INGENIERÍA DE LA SALUD

Base Toxicológica

REALIZADO POR:

CARLOS BELTRÁN LÓPEZ
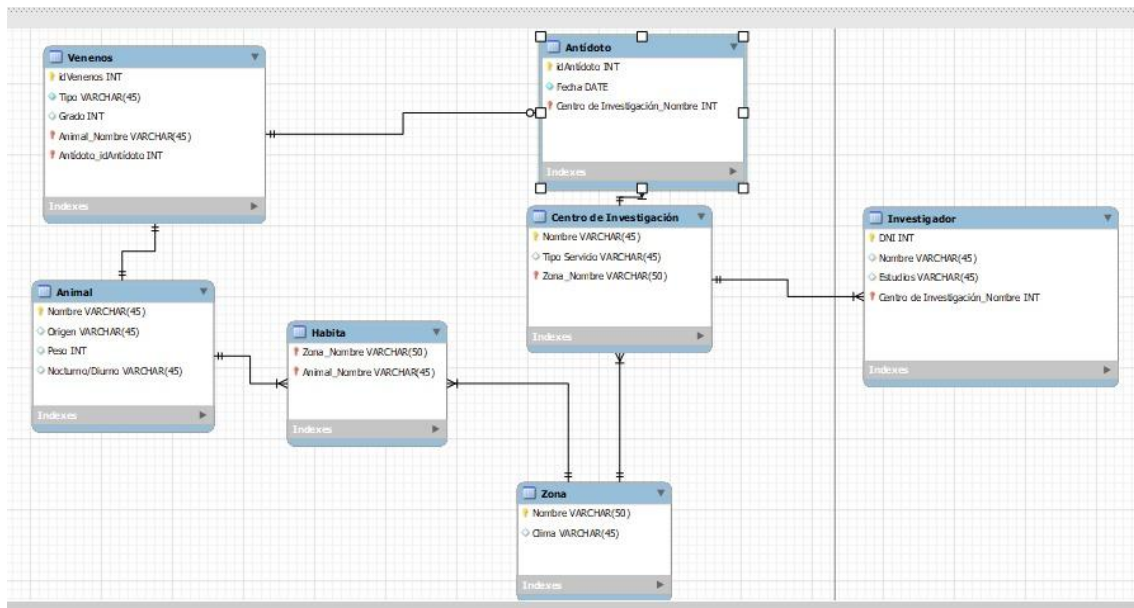
ALEJANDRO PASCUAL MELLADO

TUTORIZADO POR:

ISMAEL NAVAS DELGADO

ÍNDICE

1. INTRODUCTION

It is going to implement a data base to manage the toxicology information needed for the study of the different toxic agents in different zones where one or more researching centres take part in.

2. DESIGN AND DATA IMPLEMENTATION

Different tables have been developed in order to build the structure of the database.

Description of each one:

Venenos: table in which the id of the toxic will be saved as primary key, accompanied by its type, mortality degree (1-10) being 10 the most dangerous.

Animal: animal which originates that specific poison.

Zona: it specifies the weather. It has a 1:N relation with Centro_de_Investigacion class (one zone could have more than one investigation center) and a relation N:N with animal which is the table Habita.

Centro_de_Investigacion: the organisation that studies and develop the antidotes of each toxic agent it can be either public or private.

Investigador: table which saves the professionals working on each centre and general information about them.

Antídoto: the antidote associated to a specific poison which was created in a date and which have an id acting as a PK.

All this logical model was designed with mysql, from this, a sql file was generated and the data was inserted manually in it with the function insert.

Now it is possible to make queries, functions, triggers…

3. QUERY DESIGN

For each researching centre with three or more researchers, show it name and the zone it belongs to.

```sql
select Centro_de_Investigacion.Nombre, Centro_de_Investigacion.Zona_Nombre from Centro_de_Investigacion
where Centro_de_Investigacion.Nombre in (select Centro_de_Investigacion_Nombre from Investigador
group by Centro_de_Investigacion_Nombre
having count(Investigador.DNI)>=3);
```

	Nombre	Zona_Nombre
▶	NaturaSt	Amazonas

Show the antidotes that have been developed in researching centres from a specified zone

```sql
select * from Antídoto
where Centro_de_Investigacion_Nombre in
(select Centro_de_Investigacion.Nombre from Centro_de_Investigacion where Centro_de_Investigacion.Zona_Nombre='Alpes');
```

	idAntídoto	Fecha	Centro_de_Investigacion_Nombre
▶	202	2002-12-07	ColdI+d

Show the poisons and its antidotes if it exists

```sql
select Animal_Nombre, idVenenos, Antídoto_idAntídoto from Venenos
where Antídoto_idAntídoto is not null;
```

	Animal_Nombre	idVenenos	Antídoto_idAntídoto
▶	Rana Dardo	77	150
	Tarántula	80	151
	Mamba Negra	82	152
	Escorpion	79	153
	Víbora	81	154
	Avispa de mar	851	202
	Cobra Kai	852	203
	La ex del carlos	855	204
	Ornitorrinco	853	205

Access the name of the animals in the animals table and their area of the inhabits table that do not inhabit a specific zone

```
select Animal.Nombre, Habita.Zona_Nombre from Animal inner join Habita on Animal.Nombre=Habita.Animal_Nombre
where Nombre <>All(select Animal_Nombre from Habita where Zona_Nombre='Tailandia');
```

Nombre	Zona_Nombre
Escorpion	Sahara
Escorpion	Spain
La ex del carlos	Sahara
Lince Iberico Mutante	Spain
Lolo	Alpes
Ornitorrinco	Sahara
Pulpo Pol	Spain
Rana Dardo	Amazonas
Víbora	Spain
Viuda Negra	Amazonas