

# Relational Database Schema

**Ships** (imo\_number, name, flag\_country, producer, cargo\_capacity, crew\_capacity, ownership\_status)

**MaintenanceEvents** (id, ship\_number REF Ships, cause, start, end, status)

**CrewMembers** (id, name, surname, country\_id REF Countries, date\_of\_birth, contract\_termination, rank)

**Cruises** (id, ship\_number REF Ships, crew\_id REF CrewMembers, waterbody\_id REF Waterbodies, etd, eta, atd, ata, status)

**Incidents** (id, cruise\_id REF Cruises, cause, start, end, delay, severity)

**PortCalls** (cruise\_id REF Cruises, seq\_no, port\_code REF Ports, etd, eta, atd, ata, status)

**Cargo** (id, order\_id REF Orders, cruise\_id, load\_seqno, discharge\_seqno, planned\_weight, transported\_weight, status)

(cruise\_id, load\_seqno) REF PortCalls

(cruise\_id, discharge\_seqno) REF PortCalls

**Orders** (id, client\_code REF Clients, origin\_port\_code REF Ports, dest\_port\_code REF Ports, status)

**Clients** (client\_code, name, billing\_address, contract\_valid\_from, contract\_valid\_to)

**Ports** (un\_locode, waterbody\_id REF Waterbodies, country\_id REF Countries, name)

**Waterbodies** (id, country\_id REF Countries, name, navarea, kind)

**Countries** (id, continent, name, area, population)