Airport Database System

This comprehensive airport database system encompasses several key entities and their attributes. It begins with the airline partners (Airline), where each airline is uniquely identified by an ID (airlineID) and is associated with essential information such as the airline's name (airlineName), website (airlineWebsite), and headquarters location (airlineHQ). It's important to note that each aircraft (Aircraft) is connected to a specific airline and is described by a unique aircraft ID (aircraftID), model (aircraftModel), capacity (aircraftCapacity), fuel amount (aircraftFuel), and the date of its recent maintenance (aircraftLastMaintenenceDate).

Flights are an important part of the database, with each flight containing a unique flight number (flightNum), departure time (flightDeptTime), arrival time (flightArrivalTime), and flight status (flightStatus). It's essential to mention that every flight operates under the banner of an airline. Moreover, the database contains a section dedicated to airport boarding gates, each identified by a unique gate number (gateNum), gate location (gateLoc), and characterized by its current status (gateStatus). Some gates serve as departure points for flights.

Passengers form a crucial component of the system, with each passenger having a unique passport ID (passengerPassportID), a full name(passengerFullName) consisting of first and last names(passFirstName) (passLastName), a Date Of Birth (passengerDOB), and the passenger’s age (passengerAge) which can be derived from the DOB. Furthermore, passengers have multiple contact information entries (passengerConInfo), and each passenger is connected to one or more flights. Additionally, luggage information is also tracked, possessing a unique ID (luggID), luggage weight (luggWeight), and checked status (luggStatus). Importantly, each piece of luggage is linked to an individual passenger and is associated with a specific flight.

The system also manages data concerning airport staff. Staff members are identified by their full names(staffFullname), which are comprised of first and last names (staffFirstName) (staffLastName), and each has a unique staff ID (staffID). Their nationality (staffNationality) and date of birth (staffDOB) are also recorded. Certain staff members have distinct job types (staffJobType) such as Gate staff, who are assigned to one or more boarding gates; Airline staff, who are associated with a specific airline; and Security staff, who are identified by a badge number (staffBadgeNum).

Additionally, the database encompasses information related to ground transportation services offered to passengers. These services include unique vehicle numbers (GTVehicleNum), car type(GTCarType), driver name (DriverName), reservation cost (GTReserveCost),and the driver's license details (DriverLicenseID). It's important to emphasize that some passengers choose to book specific ground transportation methods.

Lastly, the airport provides VIP Lounge with unique IDs (VIP\_ID), email (VIP\_Email), VIP Location (VIP\_Loc). It's important to mention that certain passengers are granted access to the VIP services.