

# Project 2

## 1. Overview

The purpose of this API is to serve as an interface for the database for a single vets office. In this, customers will not have direct access, and all input and output is all handled by employees at that vets office. In reference to owners, we should be able to pull their information, get a list of their outstanding visit payments, update their home address in case they move, delete old phone numbers, and add new owners when they come to the office for the first time. In reference to employees, we should be able to pull their information, update their salary (either up or down), add new employees when they are hired, and delete employees when they are no longer needed in the system. For pets, we want to be able to get their information, get a list of their owners, and add new owners to that pet.

## 2. Route Paths

**Path Name:** Get Owner

**Path:** `http://blue.cs.sonoma.edu:8043/api/v1/owner/:id`

**Description:** This route gets the information of an owner, given their id

**Example Call:**

`curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/owner/1`

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/owner/1
[
  {
    "id": 1,
    "dob": "1946-02-14T08:00:00.000Z",
    "f_name": "Selena",
    "l_name": "Gomez",
    "street": "1234 Example St.",
    "city": "Los Angeles",
    "state": "CA",
    "zip": "94928"
  }
]
[[bdale@blue ~]$
```

**Path Name:** Get Owner Money Due

**Path:** `http://blue.cs.sonoma.edu:8043/api/v1/owner/moneyDue/:id`

**Description:** Gets a list of all unpaid visits, with the total cost of each unpaid visit for all of their pets

**Example Call:**

`curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/owner/moneyDue/1`

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/owner/moneyDue/1
[
  {
    "Owner ID": 1,
    "Pet ID": 1,
    "date": "2000-12-16T08:00:00.000Z",
    "Total Cost": 250
  },
  {
    "Owner ID": 1,
    "Pet ID": 15,
    "date": "2015-08-10T07:00:00.000Z",
    "Total Cost": 230
  }
]
[[bdale@blue ~]$
```

**Path Name:** Update Owner Address

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/owner/:id

**Description:** Updates the address of a user, given their ID and a new address (street, city, state, and zip)

**Example Call:**

```
curl -X PUT -H 'Content-type: application/json' -d '{"street": "321 New St", "city": "newcity", "state": "CA", "zip": "12345"}' http://blue.cs.sonoma.edu:8043/api/v1/owner/1
```

```
[bdale@blue ~]$ curl -X PUT -H 'Content-type: application/json' -d '{"street": "321 New St", "city": "newcity", "state": "CA", "zip": "12345"}' http://blue.cs.sonoma.edu:8043/api/v1/owner/1
OK[bdale@blue ~]$
```

*Database output, after above call*

```
[MariaDB [bdale_cs355sp23]> SELECT * FROM Owner WHERE id = 1;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | dob       | f_name | l_name | street   | city    | state | zip   |
+----+-----+-----+-----+-----+-----+-----+-----+
| 1  | 1946-02-14 | Selena | Gomez  | 321 New St | newcity | CA    | 12345 |
+----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)
```

**Path Name:** Add Owner

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/owner

**Description:** Adds a new owner to the database

**Example Call:**

```
curl -X POST -H 'Content-type: application/json' -d '{"dob": "2020-01-01", "f_name": "New", "l_name": "Owner", "street": "10 Main St", "city": "New City", "state": "CA", "zip": "12345"}' http://blue.cs.sonoma.edu:8043/api/v1/owner
```

```
[bdale@blue ~]$ curl -X POST -H 'Content-type: application/json' -d '{"dob": "2020-01-01", "f_name": "New", "l_name": "Owner", "street": "10 Main St", "city": "New City", "state": "CA", "zip": "12345"}' http://blue.cs.sonoma.edu:8043/api/v1/owner
Created[bdale@blue ~]$
```

*Database output, after above call*

```
[MariaDB [bdale_cs355sp23]> SELECT * FROM Owner WHERE f_name = 'New';
+----+-----+-----+-----+-----+-----+-----+-----+
| id | dob       | f_name | l_name | street   | city    | state | zip   |
+----+-----+-----+-----+-----+-----+-----+-----+
| 16 | 2020-01-01 | New    | Owner  | 10 Main St | New City | CA    | 12345 |
+----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)
```

**Path Name:** Delete Owner Phone Number

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/owner/:id/num/:ph\_num

**Description:** Adds a new phone number to a owner (duplicate owner phone numbers are blocked)

**Example Call:**

curl -X DELETE http://blue.cs.sonoma.edu:8043/api/v1/owner/1/num/1231231234

```
[Not Found]bdale@blue ~]$ curl -X DELETE http://blue.cs.sonoma.edu:8043/api/v1/owner/1/num/1231231234
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}[bdale@blue ~]$
```

*Before/After Call*

```
MariaDB [bdale_cs355sp23]> SELECT * FROM Owner_PhoneNumber WHERE owner_id = 1;
+-----+-----+
| owner_id | ph_number |
+-----+-----+
| 1 | 123-123-1234 |
| 1 | 207-924-3726 |
| 1 | 209-988-1027 |
| 1 | 310-568-1308 |
| 1 | 310-897-1484 |
| 1 | 949-763-7785 |
+-----+-----+
6 rows in set (0.001 sec)
```

```
MariaDB [bdale_cs355sp23]> SELECT * FROM Owner_PhoneNumber WHERE owner_id = 1;
+-----+-----+
| owner_id | ph_number |
+-----+-----+
| 1 | 207-924-3726 |
| 1 | 209-988-1027 |
| 1 | 310-568-1308 |
| 1 | 310-897-1484 |
| 1 | 949-763-7785 |
+-----+-----+
5 rows in set (0.001 sec)
```

**Path Name:** Get Employee

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/employee/:id

**Description:** Gets the information of an employee, given their ID

**Example Call:**

curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/employee/1

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/employee/1
[
  {
    "id": 1,
    "ssn": "663403032",
    "dob": "1984-06-13T07:00:00.000Z",
    "f_name": "Ashley",
    "l_name": "Katchadorian",
    "start_date": "2016-06-28T07:00:00.000Z",
    "salary": 113863,
    "position": "Vet Assistant"
  }
]
[[bdale@blue ~]$
```

**Path Name:** Update Employee Salary

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/employee/:id

**Description:** Updates a employees salary to the new specified amount

**Example Call:**

```
[[bdale@blue ~]$ curl -X PUT -H 'Content-type: application/json' -d '{"amt": "100.00"}' http://blue.cs.sonoma.edu:8043/api/v1/employee/1
OK[[bdale@blue ~]$
```

*Before/After Call*

```
MariaDB [bdale_cs355sp23]> SELECT id, salary FROM Employee WHERE id = 1;
+-----+
| id | salary |
+-----+
| 1 | 113863.00 |
+-----+
1 row in set (0.001 sec)
```

```
MariaDB [bdale_cs355sp23]> SELECT id, salary FROM Employee WHERE id = 1;
+-----+
| id | salary |
+-----+
| 1 | 100.00 |
+-----+
1 row in set (0.001 sec)
```

**Path Name:** Add Employee

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/employee

**Description:** Adds a new employee to the database, WITHOUT specifying id of new employee

**Example Call:**

```
curl -X POST -H 'Content-type: application/json' -d  
'{"ssn":"111223333","dob":"2020-01-01","f_name":"New","l_name":"employee","start_date":"2020-01-02","salary":"0.01","position":"New Position"}'  
http://blue.cs.sonoma.edu:8043/api/v1/employee
```

```
[bdale@blue ~]$ curl -X POST -H 'Content-type: application/json' -d '{"ssn":"111223333","dob":"2020-01-01","f_name":"New","l_name":"employee","start_date":"2020-01-02","salary":"0.01","position":"New Position"}' http://blue.cs.sonoma.edu:8043/api/v1/employee  
Created[bdale@blue ~]$
```

*After The Above Call*

```
[MariaDB [bdale_cs355sp23]> SELECT * FROM Employee ORDER BY id DESC LIMIT 1;  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| id | ssn      | dob      | f_name | l_name  | start_date | salary | position |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
| 11 | 111223333 | 2020-01-01 | New    | employee | 2020-01-02 | 0.01  | New Position |  
+-----+-----+-----+-----+-----+-----+-----+-----+  
1 row in set (0.001 sec)
```

**Path Name:** Delete Employee

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/employee/:id

**Description:** Deletes an employee from the database, given their ID

**Example Call:**

```
curl -X DELETE http://blue.cs.sonoma.edu:8043/api/v1/employee/11
```

```
[bdale@blue ~]$ curl -X DELETE http://blue.cs.sonoma.edu:8043/api/v1/employee/11  
{  
  "fieldCount": 0,  
  "affectedRows": 1,  
  "insertId": 0,  
  "serverStatus": 2,  
  "warningCount": 0,  
  "message": "",  
  "protocol41": true,  
  "changedRows": 0  
}[bdale@blue ~]$
```

*After the above call*

```
[MariaDB [bdale_cs355sp23]> SELECT * FROM Employee WHERE id = 11;  
Empty set (0.000 sec)
```

**Path Name:** Get Pet

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/pet/:id

**Description:** Gets the information of a pet, given their ID

**Example Call:**

curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/6

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/6
[
  {
    "id": 6,
    "name": "Special Agent Dale Cooper FBI",
    "dob": "2008-07-20T07:00:00.000Z",
    "species": "cat",
    "breed": "tabby",
    "sex": "other"
  }
]
[[bdale@blue ~]$
```

**Path Name:** Get Pet's Owners

**Path:** http://blue.cs.sonoma.edu:8043/api/v1/pet/owners/:id

**Description:** Gets the information for all owners that own the pet with the specified ID

**Example Call:**

curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/owners/1

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/owners/1
[
  {
    "owner_id": 1,
    "pet_id": 1,
    "id": 1,
    "dob": "1946-02-14T08:00:00.000Z",
    "f_name": "Selena",
    "l_name": "Gomez",
    "street": "321 New St",
    "city": "newcity",
    "state": "CA",
    "zip": "12345"
  },
  {
    "owner_id": 5,
    "pet_id": 1,
    "id": 5,
    "dob": "1984-05-15T07:00:00.000Z",
    "f_name": "Charles E",
    "l_name": "Cheese",
    "street": "3165 Heavens Way",
    "city": "Boca Grande",
    "state": "FL",
    "zip": "33921"
  }
]
[[bdale@blue ~]$
```

**Path Name:** Add Pet's Owner

**Path:** `http://blue.cs.sonoma.edu:8043/api/v1/pet/:petID/owner/:ownerID`

**Description:** Makes the owner with ownerID a owner of the pet with petID

**Example Call:**

`curl -X POST http://blue.cs.sonoma.edu:8043/api/v1/pet/3/owner/1`

```
[[bdale@blue ~]$ curl -X POST http://blue.cs.sonoma.edu:8043/api/v1/pet/3/owner/1
Created[[bdale@blue ~]$
```

*Before/After the above call*

```
[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/owners/3
[
  {
    "owner_id": 3,
    "pet_id": 3,
    "id": 3,
    "dob": "2001-01-01T08:00:00.000Z",
    "f_name": "Mr.",
    "l_name": "Worldwide",
    "street": "1 Main St.",
    "city": "Miami",
    "state": "FL",
    "zip": "33101"
  }
]
[[bdale@blue ~]$
```

```
Created[[bdale@blue ~]$ curl -X GET http://blue.cs.sonoma.edu:8043/api/v1/pet/owners/3
[
  {
    "owner_id": 1,
    "pet_id": 3,
    "id": 1,
    "dob": "1946-02-14T08:00:00.000Z",
    "f_name": "Selena",
    "l_name": "Gomez",
    "street": "321 New St",
    "city": "newcity",
    "state": "CA",
    "zip": "12345"
  },
  {
    "owner_id": 3,
    "pet_id": 3,
    "id": 3,
    "dob": "2001-01-01T08:00:00.000Z",
    "f_name": "Mr.",
    "l_name": "Worldwide",
    "street": "1 Main St.",
    "city": "Miami",
    "state": "FL",
    "zip": "33101"
  }
]
[[bdale@blue ~]$
```