

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.

Habitat (Entity)

- Habitat types (Habitat ID)(Primary key)
- Number of enclosures
- Enclosure ID (Foreign key)

Enclosure(Entity)

- Unique number (Enclosure ID)(Primary key)
- Habitat types
- Size of encloser
- Main feature
- Animals of different species
- Max number of animals of a particular species

Animals (Entity)

- Unique ID (Animal ID)(Primary Key)
- Name
- Date of birth
- Diet
- Description
- Enclosure start date
- Enclosure end date
- Zoo keeper notes

Compatibility table (Entity)

- SpeciesA
- SpeciesB
- Compatibilities rating

Species (Entity)

- Name
- Description
- Habitat type
- Enclosure (Foreign key)
- Zoo staff
- Animal ID (Foreign key)