Conceptual Model:

Diagram

Description automatically generated

Logical Model:

**Manufacturer(name)**

PK name

Ski:

**Ski(manufacturer, id, size, MSRPP, model, weight\_class, ski\_type)**

PK manufacturer, id)

FK manufacturer REFERENCES Manufacturer(name)

FK model REFERENCES Ski\_model(model)

FK weight\_class REFERENCES Weight\_class(name)

FK ski\_type REFERENCES Ski\_type(name)

**Weight\_class(name)**

PK name

**Ski\_type(name)**

PK name

**Ski\_Model(model, description, grip\_system, historical, url, temperature)**

PK model

**Public\_ski\_models(account\_id, model\_id)**

PK account\_id, model\_id

FK account\_id REFERENCES General\_public(account\_id)

FK model\_id REFERENCES Ski\_model(model)

**General\_public(account\_id)**

PK account\_id

Customers:

**Individual\_store(customer\_id, start\_date, end\_date, name, shipping\_address, buying\_price)**

PK customer\_id

**Franchise(customer\_id, store\_info)**

PK customer\_id

**Team\_skier(customer\_id, start\_date, end\_date, name, dob, club, num\_skies)**

PK customer\_id

Employees:

**Production\_planner(number, name, department)**

PK number

**Storekeeper(number, name, department)**

PK number

**Customer\_representative(number, name, department)**

PK number

Production Plans:

**Planner\_production\_plans(planner\_id, plan\_id)**

PK planner\_id, plan\_id

FK planner\_id REFERENCES Production\_planner(number)

FK plan\_id REFERENCES Production\_plan(id)

**Production\_plan(id, start\_date, end\_date, manufacturer)**

PK id

FK manufaturer REFERENCES Manufacturer(name)

**Ski\_production\_quantity(plan\_id, working\_day, ski\_model)**

PK plan\_id, working\_day, ski\_model

FK plan\_id REFERENCES Production\_plan(id)

Transport:

**Shipment(number, store\_name, shipping\_address, pickup\_date, state, transporter, driver\_id, representative\_id)**

PK number

FK representative\_id REFERENCES Customer\_representative(number)

FK transporter REFERENCES Transporter(company\_name) // In the conceptual model, maybe remove “transporter” from Shipment, as it is already a FK.

**Transporter(company\_name)**

PK company\_name

Other:

**Representative\_review\_order(rep\_id, order\_number)**

PK rep\_id, order\_number

FK rep\_id REFERENCES Customer\_representative(number)

FK order\_number REFERENCES Order(order\_number)

**Storekeeper\_update\_order(keeper\_id, order\_id)**

PK keeper\_id, order\_id

FK keeper\_id REFERENCES Storekeeper(number)

FK order\_id REFERENCES Order(order\_number)

**Transporter\_retrive\_order(transporter\_id, order\_id)**

PK transporter\_id, order\_id

FK transporter\_id REFERENCES Transporter(company\_name)

FK order\_id REFERENCES Order(order\_number)

**Order(order\_number, total\_price, state, customer\_id)**

PK order\_number

FK customer\_id REFERENCES Customer(id)

**Ski\_type\_quantity(order\_number, ski\_type, weight\_class, model, quantity)**

PK order\_number, ski\_type, weight\_class, model

FK order\_number REFERENCES Order(order\_number)

**Quantity\_of\_skies(order\_number, ski\_type, weight\_class, model, ski\_id)**

PK order\_number, ski\_type, weight\_class, model, ski\_id

FK order\_number REFERENCES Order(order\_number)

FK ski\_type REFERENCES ski\_type\_quantity(ski\_type)

FK weight\_class REFERENCES ski\_type\_quantity(weigth\_class)

FK model REFERENCES ski\_type\_quantity(model)

FK ski\_id REFERENCES Ski(id)

Physical Model: