Task 1 – Finsbury Happy Zoo

Scenario

The database stores details of animals and the enclosures they are in, including the species of the animal, the name of the animal, the habitat, date of birth and description. The database will enable the zoo keepers to keep a record of what enclosure each animal is in as well as make a comment on specific animals or make a note of transfers between enclosures.

Example entities and attributes

Species (entity)

       Species_Name – elephant (key)

       Species_desc – large mammal

       Habitat_Type – grassland

       Max_num_of_species – 4

Animal (entity)

       Species_Name – elephant (foreign key)

       Animal_ID – ele123 (primary key)

       Enclosure_ID -grass1234

       Animal_Name – ellie

       DOB – 12/09/20

       Animal_desc – small elephant

       Diet – grass

Transfer (event entity)

       Animal_ID – ele123 (foreign key)

       Enclosure_ID – grass1234 <- initial enclosure

       Enclosure_entered_date – 10/09/21

       Enclosure_ID – grass1243 <- transfer enclosure

       Enclosure_transfer_date – 13/09/21

Comment (event entity)

     Animal_ID – ele123 (foreign key)

     Comment_ID – diet123 (primary key)

     Comment – not eating well

     Date_commented – 10/09/21

Enclosure (entity)

     Enclosure_ID – grass1234

     Habitat_type – grassland

     Enclosure_size – 30

     Main_feature – stream

Compatability (entity)

     Compatability_ID (primary key)

     Species_Name – elephant (foreign key) <- this is species a

     Species_Name – tiger (foreign key) <- this is species b

     Compatability – 2

Example queries

1. Which animals live in a specific enclosure
   Attributes needed:
   - Animal_ID, Enclosure_ID
2. Which habitats an animal can live in

   Attributes needed:

   - Animal_ID, Species_Name, habitat_type, Enclosure_ID
3. How many of a specific species can be put into an enclosure

   Attributes needed:

   - Species_Name, max_num_of_species

4. Can two species be put in the same enclosure
   Attributes needed:
   - Compatability_ID
   - Compatability
5. When was a specific comment made about a specific animal
   Attributes needed:
   - Animal_ID
   - Comment_ID
   - Date_commented