

MERISKILL | Data Analyst | Internship | Project No: 03 | HR Analytics**Project No# 3: HR Analytics****Task to Perform****1) Data Cleaning:**

- Deleting redundant columns
- Renaming the columns.
- Dropping duplicates
- Cleaning individual columns
- Remove the NaN values from the dataset
- Check for some more Transformations

2) Data Visualization:

- ☐ Plot a correlation map for all numeric variables
- ☐ Overtime
- ☐ Marital Status
- ☐ Job Role
- ☐ Gender
- ☐ Education Field
- ☐ Department
- ☐ Business Travel
- ☐ Relation between Overtime and Age
- ☐ Total Working Years
- ☐ Education Level
- ☐ Number of Companies Worked
- ☐ Distance from Home

Project No 2: Title: HR Analytics - Data Cleaning and Visualization

Project Description: In the "HR Analytics" project, we will delve into the world of human resources data, focusing on data cleaning and visualization. The project's primary tasks encompass data preparation and creating informative data visualizations.

1) Data Cleaning:

- **Deleting Redundant Columns:** We will begin by identifying and removing any redundant columns from the dataset that do not contribute to our analysis.
- **Column Renaming:** To improve clarity, we will rename columns as needed, ensuring they are descriptive and meaningful.
- **Dropping Duplicates:** Any duplicate entries in the dataset will be identified and removed to maintain data integrity.
- **Cleaning Individual Columns:** We will perform data cleaning on individual columns to handle any inconsistencies, format issues, or outliers.
- **Removing NaN Values:** To maintain data quality, we will address missing values by either imputing them or removing rows with missing data.
- **Additional Transformations:** As necessary, we will conduct further data transformations to make the dataset more suitable for analysis.

2) Data Visualization: We will utilize Power BI to create insightful visualizations. The project's data visualizations will include:

- **Correlation Map:** A correlation map for all numeric variables to identify relationships among different HR metrics.
- **Overtime:** Visualizing the impact of overtime on employee performance and retention.
- **Marital Status:** Exploring the distribution of marital status among employees.
- **Job Role:** Visualizing the distribution of employees across different job roles.
- **Gender:** Analyzing gender diversity within the organization.
- **Education Field:** Examining the educational backgrounds of employees in different fields.

- **Department:** Visualizing the distribution of employees across various departments.
- **Business Travel:** Understanding the extent of business travel and its impact on employee satisfaction and retention.
- **Relation between Overtime and Age:** Investigating how age influences overtime work patterns.
- **Total Working Years:** Analyzing the relationship between total working years and other factors.
- **Education Level:** Visualizing the educational qualifications of employees.
- **Number of Companies Worked:** Exploring how the number of companies worked at affects job satisfaction and retention.
- **Distance from Home:** Visualizing the distance from home for employees.

Project Summary: The "HR Analytics - Data Cleaning and Visualization" project combines data cleaning and visualization to provide meaningful insights into human resources data. By ensuring data integrity through cleaning and presenting the data in a visually appealing manner, we aim to support informed HR decisions and improve understanding of workforce dynamics.

Through data visualization, we will uncover patterns and trends related to various HR metrics, enabling HR professionals to make data-driven decisions that impact employee satisfaction, retention, and overall organizational success. This project demonstrates the power of analytics in HR and its role in shaping organizational strategies.

Dashboard of Project:

