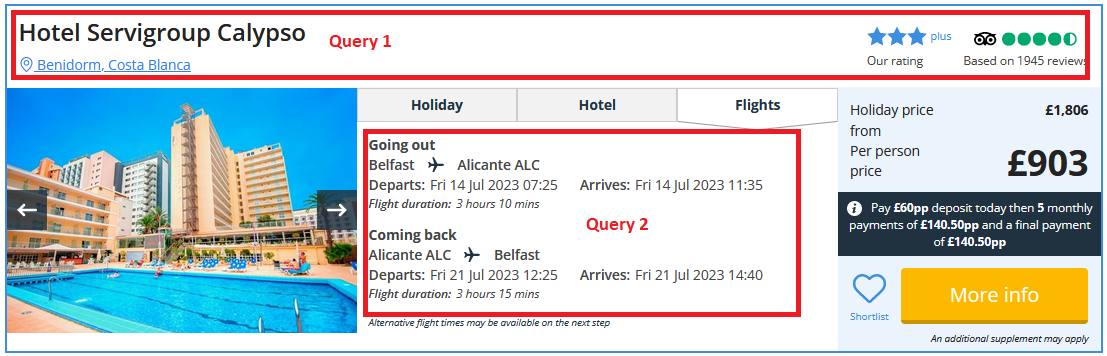
**APPENDIX 1 : QUERIES**

Note Test data does not necessarily match website data

**Use Case - 1:**

**Generate the data visible on a hotel “card” on the website after using main search form**



**Use Case 1 – Queries 1:**

SET @HotelName = 'Spanish Hotel 1';

SELECT

  hotel.hotel\_name AS HotelName,

    region.region\_name AS RegionName,

    resort.resort\_name AS ResortName,

    star\_rating.star\_rating AS OurRating,

    star\_rating.star\_rating\_plus AS OurRatingPlusFlag,

    CAST(SUM(review\_rating.review\_rating) / COUNT(review.review\_id) AS DEC(2,1)) AS ReviewScore,

    COUNT(DISTINCT review.review\_id) AS NumberOfReviews

FROM hotel

INNER JOIN resort ON resort.resort\_id = hotel.hotel\_resort\_id

INNER JOIN region ON region.region\_id = resort.resort\_id

INNER JOIN star\_rating ON star\_rating.star\_rating\_id = hotel.hotel\_star\_rating\_id

INNER JOIN room\_type ON room\_type.room\_type\_hotel\_id = hotel.hotel\_id

INNER JOIN room\_booking ON room\_booking.room\_booking\_room\_type\_id = room\_type.room\_type\_id

INNER JOIN booking ON booking.booking\_id = room\_booking.room\_booking\_booking\_id

INNER JOIN booking\_contact ON booking\_contact.booking\_contact\_id = booking.booking\_contact\_id

INNER JOIN review ON review.reviewer\_id = booking\_contact.booking\_contact\_id

INNER JOIN review\_rating ON review\_rating.review\_rating\_id = review.review\_rating\_id

WHERE hotel.hotel\_name = @HotelName

GROUP BY hotel.hotel\_id;

**Use Case 1 – Results 1:**

Graphical user interface, application, website

Description automatically generated

**Use Case 1 – Queries 2:**

-- parameters gathered from jet2Holidays main search feature form

SET @OutboundDate = '2023-01-01';

SET @Duration = 2;

SET @HomeAirportId = 5; -- Belfast Internation Airport ID

-- parameter from website card shown above, changes for each card

SET @HotelId = 11; -- 'Spanish Hotel 1' Id

-- get route ids & compute return date

SET @AwayAirportId = (SELECT hotel.hotel\_serving\_airport\_id FROM hotel WHERE hotel.hotel\_id = @HotelId);

SET @OutboundRouteId = (SELECT route.route\_id FROM route WHERE route.departure\_airport\_id = @HomeAirportId AND route.arrival\_airport\_id = @AwayAirportId);

SET @ReturnRouteId = (SELECT route.route\_id FROM route WHERE route.departure\_airport\_id = @AwayAirportId AND route.arrival\_airport\_id = @HomeAirportId);

SET @ReturnDate = DATE\_ADD(@OutboundDate, INTERVAL @Duration DAY);

-- outbound flight info query

SELECT

  dep\_airport.airport\_name AS DepartureAirport,

    dep\_airport.airport\_iata\_code AS DepartureAirportCode,

    arr\_airport.airport\_name AS ArrivalAirport,

    arr\_airport.airport\_iata\_code AS ArrivalAirportCode,

    flight.departure\_utc\_datetime AS DepartureTime,

    flight.arrival\_utc\_datetime AS ArrivalTime,

    TIMEDIFF(flight.arrival\_utc\_datetime, flight.departure\_utc\_datetime) AS Duration

FROM flight

INNER JOIN route ON route.route\_id = flight.route\_id

INNER JOIN airport AS dep\_airport ON dep\_airport.airport\_id = route.departure\_airport\_id

INNER JOIN airport AS arr\_airport ON arr\_airport.airport\_id = route.arrival\_airport\_id

WHERE flight.route\_id = @OutboundRouteId LIMIT 1;

-- return flight info query

SELECT

  dep\_airport.airport\_name AS DepartureAirport,

    dep\_airport.airport\_iata\_code AS DepartureAirportCode,

    arr\_airport.airport\_name AS ArrivalAirport,

    arr\_airport.airport\_iata\_code AS ArrivalAirportCode,

    flight.departure\_utc\_datetime AS DepartureTime,

    flight.arrival\_utc\_datetime AS ArrivalTime,

    TIMEDIFF(flight.arrival\_utc\_datetime, flight.departure\_utc\_datetime) AS Duration

FROM flight

INNER JOIN route ON route.route\_id = flight.route\_id

INNER JOIN airport AS dep\_airport ON dep\_airport.airport\_id = route.departure\_airport\_id

INNER JOIN airport AS arr\_airport ON arr\_airport.airport\_id = route.arrival\_airport\_id

WHERE flight.route\_id = @ReturnRouteId LIMIT 1;

**Use Case 1 – Results 2:**





**Use Case - 2:**

**Demonstrate Time & Date Dependent Flight Pricing**

**Use Case 2 – Queries 1** *(ran once with each datetime variable below)***:**

SET @DateTimeToCheck = '2023-01-01 03:00:00';

-- SET @DateTimeToCheck = '2023-01-01 14:00:00';

-- SET @DateTimeToCheck = '2023-01-01 21:00:00';

-- SET @DateTimeToCheck = '2023-01-02 12:20:00';

SET @RouteId = 10; -- 'Spain to Belfast'

SELECT

  route\_price.route\_price\_gbp AS FlightPrice,

    @DateTimeToCheck AS FlightDateTime,

    route\_price.route\_price\_valid\_from\_datetime AS ValidFrom,

    route\_price.route\_price\_valid\_to\_datetime AS ValidTo FROM route\_price

INNER JOIN route ON route.route\_id = route\_price.route\_price\_route\_id

WHERE route\_price.route\_price\_route\_id = @RouteId

AND @DateTimeToCheck BETWEEN route\_price.route\_price\_valid\_from\_datetime AND route\_price.route\_price\_valid\_to\_datetime

AND route.route\_id = @RouteId;

**Use Case 2 – Results 1**

**Text

Description automatically generated with low confidence**

**Graphical user interface

Description automatically generated with medium confidence**

**Graphical user interface

Description automatically generated with medium confidence**

**A picture containing graphical user interface

Description automatically generated**

**Use Case - 3:**

**Hotel Reviews**

Graphical user interface, text, application, email

Description automatically generated

**Use Case 3 – Queries 1:**

SET @HotelName = 'Spanish Hotel 1';

SELECT

    hotel.hotel\_name AS HotelName,

    town\_city.town\_city\_name AS ReviewerTown,

    CountryName.location\_name AS ReviewerCountry,

    passenger.passenger\_first\_name AS ReviewerFirstName,

    passenger.passenger\_last\_name AS ReviewerLastName,

    DATE(review.review\_timestamp) AS ReviewDate,

    review\_rating.review\_rating AS ReviewRating,

    review.review\_content AS Review

FROM review

INNER JOIN booking\_contact ON booking\_contact.booking\_contact\_id = review.reviewer\_id

INNER JOIN passenger ON passenger.passenger\_id = booking\_contact.booking\_contact\_passenger\_id

INNER JOIN booking ON booking.booking\_contact\_id = booking\_contact.booking\_contact\_id

INNER JOIN review\_rating ON review\_rating.review\_rating\_id = review.review\_rating\_id

INNER JOIN address ON address.address\_id = booking\_contact.booking\_contact\_address\_id

INNER JOIN town\_city ON town\_city.town\_city\_id = address.town\_city\_id

INNER JOIN country ON country.country\_id = town\_city.town\_city\_country\_id

INNER JOIN location\_name AS CountryName ON CountryName.location\_name\_id = country.country\_location\_name\_id

INNER JOIN room\_booking ON room\_booking.room\_booking\_booking\_id = booking.booking\_id

INNER JOIN room\_type ON room\_type.room\_type\_id = room\_booking.room\_booking\_room\_type\_id

INNER JOIN hotel ON hotel.hotel\_id = room\_type.room\_type\_hotel\_id

WHERE hotel.hotel\_name = @HotelName

GROUP BY review.review\_id;

**Use Case 3 – Results 1:**

