

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.

Solution:

1. Collect employee data (like Employee ID, Age, Tenure, Performance Rating, Attrition)
3. Preprocessing the data
4. Split data into training and testing sets
4. Train a classification or Regression model (Here values are categorical so model is Classification, i.e Employee resign or not)
5. Deploy the model to predict employee attrition

3-Stage

1. Machine learning (Value is Numerical)
2. Requirement is clear (I/P, O/P) --> Supervised Learning
3. Output or Attrition (0 or 1) is Resign or Not --> Classification Model

Project Name: Predict Employee Attrition

Dummy Dataset:

| Employee ID | Age | Tenure | Performance Rating | Attrition |
|-------------|-----|--------|--------------------|-----------|
| 1 | 25 | 2 | 3 | 0 |
| 2 | 30 | 5 | 4 | 0 |
| 3 | 28 | 1 | 2 | 1 |
| 4 | 35 | 8 | 5 | 0 |
| 5 | 22 | 1 | 1 | 1 |

Note: Attrition: 0 (will not resign), 1 (will resign)