

## **Data Modeling**

### **UPS**

UPS company prides itself on having up-to-date information on the processing and current location of each shipped item. To do this, UPS relies on a company-wide information system with the following requirements:

1. Shipped items are the heart of the UPS product tracking information system. Shipped items can be characterized by a unique item number, weight, dimensions, insurance amount, destination, and final delivery date.
2. Shipped items are received into the UPS system at a single retail center.
3. Retail centers are characterized by their type, uniqueID, and address.
4. Shipped items make their way to their destination via one or more standard UPS transportation events (flights, truck deliveries, etc.).
5. These transportation events are characterized by a unique scheduleNumber, a type (flight, truck, etc.), and a deliveryRoute.

### **Question:**

Design a representation of the data in terms of entities, attributes, and relationships between entities:

1. Construct an ERD diagram to depict this representation.
2. Show the cardinalities using (min, max) notation.

**Solution:****Entity-Relationship Diagram**