ER Diagrams

1. A sales department (SDept-#) is uniquely assigned to a customer characteristics (Cust-#), an article characteristics (Art-#) and a sales channel (Sch-#).
2. An airplane (Tail-#) is assigned to several flights (Flight-#). A flight is assigned to only one airplane.

A pilot (SocialSec-ID) can perform several flights. A flight is performed by several (normally at least two) pilots.

1. A supplier (Supp-#) processes many purchase orders (PO-#) and sells a number of products (Prod-#). A product is sold by only one supplier.

Each of the purchase orders that a supplier may process includes several products. The relationship between order and product is defined as "Line Item".

A customer (Cust-#) may place one or more purchase orders. A purchase order may be placed by only one customer.

Use Case Diagrams

1. E-commerce
2. Online ticketing

Use Case and Class