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# LU03.L02 - Designing an ERD

### Given business case

As overreaching goal, we want to administrate our holidays. Though we want to store the following information:

- · which countries we visited so far
- how long we stayed in each country
- on which continent each country is located
- the price for each trip
- the date of each trip

## Task: Design a ERD

Analyse the given business case and design an ERD that matches the requirements of the business case.

#### Solution

For this scenario, the following entities are identified:

- 1. Country
  - Attributes
    - CountryID (Primary Key)
    - CountryName
    - ContinentName
- 2. Trip
  - Attributes
    - ∘ TripID (Primary Key)
    - CountryID (Foreign Key)
    - StartDate
    - EndDate
    - Price
  - Relationships:
    - Country: A trip occurs in one country.
    - Duration: Calculated as the difference between EndDate and StartDate.
- 3. Continent
  - Attributes:
    - ContinentID (Primary Key)

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- ContinentName
- Relationships:
  - Country: Each country is located on one continent.
- 4. Relationships:
  - One-to-Many:
    - A Continent can have many Countries.
    - A Country can have many Trips.

5 ERD in Crow's feet notation Continent (1) ————< has >———— (∞) Country Country (1) ————< hosts >——— (∞) Trip

## **Vocabulary**

| English      | German             |
|--------------|--------------------|
| prerequisite | Grundvoraussetzung |



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