# Structured Query Language SQL - Day 4

# <mark>Agenda</mark>

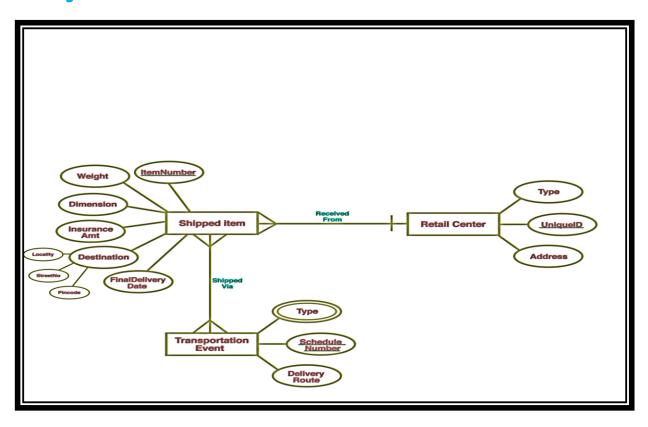
• ER Diagram Case Study



### Case Study 1:

UPS 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. Shipped items are the heart of the UPS product tracking information system. Shipped items can be characterized by item number (unique), weight, dimensions, insurance amount, destination, and final delivery date. Shipped items are received into the UPS system at a single retail centre. Retail centres are characterized by their type, uniqueID, and address. Shipped items make their way to their destination via one or more standard UPS transportation events (i.e., flights, truck deliveries). These transportation events are characterized by a unique scheduleNumber, a type (e.g., flight, truck), and a deliveryRoute. Create an Entity Relationship diagram that captures this information about the UPS system. Be certain to indicate identifiers and cardinality constraints.

#### ER Diagram for the above database.



# Case Study 2:

In a Hospital database.

A patient is assigned a particular ward. A single ward is assigned to many patients during a given period.

A ward has or more nurses. On the other hand each nurse must be assigned a single ward only and each ward must have a nurse.

A doctor may check zero or many patients during a given period. A patients may be checked by Zero or many doctors.

A patients is billed for one or many medicines. On the other hand, a particular medicine may appear in zero or more patients.

ER Diagram for the above database.

