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.

Answer:

1. We need to collect the employees' age, previous job details where they have worked for some years or how frequently they have switched jobs. Also, collect the performance details, job satisfaction level, whether the employee will prefer wfh (Work From Home) or hybrid mode of travel. We can predict that the person will continue to work or resign from the job for next month.
2. Stage 1: Domain Selection: Machine learning

Stage 2: Learning selection: Supervised Learning

Stage 3: Classification (whether the employee resign or continue to work)

1. Project Name: Employee Resignation Prediction System
2. Sample dataset:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Emp ID | Age | Years of Exp | Job Satisfaction | Performance level | Previously switched companies | Resignation Prediction |
| E01 | 25 | 3 | 4 | 8 | 1 | No |
| E02 | 32 | 7 | 2 | 6 | 3 | Yes |
| E03 | 28 | 4 | 5 | 9 | 0 | No |
| E04 | 40 | 12 | 1 | 5 | 4 | Yes |
| E05 | 30 | 6 | 3 | 7 | 2 | No |