

List all available cars for a given date SQL

Asked 7 years, 4 months ago Modified 7 years, 4 months ago Viewed 2k times



1



Hello guys am trying to show list of all available cars for a given date i try with `BETWEEN` but unsuccessfully. Is it a good idea to add another field(status) in the car table and query with status. Has there's a good approach? Or is it better to be displayed by using the booking_date between return_date?

booking:

id	customer_id	car_id	booking_date	return_date	time_stamp
1	2	5	2015-11-04	2015-11-12	15.06.10 20:10
2	3	2	2015-11-02	2015-11-13	15.06.10 20:10
3	1	11	2015-11-05	2015-11-16	15.06.10 20:10
4	4	8	2015-11-10	2015-12-16	15.06.10 20:10
5	0	0	0000-00-00	0000-00-00	15.06.10 20:10

CarType:

id	car_type_id	branch_id	registration_number	color	date_of_manufacturing	base_price_per_day
1	1	1	BG-123-431	Bela	2010-11-15	
2	2	1	BG-A32-212	Metalik	2015-11-04	
3	3	2	PA-332-421	Metalik	2008-05-03	
4	4	1	SM-312-542	Crna	2014-06-01	
5	5	1	BG-4393-54	Crna	2012-05-03	
6	6	1	NS-423-64	Bela	2010-10-08	

Car:

id	car_type_id	branch_id	registration_number	color	date_of_manufacturing	base_price_per_day
1	1	1	BG-123-431	Bela	2010-11-15	
2	2	1	BG-A32-212	Metalik	2015-11-04	
3	3	2	PA-332-421	Metalik	2008-05-03	
4	4	1	SM-312-542	Crna	2014-06-01	

35	5	5	1	BG-4393-54	Crna	2012-05-03
50	6	6	1	NS-423-64	Be1a	2010-10-08
50						

My all bookings am listing like this:

```
SELECT BOOKING.BOOKING_NUMBER, BOOKING.BOOKING_DATE,
BOOKING.RETURN_DATE, AGENCY.NAME, CAR.REGISTRATION_NUMBER,
CAR_TYPE.NAME
FROM BOOKING
JOIN AGENCY ON BOOKING.AGENCY_ID = AGENCY.ID
JOIN CAR ON CAR.ID = BOOKING.CAR_ID
JOIN CAR_TYPE ON CAR_TYPE.ID = CAR.CAR_TYPE_ID
```

But for all available vehicles I have no idea. Any example?

php mysql sql database

Share Improve this question Follow

edited Nov 4, 2015 at 14:17

asked Nov 4, 2015 at 14:15



Juan Carlos Oropeza

46.9k 12 76 118



Ivan

5,035 11 52 84

2 Answers

Sorted by:

Highest score (default)

You can use LEFT JOIN :

1

```
SELECT
CAR.REGISTRATION_NUMBER,
CAR_TYPE.NAME,
AGENCY.NAME,
CASE
WHEN BOOKING.CAR_ID IS NULL THEN 'Not Booked'
ELSE 'Booked'
END AS Status,
BOOKING.BOOKING_NUMBER,
BOOKING.BOOKING_DATE,
BOOKING.RETURN_DATE
FROM CAR
INNER JOIN CAR_TYPE ON CAR_TYPE.ID = CAR.CAR_TYPE_ID
LEFT JOIN BOOKING ON CAR.ID = BOOKING.CAR_ID
LEFT JOIN AGENCY ON BOOKING.AGENCY_ID = AGENCY.ID;
```

This will give you all the available cars, and if any cars has no booking it will come with NULL values for booking and agency, and the status column will show whether it is booking or not.

Share Improve this answer Follow

answered Nov 4, 2015 at 14:20

**Mahmoud Gamal****77.4k** 17 138 163Using your `booking` table you can know what cars are book on a single day `@checkDate`

1



```
SELECT *
FROM BOOKING
WHERE @checkDate BETWEEN booking_date AND return_date
```



So to get available cars on that date, you use:

```
SELECT *
FROM Cars
WHERE car_id not in (
    SELECT car_id
    FROM BOOKING
    WHERE @checkDate BETWEEN booking_date AND return_date
)
```

OR in your full query

```
SELECT
    BOOKING.BOOKING_NUMBER, BOOKING.BOOKING_DATE,
    BOOKING.RETURN_DATE, AGENCY.NAME,
    CAR.REGISTRATION_NUMBER, CAR_TYPE.NAME
FROM BOOKING
JOIN AGENCY ON BOOKING.AGENCY_ID = AGENCY.ID
JOIN CAR ON CAR.ID = BOOKING.CAR_ID
JOIN CAR_TYPE ON CAR_TYPE.ID = CAR.CAR_TYPE_ID
WHERE
    CAR.car_id not in (
        SELECT car_id
        FROM BOOKING
        WHERE @checkDate BETWEEN booking_date AND return_date
    )
```

Share Improve this answer Follow

edited Nov 4, 2015 at 14:37

answered Nov 4, 2015 at 14:20

**Juan Carlos Oropeza****46.9k** 12 76 118

I think for the bigger amount of data `NOT IN` is little slower? Better to use `NOT EXIST` – [Ivan](#) Nov 4, 2015 at 14:43

I just give you the safest solution. You can also try `left join BOOKING on @checkDate BETWEEN booking_date AND return_date` but because I dont have the data didnt want to guess. That way you will get `NULL` for not booked cars – [Juan Carlos Oropeza](#) Nov 4, 2015 at 14:45

I think will work ok if you have index for `booking_date` and `return_date`. Other solution is use `EXISTS` but you will know what is the better only by testing with your data – [Juan Carlos Oropeza](#) Nov 4,

2015 at 14:47 
