Tarea: Ecto basic operations

- **Crear los alias para Pet y Repo**

```
iex(34)> alias PetClinic.PetClinicService.Pet
PetClinic.PetClinicService.Pet
iex(35)> alias PetClinic.Repo
PetClinic.Repo
```

- **Importar Ecto.Query**

```
iex(36)> import Ecto.Query
Ecto.Query
```

- **Crear 1 pet**

```
iex(37)> sky = %Pet{name: "sky", type: "dog", sex: "male", age: 3}
%PetClinic.PetClinicService.Pet{
 __meta__: #Ecto.Schema.Metadata<:built, "pets">,
age: 3,
id: nil,
inserted_at: nil,
name: "sky",
sex: "male",
type: "dog",
updated_at: nil
}
iex(38)> Repo.insert(sky)
[debug] QUERY OK db=21.5ms queue=0.8ms idle=1993.8ms
INSERT INTO "pets" ("age","name","sex","type","inserted_at","updated_at") VALUES
($1,$2,$3,$4,$5,$6) RETURNING "id" [3, "sky", "male", "dog", ~N[2022-04-19 23:32:51],
~N[2022-04-19 23:32:51]]
{:ok,
 %PetClinic.PetClinicService.Pet{
   __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
   age: 3,
   id: 8,
   inserted_at: ~N[2022-04-19 23:32:51],
   name: "sky",
   sex: "male",
   type: "dog",
   updated_at: ~N[2022-04-19 23:32:51]
 }}
```

- **Consultar todos los pets.**

```
iex(39)> Repo.all(Pet)
[debug] QUERY OK source="pets" db=1.3ms idle=1099.3ms
SELECT p0."id", p0."age", p0."name", p0."sex", p0."type", p0."inserted_at", p0."updated_at"
FROM "pets" AS p0 []
[
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 1,
    id: 2,
    inserted_at: ~N[2022-04-06 22:45:08],
```

```
  name: "Stormy",
  sex: "female",
  type: "cat",
  updated_at: ~N[2022-04-06 22:45:08]
},
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 2,
  id: 1,
  inserted_at: ~N[2022-04-06 22:43:06],
  name: "Rolando",
  sex: "Male",
  type: "dog",
  updated_at: ~N[2022-04-07 14:38:20]
},
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 3,
  id: 3,
  inserted_at: ~N[2022-04-07 14:38:59],
  name: "clifford",
  sex: "Male",
  type: "dog",
  updated_at: ~N[2022-04-07 14:38:59]
},
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 5,
  id: 5,
  inserted_at: ~N[2022-04-07 17:04:49],
  name: "tintan",
  sex: "female",
  type: "snake",
  updated_at: ~N[2022-04-07 17:04:49]
},
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 2,
  id: 6,
  inserted_at: ~N[2022-04-07 17:08:48],
  name: "fred",
  sex: "male",
  type: "snake",
  updated_at: ~N[2022-04-07 17:08:48]
},
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 3,
```

```
    id: 7,
    inserted_at: ~N[2022-04-19 22:15:19],
    name: "Fido",
    sex: "male",
    type: "dog",
    updated_at: ~N[2022-04-19 22:15:19]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 3,
    id: 8,
    inserted_at: ~N[2022-04-19 23:32:51],
    name: "sky",
    sex: "male",
    type: "dog",
    updated_at: ~N[2022-04-19 23:32:51]
  }
]
```

• Consultar pets con más de un criterio (Repo.all), usando también select y order_by

```
iex(7)> Repo.all(from p in Pet, where: p.sex == "female", order_by: [p.id])
[debug] QUERY OK source="pets" db=2.5ms queue=4.5ms idle=1630.9ms
SELECT p0."id", p0."age", p0."name", p0."sex", p0."type", p0."inserted_at", p0."updated_at"
FROM "pets" AS p0 WHERE (p0."sex" = 'female') ORDER BY p0."id" []
[
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 1,
    id: 2,
    inserted_at: ~N[2022-04-06 22:45:08],
    name: "Stormy",
    sex: "female",
    type: "cat",
    updated_at: ~N[2022-04-06 22:45:08]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 5,
    id: 5,
    inserted_at: ~N[2022-04-07 17:04:49],
    name: "tintan",
    sex: "female",
    type: "snake",
    updated_at: ~N[2022-04-07 17:04:49]
  }
]
```

• Modificar en BD 1 atributo de 1 pet (consultar, crear changeset, actualizar)

```
iex(10)> sky = Repo.get!(Pet, 8)
[debug] QUERY OK source="pets" db=0.7ms queue=1.0ms idle=1869.8ms
SELECT p0."id", p0."age", p0."name", p0."sex", p0."type", p0."inserted_at", p0."updated_at"
FROM "pets" AS p0 WHERE (p0."id" = $1) [8]
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 3,
  id: 8,
  inserted_at: ~N[2022-04-19 23:32:51],
  name: "sky",
  sex: "male",
  type: "dog",
  updated_at: ~N[2022-04-19 23:32:51]
}
iex(11)> change = Ecto.Changeset.change sky, type: "cat"
#Ecto.Changeset<
  action: nil,
  changes: %{type: "cat"},
  errors: [],
  data: #PetClinic.PetClinicService.Pet<>,
  valid?: true
>
iex(12)> Repo.update(change)
[debug] QUERY OK db=26.7ms queue=1.3ms idle=1339.3ms
UPDATE "pets" SET "type" = $1, "updated_at" = $2 WHERE "id" = $3 ["cat", ~N[2022-04-19
23:56:12], 8]
{:ok,
 %PetClinic.PetClinicService.Pet{
   __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
   age: 3,
   id: 8,
   inserted_at: ~N[2022-04-19 23:32:51],
   name: "sky",
   sex: "male",
   type: "cat",
   updated_at: ~N[2022-04-19 23:56:12]
 }}
```

- **Corroborar el cambio anterior usando Repo.get!**

```
iex(14)> Repo.get!(Pet, 8)
[debug] QUERY OK source="pets" db=2.4ms idle=1260.3ms
SELECT p0."id", p0."age", p0."name", p0."sex", p0."type", p0."inserted_at", p0."updated_at"
FROM "pets" AS p0 WHERE (p0."id" = $1) [8]
%PetClinic.PetClinicService.Pet{
  __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
  age: 3,
  id: 8,
  inserted_at: ~N[2022-04-19 23:32:51],
  name: "sky",
```

```
  sex: "male",
  type: "cat",
  updated_at: ~N[2022-04-19 23:56:12]
}
```

- **Borrar un pet**

```
iex(16)> Repo.delete(sky)
{:ok,
 %PetClinic.PetClinicService.Pet{
   __meta__: #Ecto.Schema.Metadata<:deleted, "pets">,
   age: 3,
   id: 8,
   inserted_at: ~N[2022-04-19 23:32:51],
   name: "sky",
   sex: "male",
   type: "dog",
   updated_at: ~N[2022-04-19 23:32:51]
 }}
iex(17)> [debug] QUERY OK db=19.5ms queue=1.7ms idle=1164.1ms
DELETE FROM "pets" WHERE "id" = $1 [8]

iex(17)> Repo.all(Pet)
[debug] QUERY OK source="pets" db=2.8ms idle=1215.4ms
SELECT p0."id", p0."age", p0."name", p0."sex", p0."type", p0."inserted_at",p0."updated_at"
FROM "pets" AS p0 []
[
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 1,
    id: 2,
    inserted_at: ~N[2022-04-06 22:45:08],
    name: "Stormy",
    sex: "female",
    type: "cat",
    updated_at: ~N[2022-04-06 22:45:08]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 2,
    id: 1,
    inserted_at: ~N[2022-04-06 22:43:06],
    name: "Rolando",
    sex: "Male",
    type: "dog",
    updated_at: ~N[2022-04-07 14:38:20]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 3,
```

```
    id: 3,
    inserted_at: ~N[2022-04-07 14:38:59],
    name: "clifford",
    sex: "Male",
    type: "dog",
    updated_at: ~N[2022-04-07 14:38:59]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 5,
    id: 5,
    inserted_at: ~N[2022-04-07 17:04:49],
    name: "tintan",
    sex: "female",
    type: "snake",
    updated_at: ~N[2022-04-07 17:04:49]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 2,
    id: 6,
    inserted_at: ~N[2022-04-07 17:08:48],
    name: "fred",
    sex: "male",
    type: "snake",
    updated_at: ~N[2022-04-07 17:08:48]
  },
  %PetClinic.PetClinicService.Pet{
    __meta__: #Ecto.Schema.Metadata<:loaded, "pets">,
    age: 3,
    id: 7,
    inserted_at: ~N[2022-04-19 22:15:19],
    name: "Fido",
    sex: "male",
    type: "dog",
    updated_at: ~N[2022-04-19 22:15:19]
  }
]
```