Emily Brown

Libr242

2/5/13

Individual Assignment

Expedia

The database system is used for storing data on travel options. It has data on times and dates on cruises, hotels, car rentals, flights, vacation packages which combine several of the former, and things to do in a city of your choice. For example, I can look up all the one way flights from Portland, OR to San Diego, CA for March 24th, 2013. The results can be sorted by departure time, arrival time, stops, duration and price. The results can be refined by departure or arrival time, the number of stops, and the airline provider.

The default search prompt for flights requires the departure city, the arrival city, the date of departure and arrival. For the hotel, the search prompt requires the city, the check-in and check-out dates. Car rental requires the pick-up airport or city, the pick-up and drop-off date. For activities, or things to do, a destination and from and to dates must be entered. For the cruise, a destination is selected from a drop down menu and a departure month. Additional search options for cruises include selecting the departure port, ship, promotion, type of cruise, cruise line, cruise length, destination and itinerary. Flight and hotel requires the departure airport, departure date and time, arrival airport, returning date and time, numbers of rooms required, number of people and type of people. This includes adults, seniors, and children. Flight and car require departure airport, date and time, arrival airport, date and time of return, number of people, and preferred car type. Flight, hotel and car require departure airport, date and time, arrival airport, date and time of return, number of rooms, number of people. Hotel and car require destination city, check-in and check-out date for the hotel, pick-up and drop-off time for the car, number of rooms, and type of people.

Leaving the city or dates blank creates a prompt for the user to enter the required information. In the search box, the required fields are highlighted with a red border and a pink field. Until the information is entered, the site will not progress to the results page.

The user is allowed to give complicated search conditions. For example, bundling a flight with a hotel, there is an option of having a hotel reservation for only part of the trip. There is also an option of searching two destinations. The flight search prompt allows for round trip, one way, or multiple destinations, up to five (5) separate flights. On popular routes, the user can indicate that their dates are flexible. The user can specify they types of fliers, from adults, seniors, and children. They can also request to see only nonstop flights, or refundable flights. They can specify their preferred airline and which class they'd like to search for.

The conditions are simple drop down menus, check boxes, or blank names for city and airport names. There is no particular syntax required besides having the correct city or airport name, and having the dates in the correct format. There is no requirement to use any kind of special keywords or symbols to designate logical relations.

What information elements must have been stored in the database, based on the results you got from your experimentation?

Several different airline providers flight times and dates for hundreds of different destinations, with connecting flight information and pricing. Hundreds of different hotels with reservation availabilities, room information and prices. Several car rental agencies with reservation availabilities, prices, car information and locations. Several cruise liner reservation availabilities, destinations, and cruise information. Hundreds of cities' attractions listing and information. Hundreds of package deals that combine flights with hotels, flights with car rentals, flights with hotel and car rentals, hotels with car rentals. Information on offers and other deals like frequent flyer miles and rewards. All of this information must be up to date, which is indicated by, for example, certain flight deals will announce to the user that only a few seats remain on that particular flight. That means that the entire database is keeping track of how many reservations remain on each flight for each time and date and airline.

The information in the database is organized where, for the most part, specific dates must be entered in to show the corresponding information requested. The exception to this is the flexible dates option on flights, and the month window selection for cruises. From there, the information is usually displayed by cost, but several other display options exist. This means that while seeing many different options for flights, for example, can easily be viewed in a number of sorted ways, if the user wants to change the dates of travel, this action will change all of the results.

The main key for flights would be the flight number, which is unique to it's airline. Even two flights going to the same destination from the same departure airport on the same day from the same carrier will have different flight numbers. This flight number can be used as a foreign key to correspond with the bundling packages with flight and hotel, or flight and car, or flight, hotel and car. Hotels often have similar names; many are part of chains. The unique address of a hotel would be an useful identification that would associate that particular hotel with a particular city and/or airport. Furthermore, of the many rooms, at the time of reservation, the user would be assigned a specific room or rooms. The car rental would be a similar situation. There are many chain car rental services, but it's unique address would indicate it's location and what it can be associated with. The car reservation would also assign a specific car to be reserved for the user's specified dates. This also goes for activities. There are many activities going on in a city, but the user will reserve one specific slot or slots in that activity. The cruises' primary key seems to be in the departure city to arrival city and the dates of travel. For example, there are many Viking River Cruises in Europe. However, they are organized by the specific dates of travel as well as the departure. So there can be two different cruises on the same dates but one is traveling from Amsterdam to Basel, while another is traveling from Basel to Amsterdam.

What seems to be the primary data directly stored/retrieved from the database and what is likely to be "secondary" data computed in real time from primary data for reporting?

The primary data

Try to make your best guess using whatever you know, and don't be afraid of making mistakes. The report should be no more than five pages in length, excluding references and appendiices of illustrations (screen captures).

Due 2/8