forbidden

```
{
    "Error": "This shelter belongs to someone else"
}
```

Shelter does not exist

Status: 403 Forbidden

```
{
    "Error": "No shelter with this shelter_id exists"
}
```

Attempt to change ID

Status: 403 Forbidden

```
{
    "Error": "The ID attribute cannot be changed"
}
```

Shelter name is not unique

Status: 403 Forbidden

```
{
    "Error": "The name of the shelter is not unique"
}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{
    "Error": "application/json is the only supported content type"
}
```

Request body is not application/JSON

Status: 415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data"
}
```

Create a Pet

Creates a new pet in Datastore. The new pet will not be within a shelter. This endpoint is unprotected.

POST /pets

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the pet.	Yes
species	String	The species of the pet.	Yes
age	String	The age of the pet.	Yes

Request Body Example

```
{
  "name": "Andy",
  "species": "Dog",
  "age": 5
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing one of the required attributes for a pet, then the pet will not be created. A 400 status is also caused by an incorrect data type for an attribute's value, an invalid character in the name or species attributes, an attribute in the request body that is not one of the attributes in the pet entity, a name or species that is too long, or an age that is not in the range of 1-25.
Failure	403 Forbidden	If an attempt to change the ID of a pet is made, then the pet will not be created.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the pet will not be created.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the pet will not be created.

Response Examples

Success

Success in application/json

```
Status: 201 Created

{
    "id": "02468",
    "name": "Andy",
    "species": "Dog",
    "age": 5,
    "adopted": false,
    "shelter": {},
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
}
```

Failure

Missing one of the required attributes

```
Status: 400 Bad Request

{
    "Error": "The request object is missing at least one of the required attributes"
}
```

Incorrect data type for an attribute's value

```
Status: 400 Bad Request

{
    "Error": "The data type for at least one of the values is incorrect"
}
```

Invalid character in the name or type attribute

```
Status: 400 Bad Request

{
    "Error": "An invalid character was entered"
}
```

Invalid attribute entered

```
Status: 400 Bad Request

{
    "Error": "An attribute not valid for the request body was entered"
}
```

Pet name or species is too long

```
Status: 400 Bad Request

{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Age is not within the range of 1-25

```
Status: 400 Bad Request

{
    "Error":  "A pet's age must be in the range of 0 to 25"
}
```

Attempt to change ID

```
Status: 403 Forbidden

{
    "Error":  "The ID attribute cannot be changed"
}
```

Requested content type for response is not application/JSON

```
Status: 406 Not Acceptable

{
    "Error":  "application/json is the only supported content type"
}
```

Request body is not application/JSON

```
Status: 415 Unsupported Media Type

{
    "Error":  "Server only accepts application/json data"
}
```

Get a Pet

Get a pet that exists within Datastore. This endpoint is unprotected.

GET /pets/:pet_id

Request

Request Parameters

Name	Type	Description	Required?
pet_id	String	ID of the pet.	Yes

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	A pet with this pet_id does not exist
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the pet will not be created.

Response Examples

Success

Status: 200 OK

```
{
    "id": "13579",
    "name": "Bella",
    "species": "Cat",
    "age": 2,
    "adopted": false,
    "shelter": {
        "id": "123456",
        "name": "Greenhill Humane Society",
        "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
    },
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/13579"
}
```

Failure

Status: 404 Not Found

```
{
    "Error": "No pet with this pet_id exists"
}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{
    "Error": "application/json is the only supported content type"
}
```

List all Pets

List all existing pets within Datastore. This endpoint is unprotected.

GET /pets

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the pets will not be listed.

Response Examples

Success

Status: 200 OK

```
{
    "items": [
        {
            "id": "02468",
            "name": "Andy",
            "species": "Dog",
            "age": 5,
            "adopted": true,
            "shelter": {},
            "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
        },
        {
            "id": "13579",
            "name": "Bella",
            "species": "Cat",
            "age": 2,
            "adopted": false,
            "shelter": {
                "id": "123456",
                "name": "Greenhill Humane Society",
                "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/123456"
            },
            "self": "https://pet-adoption-api.wl.r.appspot.com//pets/13579"
        },
        {
```

```
            "id": "23579",
            "name": "Mr. Rabbit",
            "species": "Rabbit",
            "age": 1,
            "adopted": false,
            "shelter": {
                "id": "123456",
                "name": "Pet Adoption Center",
                "self": "https://pet-adoption-api.wl.r.appspot.com/shelters/234567"
            },
            "self": "https://pet-adoption-api.wl.r.appspot.com/pets/23579"
        },


    ],
    "Total pets": 3
}
```

Failure

Requested content type for response is not application/JSON

```
Status: 406 Not Acceptable


{
    "Error": "application/json is the only supported content type"
}
```

Delete a Pet

Deletes a pet from Datastore. If the pet is assigned to a shelter, then the shelter data is updated to reflect that the pet is not in the shelter anymore. This endpoint is unprotected.

DELETE /pets/:pet_id

Request

Request Parameters

Name	Type	Description	Required?
pet_id	String	ID of the pet.	Yes

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	404 Not Found	A pet with this pet_id does not exist.

Response Examples

Success

Status: 204 No Content

Failure

```
Status: 404 Not Found


{
    "Error": "No pet with this pet_id exists"
}
```

Edit All of a Pet's Attributes

Edits all attributes of a pet that exists in Datastore. This endpoint is unprotected.

PUT /pets/:pet_id

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the pet.	Yes
species	String	The species of the pet.	Yes
age	String	The age of the pet.	Yes

Request Body Example

```
{
  "name": "Andy",
  "species": "Dog",
  "age": 5
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	Link to the edited pet is provided in the response header. When redirected to this link, then the redirect response will have a 200 status code and the pet information will be displayed.
Failure	400 Bad Request	If the request is missing one of the required attributes for a pet, then the pet will not be edited. A 400 status is also caused by an incorrect data type for an attribute's value, an invalid character in the name or species attributes, an attribute in the request body that is not one of the attributes in the pet entity, a name or species that is too long, or an age that is not in the range of 1-25.
Failure	403 Forbidden	If an attempt to change the ID of a pet is made, then the pet will not be edited.
Failure	404 Not Found	A pet with this pet_id does not exist.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the pet will not be edited.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the pet will

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		not be edited.

Response Examples

Success

Before redirect

```
Status: 303 See Other

{
    "id": "02468",
    "name": "Andy",
    "species": "Dog",
    "age": 6,
    "adopted": true,
    "shelter": {},
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
}
```

After link to redirect is followed

```
Status: 200 OK

{
    "id": "02468",
    "name": "Andy",
    "species": "Dog",
    "age": 6,
    "adopted": true,
    "shelter": {},
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
}
```

Failure

Missing one of the required attributes

```
Status: 400 Bad Request

{
    "Error":  "The request object is missing at least one of the required attributes"
}
```

Incorrect data type for an attribute's value

```
Status: 400 Bad Request

{
    "Error":  "The data type for at least one of the values is incorrect"
}
```

Invalid character in the name or type attribute

Status: 400 Bad Request

```
{
    "Error": "An invalid character was entered"
}
```

Invalid attribute entered

Status: 400 Bad Request

```
{
    "Error": "An attribute not valid for the request body was entered"
}
```

Pet name or species is too long

Status: 400 Bad Request

```
{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Age is not within the range of 1-25

Status: 400 Bad Request

```
{
    "Error": "A pet's age must be in the range of 0 to 25"
}
```

Attempt to change ID

Status: 403 Forbidden

```
{
    "Error": "The ID attribute cannot be changed"
}
```

Pet not found

Status: 404 Not Found

```
{
    "Error": "No pet with this pet_id exists"
}
```

Requested content type for response is not application/JSON

Status: 406 Not Acceptable

```
{
    "Error": "application/json is the only supported content type"
}
```

Request body is not application/JSON

Status: 415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data"
}
```

Edit One or More of a Pet's Attributes

Edits one or more attributes of a pet that exists in Datastore. This endpoint is unprotected.

PATCH /pets/:pet_id

Request

Request Parameters

Name	Type	Description	Required?
pet_id	String	ID of the pet.	Yes

Request Body

Required

Request Body Format

application/json

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the pet.	No
species	String	The species of the pet.	No
age	Integer	The age of the pet.	No

Request Body Example

```
{
  "age": 6
}
```

Response

Response Body Format

application/json

Response Statuses

Outcome	Status Code	Notes
Success	303 See Other	Link to the edited pet is provided in the response header. When redirected to this link, then the redirect response will have a 200 status code and the pet information will be displayed.
Failure	400 Bad Request	In a request, if the attribute's value has an incorrect data type, an invalid character in the name or species attributes, an attribute in the request body that is not one of the attributes in the pet entity, a name or species that is too long, or an age that is not in the range of 1-25, then the pet will not be created.
Failure	403 Forbidden	If an attempt to change the ID of a pet is made, then the pet will not be created.
Failure	404 Not Found	A pet with this pet_id does not exist.
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the pet will not be created.
Failure	415 Unsupported Media Type	If the request body is not application/JSON, then the pet will not be edited.

Response Examples

Success

Before redirect

Status: 303 See Other

```
{
    "id": "02468",
    "name": "Andy",
    "species": "Dog",
    "age": 6,
    "adopted": true,
    "shelter": {},
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
}
```

After link to redirect is followed

Status: 200 OK

```
{
    "id": "02468",
    "name": "Andy",
    "species": "Dog",
    "age": 6,
    "adopted": true,
    "shelter": {},
    "self": "https://pet-adoption-api.wl.r.appspot.com/pets/02468"
}
```

Failure

Incorrect data type for an attribute's value

Status: 400 Bad Request

```
{
    "Error":  "The data type for at least one of the values is incorrect"
}
```

Invalid character in the name or species attribute

Status: 400 Bad Request

```
{
    "Error":  "An invalid character was entered"
}
```

Invalid attribute entered

Status: 400 Bad Request

```
{
    "Error":  "An attribute not valid for the request body was entered"
}
```

Pet name or species is too long

Status: 400 Bad Request

```
{
    "Error": "String attributes can be no longer than 50 characters"
}
```

Age is not within the range of 1-25

```
Status: 400 Bad Request


{
    "Error": "A pet's age must be in the range of 1 to 25"
}
```

Attempt to change ID

```
Status: 403 Forbidden


{
    "Error": "The ID attribute cannot be changed"
}
```

Pet not found

```
Status: 404 Not Found


{
    "Error": "No pet with this pet_id exists"
}
```

Requested content type for response is not application/JSON

```
Status: 406 Not Acceptable


{
    "Error": "application/json is the only supported content type"
}
```

Request body is not application/JSON

```
Status: 415 Unsupported Media Type


{
    "Error": "Server only accepts application/json data"
}
```

Assign a Pet to a Shelter

Adds the pet to a shelter. The pet and shelter are both updated to reflect the pet being assigned to the shelter. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

PUT /shelter/:shelter_id/pets/:pet_id

Request

Request Parameters

Name	Type	Description	Required?
shelter_id	String	ID of the shelter.	Yes
pet_id	String	ID of the pet.	Yes

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	Successful only if the shelter and pet both exist, the JWT is valid and its sub value matches the owner of the shelter, and the pet is not already within a shelter.
Failure	401 Unauthorized	If the JWT is missing or invalid, then the pet will not be assigned to the shelter.
Failure	403 Forbidden	The pet is in another shelter or a valid JWT is entered but a shelter with this shelter_id does not exist or belongs to someone else.
Failure	404 Not Found	A valid JWT is entered and the sub value matches the owner of the shelter but the pet does not exist.

Response Examples

Success

Status: 204 No Content

Failure

Missing or invalid JWT

```
Status: 401 Unauthorized

{
    "Error": "JWT is missing or invalid"
}
```

Pet is in another shelter

```
Status: 403 Forbidden


{
    "Error": "This pet is already in a shelter"
}
```

Shelter belongs to someone else

```
Status: 403 Forbidden


{
    "Error": "This shelter belongs to someone else"
}
```

Shelter does not exist

```
Status: 403 Forbidden


{
    "Error": "No shelter with this shelter_id exists"
}
```

Pet does not exist

```
Status: 404 Not Found


{
    "Error": "No pet with this pet_id exists"
}
```

Remove a Pet from a Shelter

Removes a pet from a shelter after being adopted. The pet and shelter are updated to reflect this change. This endpoint is protected and a valid JWT of a user within the Datastore must be entered as the bearer token.

DELETE /shelters/:shelter_id/pets/:pet_id

Request

Request Parameters

Name	Type	Description	Required?
shelter_id	String	ID of the shelter	Yes
pet_id	String	ID of the pet.	Yes

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	Successful only if the shelter and pet both exist, the JWT is valid and its sub value matches the owner of the shelter, and the pet is not already within a shelter. The "adopted" attribute of the pet will also be changed to true.
Failure	401 Unauthorized	If the JWT is missing or invalid, then the pet will not be assigned to the shelter.
Failure	403 Forbidden	The pet is in another shelter or a valid JWT is entered but a shelter with this shelter_id does not exist or belongs to someone else.
Failure	404 Not Found	A valid JWT is entered and the sub value matches the owner of the shelter but the pet does not exist.

Response Examples

Success

Status: 204 No Content

Failure

Missing or invalid JWT

```
Status: 401 Unauthorized

{
    "Error": "JWT is missing or invalid"
}
```

Pet is in another shelter

```
Status: 403 Forbidden


{

    "Error":  "The pet is not in this shelter"
}
```

Shelter belongs to someone else

```
Status: 403 Forbidden


{

    "Error":  "This shelter belongs to someone else"
}
```

Shelter does not exist

```
Status: 403 Forbidden


{

    "Error":  "No shelter with this shelter_id exists"
}
```

Pet does not exist

```
Status: 404 Not Found


{

    "Error":  "No pet with this pet_id exists"
}
```

List all Users

List all existing pets within Datastore. This endpoint is unprotected.

GET /users

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If the requested content type for the response is not application/JSON, then the users will not be listed.

Response Examples

Success

```
Status: 200 OK


[
  {
    "id": "4805841895030784",
    "auth0_id": "auth0|5fceb5cc02570c006e9ba2c1",
    "email": "test@test.com"
  },
  {
    "id": "6304888560549888",
    "auth0_id": "auth0|5fceb61cd214a2007505e8fe",
    "email": "test2@test.com"
  }
]
```

Failure

Requested content type for response is not application/JSON

```
Status: 406 Not Acceptable

{
    "Error":  "application/json is the only supported content type"
}
```

Attempt to Delete or Edit Root URL for Shelters and Pets

Attempts to delete or edit the root URLs for shelters and pets are not allowed.

```
DELETE /shelters
PUT /shelters
PATCH /shelters
DELETE /pets
PUT /pets
PATCH /pets
```

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	405 Method Not Allowed	Pets or shelters will not be edited or deleted if a request to the root URL for pets or shelters is made.

Response

No body

Response Body Format

Failure: JSON

Response Example

Failure

Attempt to make a PUT request

```
Status: 405 Method Not Allowed

{
    "Error": "You cannot PUT on the root URL"
}
```

Attempt to make a PATCH request

```
Status: 405 Method Not Allowed

{
    "Error": "You cannot PATCH on the root URL"
}
```

Attempt to make a DELETE request

```
Status: 405 Method Not Allowed

{
    "Error": "You cannot DELETE on the root URL"
}
```

Login/Create an Account

Logs into account or creates a new account given the user's email and password. The user will then be redirected to the page to display their Auth0 ID and JWT. This is an unprotected endpoint.

POST /users

Request

Request Parameters

None

Request Body

Required

Request Body Format

JSON

Request JSON Attributes

Name	Type	Description	Required?
username	String	Username represented as an email.	Yes
address	String	Password of the user.	Yes

Request Body Example

```
{
  "username": "test@test.com",
  "password": "test"
}
```

Response

No body

Response Body Format

Success: Redirect

Failure: Redirect

Response Statuses

Outcome	Status Code	Notes
Success	302 Found redirect	Redirect to /users/token
Failure	302 Found redirect	Redirect to /users/token

Response Example

Success

Status: 302 Found redirect
Found. Redirecting to /users/token

Failure

Missing or invalid JWT

Status: 302 Found redirect
Found. Redirecting to /users/token

Display JWT and Auth0 ID

Displays the logged in user's JWT and Auth0 ID. This is an unprotected endpoint.

GET /users/token

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Success: text/html

Failure: text/html

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	The user's JWT and Auth0 ID is displayed.
Failure	404 Not Found	A message will appear if the user has entered the incorrect user information at the /users endpoint. The JWT will not be displayed.

Response Example

Success

Status: 200 OK

User Token

User ID: auth0|5fcec76438518f006f2b2225

The following is your JWT:

eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6IjNteEY5d3
oxOEl3Z25oUVdTS05XVCJ9.eyJuaWNrbmFtZSI6InRlc3QiLC
JuYW1lIjoidGVzdEB0ZXN0LmNvbSIsInBpY3R1cmUiOiJodHR
wczovL3MuZ3JhdmF0YXIuY29tL2F2YXRhci9iNjQyYjQyMTdi
MzRiMWU4ZDNiZDkxNWZjNjVjNDQ1Mj9zPTQ4MCZyPXBBnJ
mQ9aHR0cHMlM0ElMkYlMkZjZG4uYXV0aDAuY29tJTJGYXZ
hdGFycyUyRnRlLnBuZylsInVwZGF0ZWRfYXQiOiIyMDIwLTEy
LTA4VDA3OjQ2OjlxLjc4NVoiLCJlbWFpbCI6InRlc3RAdGVzdC
5jb20iLCJlbWFpbF92ZXJpZmllZCI6ZmFsc2UsImlzcyI6Imh0
dHBzOi8vY3MtNDkzLWh3Ny51cy5hdXRoMC5jb20vIiwic3Vilj
oiYXV0aDB8NWZjZWM3NjQzODUxOGYwMDZmMmIyMjI1Iiw
iYXVkIjoiV0NHYUI0dGZhMHR3MXZHbm9lZDRuaU5yM1VO
MDdobjciLCJpYXQiOjE2MDc0MTM1ODEsImV4cCI6MTYwNz
Q0OTU4MX0.rQp5LkLVF1Wb3RrT3k9i7xltY4lNZJUa59f95eJ
BzJYTVRrXq86GCLN1QAVk7XdKxk-kwXKZG-
SvS_2w_p6OVHjhepCl8I1EWtdfXhzKdNQMjbNOxiMvpZ92W
2AXmj2UVQvmFQ5BbTlVIEFd5n_tu1bDoozHvuqA38tb5sgqB
3ULoHbyDalQK0eWcfe2anyLDwsrp3bKf5CoOzTfbGk3BX2Z
diLrdkoWm0Eizn1BOvwbLdQtAnjA6_GnfscM6MUR8YYPRYW
yEiLFfk0dicTGpEFXu8fnQ4cgvkPZe9CqT4hDVrwAIbMJDYam
KMoBXTw_FBEMK_h1cT-G6iid9Qn0Qw

Failure

Status: 404 Not Found

User Token

User ID: auth0|5fcec76438518f006f2b2225

The following is your JWT:

Incorrect user information. Please try again.

Display Login Page

Displays the login page for the user to type in their email and password. This endpoint is unprotected.

GET /

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Success: text/html

Failure: text/html

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	The user's JWT and Auth0 ID is displayed.
Failure	404 Not Found	A 404 message will appear if not found.

Response Example

Success

Status: 200 OK

Welcome!

Please enter your email and password below in order to display your Auth0 JWT and Auth0 user ID. If you have not already signed up, then an account will be made for you using the email and password entered. Your new JWT and user ID will then be displayed. If you have already signed up, then you will be logged in and shown your JWT and user ID.

| Username | Password | Submit |

Failure

Status: 404 Not Found
Cannot get "/"