ZOO

Animal Health and Habitat project

Teeshyna Jhummun
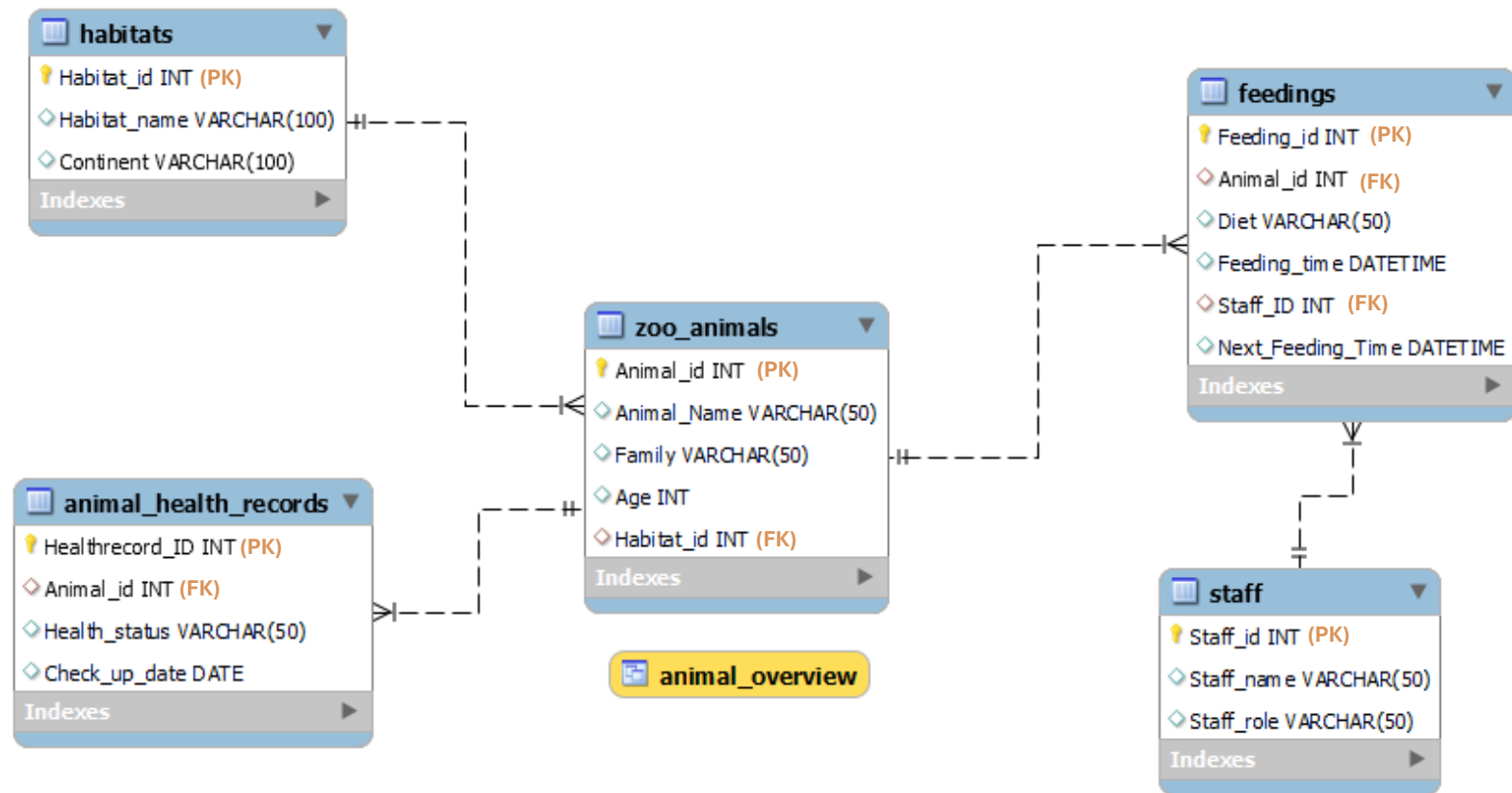
INTRODUCTION

Animal analysis using MySQL

- Purpose : Design and implement a database to manage zoo animals, understand their eating habits and health within the zoo environments.

- Extract animal dataset from Kaggle : https://www.kaggle.com/datasets/iamsouravbanerjee/animal-information-dataset

DATA MODEL

Using Kaggle Dataset:	Zoo animal Table
Animal	Name of animal
Diet	Type of diet the animal follows (Herbivore, Carnivore)
Habitat	Environment the animal is typically found in.
Continent	Continent that the animal is commonly found.

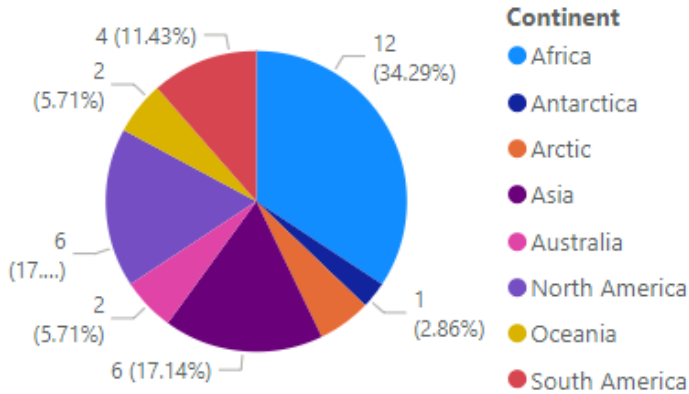| Table 2	Primary Key	Foreign Key
Zoo_animals	Animal_Id	Habitat_id (references habitats)
Habitats	Habitat_id	None
Staff	Staff_id	None
Feeding	Feeding_id	Animal_id (references zoo_animals), Staff_ID (references staff)
Animal Health record	Healthrecord_ID	Animal_id (references zoo_animals)

habitats
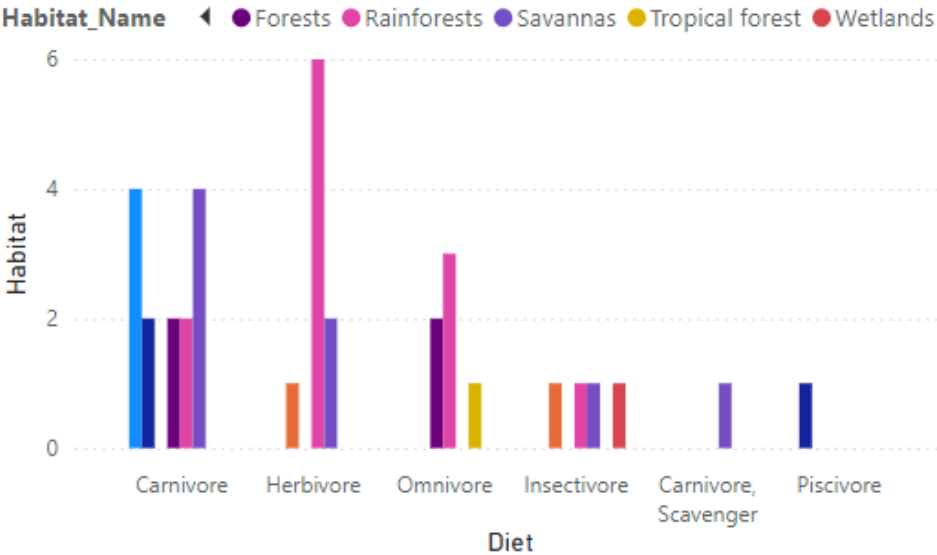- Habitat_id INT (PK)
- Habitat_name VARCHAR(100)
- Continent VARCHAR(100)
- Indexes

feedings
- Feeding_id INT (PK)
- Animal_id INT (FK)
- Diet VARCHAR(50)
- Feeding_time DATETIME
- Staff_ID INT (FK)
- Next_Feeding_Time DATETIME
- Indexes

zoo_animals
- Animal_id INT (PK)
- Animal_Name VARCHAR(50)
- Family VARCHAR(50)
- Age INT
- Habitat_id INT (FK)
- Indexes

animal_health_records
- Healthrecord_ID INT (PK)
- Animal_id INT (FK)
- Health_status VARCHAR(50)
- Check_up_date DATE
- Indexes

animal_overview

staff
- Staff_id INT (PK)
- Staff_name VARCHAR(50)
- Staff_role VARCHAR(50)
- Indexes

Using Power BI

Africa	Antarctica	Arctic	Asia	Australia	North America	Oceania	South America

Animal_name	Food_type	Habitat_Name	Continent
Aardvark	Insectivore	Savannas	Africa
African Elephant	Herbivore	Savannas	Africa
African Lion	Carnivore	Savannas	Africa
Arabian Oryx	Herbivore	Desert	Asia
Australian Fur Seal	Carnivore	Coastal Waters	Oceania
Bald Eagle	Carnivore	Forests	North America
Blue-Footed Booby	Piscivore	Coastal Waters	South America
Bornean Orangutan	Omnivore	Rainforests	Asia
Brown Bear	Omnivore	Forests	North America
Cheetah	Carnivore	Savannas	Africa
Coelacanth	Carnivore	Coastal Waters	Africa
Dhole	Carnivore	Forests	Asia
Eastern Gorilla	Herbivore	Rainforests	Africa
Emperor Penguin	Carnivore	Arctic	Antarctica
Flying Fox	Herbivore	Rainforests	Australia
Gerenuk	Herbivore	Savannas	Africa
Golden Lion Tamarin	Herbivore	Tropical forest	South America
Harp Seal	Carnivore	Arctic	Arctic
Harpy Eagle	Herbivore	Rainforests	South America
Indri	Carnivore	Rainforests	Africa
Narwhal	Carnivore	Arctic	Arctic
Okapi	Herbivore	Rainforests	Africa
Red-Eyed Tree Frog	Carnivore	Rainforests	North America
Secretary Bird	Carnivore	Savannas	Africa
Snowy Owl	Carnivore	Arctic	North America
Spider Monkey	Omnivore	Rainforests	South America
Spotted Hyena	Carnivore	Savannas	Africa
Star-Nosed Mole	Insectivore	Wetlands	North America

Distribution of animals by Continent

4 (11.43%)
2 (5.71%)
12 (34.29%)
6 (17....)
2 (5.71%)
1 (2.86%)
6 (17.14%)

Continent
- Africa
- Antarctica
- Arctic
- Asia
- Australia
- North America
- Oceania
- South America

Dietary Preferences Across Different Habitats

Habitat_Name ◀ ● Forests ● Rainforests ● Savannas ● Tropical forest ● Wetlands

Habitat (y-axis: 0, 2, 4, 6)

Diet (x-axis): Carnivore, Herbivore, Omnivore, Insectivore, Carnivore, Scavenger, Piscivore

The number of animals in each habitat categorized by diet