***HR Dataset Project #3 [ Microsoft Excel, MySQL , Power BI ]***

*Project started on 8th May 2023.*

Human Resource Analysis using Microsoft Excel, MySQL, Power BI.

HR dataset is downloaded from Kaggle.com

Microsoft Excel will be used for data cleaning purpose and make the data more useful . MySQL will be used for data analysis and to retrieve information using syntax and lastly, Power BI will be used for visualize and create insights.

Further Explaining the steps done with software mentioned above.

1. ***Microsoft Excel*** :-

* In dataset of HR, every csv file has number oriented data except data\_dictionary.csv for example in employee\_data\_survey.csv every column has number range 1 to 5 which defines various level mentioned in the data\_dictionary.csv. Using excel, replacing the range value with variable.
* Csv files that has been structured :- employee\_survey\_data.csv , genral\_data.csv, Manager\_survey\_data.csv
* There is a missing column heading in in\_time.csv and out\_time.csv. The count of missing column is 4410 and in general\_data.csv the EmployeeID has similar count of data ,that is 4410 , from this we can simply state that missing column header in in\_time.csv and out\_time.csv is EmployeeID
* From in\_time.csv and out\_time.csv we can say that Fiscal Year of dataset is of 2015
* Changing date time format to only time format of both in\_time.csv and out\_time.csv files except EmployeeID column
* Deleting unwanted column from dataset

General\_data.csv = EmployeeCount , Over18 , StandardHours .

1. ***Analytical Skills*** :- Using Analytical skills like Logical reasoning and Critical Thinking , I made 21 questions that will be solved in My SQL and will find the solutions for those questions .
2. ***MySQL*** :-

* Has to Drop in\_time.csv and out\_time.csv file because of SQL error (Rows size to large 8126 )
* Made 3 section for querying different queries , so later on there will be no mixture of queries and every queries will be segregated.

3 queries section created are:-

1. Employees Details.
2. Department Details.
3. Salary/Income Details.

* Queried near 21 Questions to retrieve crucial information from the dataset
* After that it was exported to Power BI for making Dashboards

1. ***Power Bi*** :- I

* Imported HR Dataset from MySQL to Power BI
* In Model Section created Relationship between the csv file that is Employees\_survey\_data , General\_data and Manager\_survey\_data using same coloum EmployeeID
* Created 3 Pages for visualization that are

1. Department Details

2. Employees Details

3. Salary Details

* Created Page Navigation Keys to Shift from one page to another

Finally completed the analysis of HR Dataset. The meaning full insights can be seen by clicking on the visuals . The insights give information about details of employees in the department and the organization within. By Watching the Insights HR Manager can take further decisions like salary increment for employees who have very high Job Involvement and outstanding Performance Rating , and many more.

*Project Completed on 14th May 2023.*

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