

## Definition

- **State**: a nation or territory considered as an organized political community under one government.
- **Airport** a complex of runways and buildings for the takeoff, landing, and maintenance of civil aircraft, with facilities for passengers.
- **Airline** an organization providing a regular public service of air transportation on one or more routes.
- **Airport-Airlines**: an association class that represent the relationship between airport and airlines.
- Flight a process of flying through the air.
- International Flight: An international flight is a form of commercial flight within civil aviation where the departure and the arrival take place in different countries
- **Charge**: demand (an amount) as a price from someone for a service rendered or goods supplied.
- Charged Flight: a flight that can be local or domestic
- Flight Crew Group of employees that help maintain a flight while it is in the air.
- Incident Report Document containing information about passengers and crew
  members specifying incidents that occurred while on the flight, could be positive or
  negative
- City a large town where people could live their daily lives.
- **Flight Schedule** the time frame that a flight is meant to fly out in with both a beginning and an end.
- **Airplane** the vehicle used for travel by air typically containing civilian passengers but can also contain products and other type of people with more specific specialties and a flight crew.
- Crew Members the specific employees that belong to the flight crew.
- Flight Crew: people who are responsible for the operation of an aircraft during flight.
- **Pilot**: a person who operates the flying controls of an aircraft.
- Co-Pilot: a second who controls the aircraft.
- **Navigator**: a person who directs the route or course of a ship, aircraft, or other form of transportation, especially by using instruments and maps.
- **Flight Attendant**: someone whose primary duty is to ensure the safety and comfort of passengers during an airline flight.

## **Associations**

A State contains one to many Cities.
A City is contained by one and only one State.

A City headquarters one to ten Airlines. An Airline is headquartered in one and only one City.

A City contains one to many Airports. An Airport is contained by one and only one City.

An Airline contains one to many Airport-Airline.
An Airport-Airline is contained by one and only one Airline.
An Airport contains one to many Airport-Airline.
An Airport-Airline is contained by one and only one Airport.

An Airport sets the arrival for one to many Flight Schedules. A Flight Schedule has a set arrival at one and only one Airport.

An Airport sets the departure for one to many Flight Schedules.

A Flight Schedule has a set departure at one and only one Airport.

A Flight Schedule is set at one to many Flights.
A Flight is set by one and only one Flight Schedule.

A International flight is/is not a Flight Schedule. A Flight Schedule is an International Flight.

A chargedFlight has zero to many charge. A charge had by one and only one chargedFlight

An Airline owns one to many Airplanes. An Airplane is owned by one and only one Airline.

n Airplane flies one to many Flights

An Airplane flies one to many Flights. A Flight is flown by one and only one Airplane.

A Flight Crew works zero to many Flights.
A Flight is worked by one and only one Flight Crew.

Each CrewMember can be a pilot a pilot is one and only crewmember

Each crew member can be a copilot a copilot is one and only one crewmember

each crewmember can be a navigator a navigator is one and only one crewmember

each crewmember can be a FlightAttendant a FlightAttendant is one and only one CrewMember

A Flight Crew is composed of only one pilot A pilot can be be in 0 to 1 Flight Crew

A Flight Crew is composed of only one copilot A copilot can be in 0 to 1 Flight Crew

A Flight Crew is composed of two to five Flight Attendant A flight attendant can be in 0 to 1 Flight Crew

A Flight Crew is composed of one navigator A navigator can be in 0 to 1 Flight Crew

A Crew Member reports zero to many Incident Reports.

An Incident Report is reported by one and only one Crew

A Crew Member is involved in zero to many Incident Reports. An Incident Report involves one and only one Crew Member.

A Flight contains zero to many Incident Reports.

An Incident Report is contained by one and only one Flight.

An Airline hires one to many Crew Member A Crew Member is hired by one and only one Airline.