

For the scenario below identify the entities, their attributes and appropriate keys

Finsbury Happy Zoo

Finsbury Happy Zoo's concept is to show animals together in their habitats. They have a number of enclosures of different **habitat types** (such as forest or tundra), different **sizes** (square metres), each having a **main feature** (such as a stream or a cave). Animals of different species share the same enclosure. Each **enclosure** has a **unique number** and there can be several enclosures with the same habitat but with a different main feature or of a different size. Each **animal** has a **unique ID**, and their **name**, **date_of_birth**, **diet** and **description** are stored. When an animal is put in an enclosure, the **start date** is recorded, and if they are transferred to another enclosure the **end date** is recorded. Zoo keepers may need to make a **note** about a particular animal, for example "not eating well today" and this is recorded along with the **date**. To make sure the animals don't eat each other a species **compatibility** table is maintained which has the following information; **speciesA**, **speciesB**, **compatibility_rating** (5 for happy neighbours to 1 for bitter enemies). **Species** are identified by their **name**, and a **description** of the species and their **habitat** type are recorded. Species are matched against enclosures by Zoo staff, and if suitable the **maximum number of animals** of a particular species for a particular enclosure is recorded to prevent overcrowding.

Entity 1 - Enclosure

Primary key: enclosure number

Attributes: habitat type, size, main feature, max number of animals

Entity 2 – Animal

Primary key: animal id

Attributes: name, DOB, diet, description, date of admission in closure, end date if transferred, note about animal and date of the note

Entity 3 – Animal Species

Primary key: species name

Foreign key: animal id

Attributes: description, habitat type, number of animals of the species

Entity 4 – Animal Compatibility

Primary key: speciesA JOIN speciesB

Attributes: compatibility_rating