

## 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?

Gather employee data, including demographics, performance metrics, attendance records, salary, job satisfaction surveys, and historical resignation data. This data will serve as the foundation for analysis

B) Find out the 3 -Stage of Problem Identification

Stage 1 – Machine Learning

Stage2 – Supervised

Stage3 – classification

C) Name the project

#### **Predictive Employee Retention System (PERS)**

D) Create the dummy Dataset.

Emp ID	Age	Job Role	Salary	Performance Score	Years at company	Job Satisfaction	Attendance	Resigned
1	28	S/W Eng	20000	4	2	4	95%	No
2	34	Manager	50000	3	5	3	80%	yes
3	45	Data Eng	30000	5	3	5	98%	No
4	29	S/W Eng	15000	2	4	3	90%	Yes

This structured approach will enable the company to proactively identify employees at risk of leaving and implement strategies to enhance retention. This will helpful project timelines are met without delays due to staffing issues.