



INDEPENDENT PROJECT

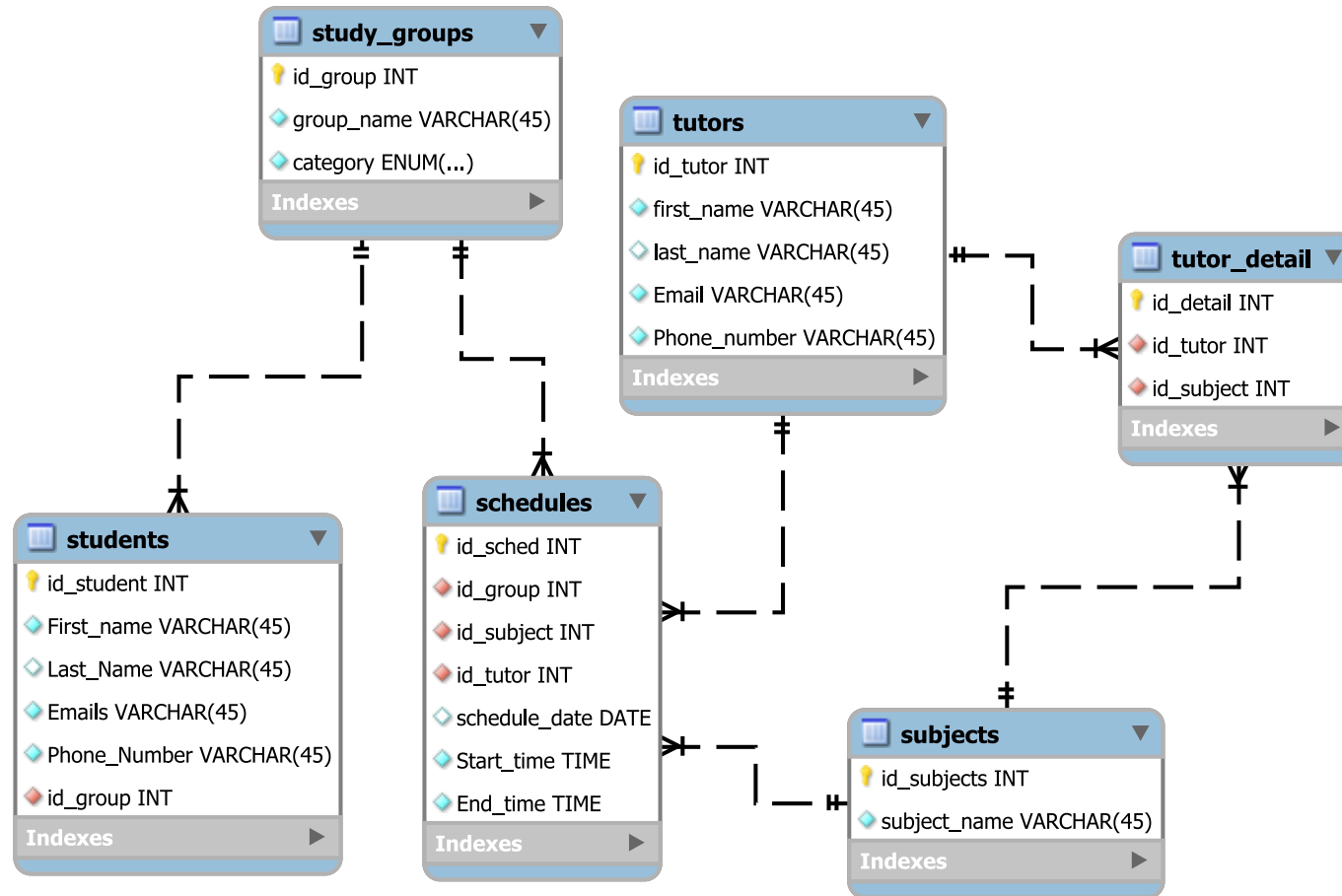
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STUDY CASE

Mr. Budi is developing a database for his tutoring business. The database will streamline the scheduling process for students and tutors, as well as facilitate the calculation of tutors' salaries.

EER DIAGRAM



TUTOR'S SCHEDULES



```
SELECT
    sg.group_name,
    s.subject_name,
    t.first_name AS tutor_name,
    sc.schedule_date,
    sc.Start_time,
    sc.End_time
FROM
    schedules sc
    JOIN
    study_groups sg ON (sg.id_group = sc.id_group)
    JOIN
    subjects s ON (s.id_subjects = sc.id_subject)
    JOIN
    tutors t ON (t.id_tutor = sc.id_tutor)
WHERE
    t.id_tutor = 2
    AND (sc.schedule_date BETWEEN '2024-02-01' AND DATE_ADD( '2024-02-01', INTERVAL 1
MONTH));
```

Results:

group_name	subject_name	tutor_name	schedule_date	Start_time	End_time
Group 01	Calculus	Emily	2024-02-04	15:00:00	17:00:00
Private 05	Calculus	Emily	2024-02-22	09:00:00	11:00:00
Group 08	Calculus	Emily	2024-02-23	08:00:00	10:00:00
Group 03	Calculus	Emily	2024-02-25	12:00:00	14:00:00
Private 02	Calculus	Emily	2024-02-26	08:00:00	10:00:00

This SQL query retrieves schedule information, including the group name, subject name, tutor's first name, schedule date, start time, and end time for schedules assigned to a specific tutor (ID = 2) within a one-month timeframe, commencing from February 1st, 2024.

STUDENT'S SCHEDULES

```
SELECT
    sg.group_name,
    s.subject_name,
    t.first_name AS tutor_name,
    sc.schedule_date,
    sc.Start_time,
    sc.End_time
FROM
    schedules sc
    JOIN
    study_groups sg ON (sg.id_group = sc.id_group)
    JOIN
    subjects s ON (s.id_subjects = sc.id_subject)
    JOIN
    tutors t ON (t.id_tutor = sc.id_tutor)
WHERE
    sg.id_group = 1
    AND YEAR(sc.schedule_date) = '2024'
    AND MONTH(sc.schedule_date) = '1';
```

Results :

group_name	subject_name	tutor_name	schedule_date	Start_time	End_time
Group 01	Physics	Robert	2024-01-05	10:00:00	12:00:00
Group 01	Calculus	Laura	2024-01-11	11:00:00	13:00:00
Group 01	Chemistry	James	2024-01-20	07:00:00	09:00:00

This SQL query retrieves schedule information for a specific study group (ID 1) in January of the year 2024. The retrieved information includes the group name, subject name, tutor's first name, schedule date, start time, and end time for schedules assigned to the specified study group.

TUTOR'S SALARIES



```
SELECT
sala.month,
sala.tutor_name,
SUM(sala.Total) AS "Total_salaries (k IDR)"
FROM
(SELECT
EXTRACT(MONTH FROM sc.schedule_date) as MONTH,
t.first_name as tutor_name,
sg.category,
COUNT(sc.id_sched) as 'count',
IF( sg.category = 'group', 100*COUNT(sc.id_sched), 130*COUNT(sc.id_sched)) AS Total
FROM schedules sc
JOIN study_groups sg ON (sg.id_group = sc.id_group)
JOIN tutors t ON (t.id_tutor = sc.id_tutor)
WHERE (sc.schedule_date BETWEEN '2024-01-01' AND DATE_ADD('2024-01-01', INTERVAL 1
YEAR))
GROUP BY
sc.id_sched,
t.id_tutor,
sg.category) AS sala
WHERE sala.month = 2
GROUP BY
sala.month,
sala.tutor_name
ORDER BY sala.tutor_name ASC;
```

Results :

month	tutor_name	Total_salaries (k IDR)
2	Daniel	430
2	David	360
2	Emily	560
2	James	100
2	Jessica	660
2	Laura	430
2	Megan	520
2	Michael	200
2	Robert	130
2	Sarah	660



Thank You

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