



The above diagram represents the tables, their attributes, and their relations used in the Query.java. Flights, Carriers, Weekdays, and Months are designed according to the given spec. BookedSeats, Reservations, and Users are included for the following reasons. BookedSeats represents the number of booked seats on a given flight, accessible via a flight id. Because multiple users can access and book seats simultaneously, as well as between sessions, the number of booked seats on a flight needs to be persistent across sessions and users. Reservations holds the relevant data for a flight reservation booked by a given user. Since reservations need to persist across multiple sessions its represented as a table instead of in memory. In contrast, itineraries exist uniquely for each user and only for that session, hence itineraries are appropriate to represent in memory rather than as tables. Users represent a users essential profile information. Since a user needs to reference against stored user information when logging in, it's essential that users be represented as a table.