

Relational Schema:

ROUTE = (routeID)

LEG = (legID, distance)

CONTAINS = (rID[FK1], lID[FK2], sequence)

FK1: rID → ROUTE(routeID)

FK2: lID → LEG(legID)

PRT = (portID, name, city, state, country, locID[FK3])

FK3: lID → LOCATION(locID)

DEPARTS = (lID[FK4], pID[FK5])

FK4: lID → LEG(legID)

FK5: pID → PORT(portID)

ARRIVES = (lID[FK6], pID[FK7])

FK6: lID → LEG(legID)

FK7: pID → PORT(portID)

LOCATION = (locID)

SHIP = (sname, max_cap, speed, locID[FK8], cruiselineID[FK9])

FK8: lID → LOCATION(locID)

FK9: cID → CRUISELINE(cruiselineID)

RIVER = (uses_paddles, sname[FK10], cID[FK13])

FK10: sname → SHIP(sname)

FK13: cID → SHIP(cruiselineID)

OCEAN_LINER = (lifeboats, sname[FK11], cID[FK15])

FK11: sname → SHIP(sname)

FK15: cID → SHIP(cruiselineID)

CRUISELINE = (cruiselineID)

CRUISE = (cruiseID, cost, rID[12])

FK12: rID → ROUTE(routeID)

SUPPORTS = (cID[FK14], sname[FK24], clineID[FK25], progress, sstatus, next_time)

FK14: cID → CRUISE(cruiseID)

FK25: sname → SHIP(sname)

FK25: clineID → SHIP(cID)

OCCUPIES = (pID[FK19], IID[FK20])

FK19: pID → PERSON(personID)

FK20: IID → LOCATION(locID)

PERSON = (personID, plast, pfirst)

CREW = (taxID, experience, pID[FK16], cID[FK21])

FK16: pID → PERSON(personID)

FK21: cID → CRUISE(cruiseID)

CREW_LICENSE = (pID[FK17], license_name)

FK17: pID → PERSON(personID)

PASSENGER = (pID[FK18], miles, funds)

FK18: pID → PERSON(personID)

BOOKED = (pID[FK22], cID[FK23])

FK22: pID → PERSON(personID)

FK23: cID → CRUISE(cruiseID)