Final Project: RESTful API - Animal Shelter
CS 493 Cloud Application Development

KC

December 3, 2018
Updated: August 17, 2021

This project implements an API for animal shelters using Google App Engine and Auth0 authentication. It has three entities: animals, adopters, and users.

A user embodies a single animal shelter that has animals up for adoption. A user can own multiple animals and each animal has one owner. The user has permissions to modify and delete the animal, remove ownership and transfer ownership to another user. The adopter represents a person who has decided to adopt an animal. They cannot modify the animal except for adopting the animal. The adopter must also be managed by a registered user, including modifying and deleting. Importantly, a user cannot be deleted if they have ownership of animals. The animals must first be transferred to another user.

ROOT URL: https://cs493-final-project-87684.uk.r.appspot.com

Postman instructions: When running the collection in Postman, include a 350ms delay.

1 Sample User Entity

```
{
   "address": "523 Town Rd, Town, KS 11111",
   "email": "help1@humaneshelter.org",
   "name": "Humane Shelter",
   "phone": "888-888-8888",
```

```
    "id": "5361816267915264",
    "self": "https://cs493-final-project-87684.uk.r.appspot.com/users
     /5361816267915264"
}
```

2 Sample Animal Entity

```
{
    "age": "20",
    "owner": "info22@shelter.org",
    "name": "Trixie",
    "species": "cat",
    "weight": "20",
    "adopter": "NULL",
    "color": "black and white",
    "id": "5711507908198400",
    "self": "https://cs493-final-project-87684.uk.r.appspot.com/animals
     /5711507908198400"
 }
```

3 Sample Adopter Entity

```
{
    "address": "99 Main St., Sherbern, CT 13444",
    "email": "bobloblaw@lawblog.com",
    "name": "Bob Loblaw",
    "phone": "1-800-888-8888",
    "id": "4795847657127936",
    "self": "https://cs493-final-project-87684.uk.r.appspot.com/adopters
     /4795847657127936"
}
```

4 Route URLs

4.1 /sign-up

POST /sign-up

4.2 /login

POST /login

4.3 /users

GET /users
DELETE /users/:id_user
GET /users/:id_user
PUT /users/:id_user
GET /users/:id_user/animals
DELETE /users/:id_user/animals/:id_animal
PUT /users/:id_user/animals/:id_animal

4.4 /animals

GET /animals
POST /animals
DELETE /animals/:id_animal
GET /animals/:id_animal
PUT /animals/:id_animal

4.5 /adopters

GET /adopters
POST /adopters
DELETE /adopters/:id_adopter
GET /adopters/:id_adopter
PUT /adopters/:id_adopter
DELETE /adopters/:id_adopter/animals/:id_animal
PUT /adopters/:id_adopter/animals/:id_animal