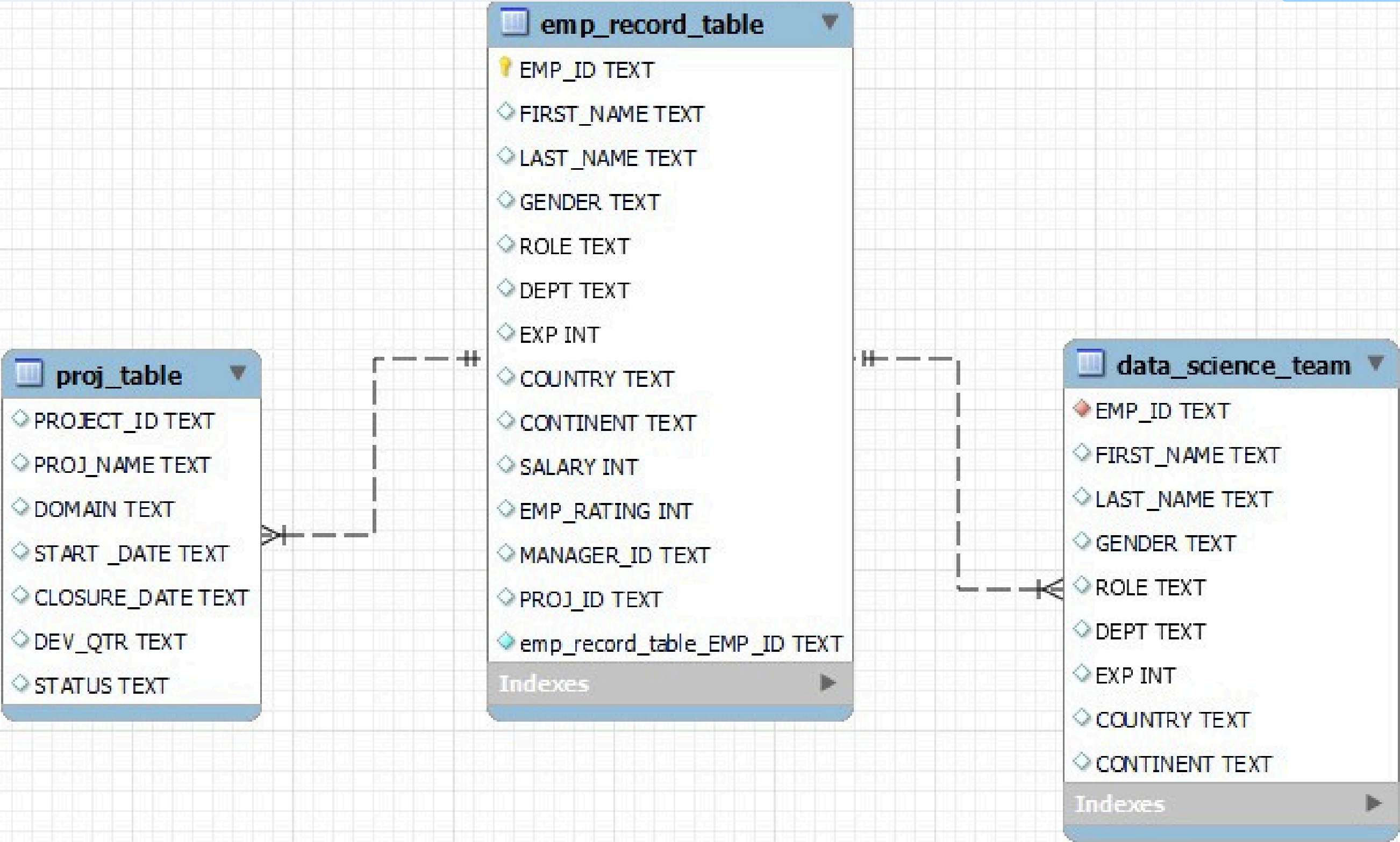


SQL PROJECT

- Objective: Employee performance mapping to ensure that all jobs are meeting the organization's profile standard and also overall performance of the organization.



ENTITY RELATIONSHIP DIAGRAM



FETCHING MENTIONED FEILDS

14 -- 3) fetch mentioned fields

15 select emp_id,first_name,last_name,gender,dept from emp_record_table

<

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	emp_id	first_name	last_name	gender	dept
▶	E001	Arthur	Black	M	ALL
	E005	Eric	Hoffman	M	FINANCE
	E010	William	Butler	M	AUTOMOTIVE
	E052	Dianna	Wilson	F	HEALTHCARE
	E057	Dorothy	Wilson	F	HEALTHCARE



FETCHING EMPLOYEES WITH RATING LESS THAN 2

```
3  select emp_id,first_name,last_name,gender,dept,emp_rating from emp_record_table
3  where emp_rating < 2
3
```




ult Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

emp_id	first_name	last_name	gender	dept	emp_rating
E057	Dorothy	Wilson	F	HEALTHCARE	1
E532	Claire	Brennan	F	AUTOMOTIVE	1
E620	Katrina	Allen	F	RETAIL	1



CONCATINATING FIRST NAME AND LAST NAME AS FULLNAME

```
28      -- 5) concat
29      select concat(first_name,',',last_name)as NAME from emp_record_table
30      where dept='finance'
31
```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

NAME
EricHoffman
EmilyGrove
SteveHoffman



DISPLAY EMPLOYEE AS MANAGER AND COUNT OF EMPLOYEES REPORTING TO THEM

```
32  -- 6) display emp as managers and count of emp reporting to them
33  select m.emp_id,count(e.emp_id) as reporters from emp_record_table m
34  inner join
35  emp_record_table e
36  on m.emp_id = e.manager_id$
37  group by m.emp_id
38  order by reporters desc
39  -- mysql not accepting more than 1 field while group by function(bug),
40  -- output when adding emp_name,role is nonagregate fields entered with group by
41
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

IA

	emp_id	reporters
▶	E001	5
	E428	3
	E083	3
	E583	3
	E103	2

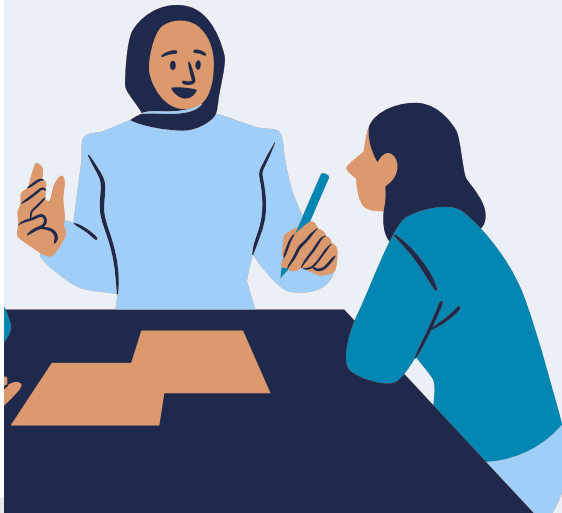


EMPLOYEES FROM HEALTHCARE AND FINANCE USING UNION

```
43  -- 7) emp from mentioned dept
44  select emp_id,first_name from emp_record_table where dept='healthcare'
45  union
46  select emp_id,first_name from emp_record_table where dept='finance'
47  order by emp_id
48
```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

	emp_id	first_name
▶	E005	Eric
	E052	Dianna
	E057	Dorothy
	E083	Patrick
	E103	Emily



MAX RATING FROM EVERY DEPARTMENT

```
49  -- 8) max rating of every dept
50  select emp_id,first_name,last_name,role,dept,emp_rating,
51  max(emp_rating) over(partition by dept) as max_dept_rating
52  from emp_record_table
53
54
```



Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	emp_id	first_name	last_name	role	dept	emp_rating	max_dept_rating
▶	E001	Arthur	Black	PRESIDENT	ALL	5	5
	E010	William	Butler	LEAD DATA SCIENTIST	AUTOMOTIVE	2	5
	E204	Karene	Nowak	SENIOR DATA SCIENTIST	AUTOMOTIVE	5	5
	E428	Pete	Allen	MANAGER	AUTOMOTIVE	4	5
	E532	Claire	Brennan	ASSOCIATE DATA SCIENTIST	AUTOMOTIVE	1	5

Result 10 of 10



MIN AND MAX SALARY FROM EVERY DEPT

```
55  -- 9) min and max salary of each dept
56  select distinct(role),
57  min(salary) over(partition by role) as min_role_salary,
58  max(salary) over(partition by role) as max_role_salary
59  from emp_record_table
60  order by max_role_salary desc
61
```



Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	role	min_role_salary	max_role_salary
▶	PRESIDENT	16500	16500
	MANAGER	8500	11000
	LEAD DATA SCIENTIST	8500	9000
	SENIOR DATA SCIENTIST	5500	7700
	ASSOCIATE DATA SCIENTIST	4000	5000



ASSIGN RANKING BASED ON EXP

```
63  -- 10) assign ranking based on exp
64  select emp_id,first_name,exp,
65  rank() over(order by exp) as exp_rank
66  from emp_record_table
67
```

Result Grid

  Filter Rows:

Export: 

Wrap Cell Content: 

	emp_id	first_name	exp	exp_rank
▶	E640	Jenifer	1	1
	E620	Katrina	2	2
	E478	David	3	3
	E532	Claire	3	3
	E403	Steve	4	5



VIEW OF EMP WITH SALARY MORE THAN 6000

```
68  -- 11) view of emp with salary more than 6000
69  create view emp_view as
70  select emp_id,first_name,last_name,salary from emp_record_table
71  where salary>6000
72
73  select * from emp_view
74
```

Result Grid



Filter Rows:

Export:



Wrap Cell Content:



	emp_id	first_name	last_name	salary
▶	E001	Arthur	Black	16500
	E005	Eric	Hoffman	8500
	E010	William	Butler	9000
	E057	Dorothy	Wilson	7700
	E083	Patrick	Voltz	9500



EMPLOYEES WITH > 10 EXP WITH USE OF NESTED QUERY

```
75  -- 12) nested query
76  select emp_id,first_name,last_name,exp from emp_record_table
77  where exp in (select exp from emp_record_table where exp > 10)
78
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	emp_id	first_name	last_name	exp
▶	E001	Arthur	Black	20
	E005	Eric	Hoffman	11
	E010	William	Butler	12
	E083	Patrick	Voltz	15
	E103	Emily	Grove	14



STORED PROCEDURE FOR EMPLOYEES >3 YR EXP

```
81  delimiter $$
82  • create procedure exp_3()
83
84  ○ begin
85
86      select emp_id,first_name,last_name,salary,exp from emp_record_table
87      where exp>3;
88
89  end;
90  $$
91
92  call exp_3
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	emp_id	first_name	last_name	exp
▶	E001	Arthur	Black	20
	E005	Eric	Hoffman	11
	E010	William	Butler	12
	E083	Patrick	Voltz	15
	E103	Emily	Grove	14



CALCULATING BONUS WITH GIVEN CRITERIA

```
137  -- 16) calculating bonus with given formula
138  select emp_id,first_name,salary,emp_rating,((0.05*salary)*emp_rating) as bonus from
139
```

<

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

IA

	emp_id	first_name	salary	emp_rating	bonus
▶	E001	Arthur	16500	5	4125.00
	E005	Eric	8500	3	1275.00
	E010	William	9000	2	900.00
	E052	Dianna	5500	5	1375.00
	E057	Dorothy	7700	1	385.00



AVERAGE SALARY BASED ON COUNTRY AND CONTINENT

```
141  -- 17) average salary based on country and continent
142
143  select emp_id,first_name,salary,country,continent,
144  avg(salary) over(partition by country) as avg_country_salalry,
145  avg(salary) over(partition by continent) as avg_continent_salary
146  from emp_record_table
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	emp_id	first_name	salary	country	continent	avg_country_salalry	avg_continent_salary
▶	E245	Nian	6500	CHINA	ASIA	6500.0000	6250.0000
	E260	Roy	7000	INDIA	ASIA	6166.6667	6250.0000
	E612	Tracy	8500	INDIA	ASIA	6166.6667	6250.0000
	E620	Katrina	3000	INDIA	ASIA	6166.6667	6250.0000
	E010	William	9000	FRANCE	EUROPE	9000.0000	7950.0000



•SKILLS DEMONSTRATED

1) DATA MODELING: CREATED AN ERD TO REPRESENT EMPLOYEE, PERFORMANCE, PROJECT, AND DEPARTMENT RELATIONSHIPS.

2) DATA MANIPULATION: UTILIZED SELECT, JOIN, WHERE, GROUP BY, AND ORDER BY CLAUSES TO FILTER, AGGREGATE, AND SORT DATA.

3) DATA ANALYSIS: ANALYZED PERFORMANCE METRICS LIKE RATINGS, PROJECT CONTRIBUTIONS, AND SALARY TO IDENTIFY TRENDS AND PATTERNS.



OUTPUT:

- **PROVIDED DATA-DRIVEN INSIGHTS TO IMPROVE EMPLOYEE PERFORMANCE MANAGEMENT STRATEGIES.**



