Hope Artificial Intelligence

Scenario Based Learning

A company works with number of employees, all the works are dependents on the employees. Even if one of the employees resign the job immediately then assigned work will be not finished at the time, so delivery of the project to the clients will be delayed. Company planned to make solution for this, they want to know which employee may resign next. If they know previously, they can arrange alternative to avoid such problem. As an AI Engineer you must give Solution to this.

A) How will you achieve this in AI?

B) Find out the 3 -Stage of Problem Identification

C) Name the project

D) Create the dummy Dataset.

A) How will you achieve this in AI?

　　　To predict which employee may resign next, we can develop an Employee Attrition. The goal is to use **historical employee data** to identify patterns and predict the likelihood of an employee leaving the company.

Steps to achieve this:

1. **Data Collection**: Collect historical employee data, including personal details, work performance, satisfaction, attendance, compensation, promotions, etc.

2. **Feature Engineering**: Identify and preprocess relevant features that influence attrition (e.g., low job satisfaction, lack of career growth, long working hours).

B) Find out the 3 -Stage of Problem Identification

　　　stage 1 : Machine Learning

　　　stage 2 : Supervised

　　　stage 3: Classification

C) Name the project.

　　　Employee Attrition Prediction System

D) Create the dummy Dataset.

Emp ID	Age	Gender	Department	Monthly Income	Job Satisfaction	Work Life Balance	Years at Company	Number of Projects	Overtime	Promotions Last 5_Years	Left Company
1	28	Male	IT	45000	3	2	2	4	1	0	0
2	35	Female	HR	60000	4	3	7	3	0	1	1
3	42	Male	Finance	75000	2	2	10	5	1	0	0
4	29	Female	Marketing	50000	5	4	3	6	1	1	1
5	50	Male	Operations	90000	3	3	15	7	0	2	0