

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?

- To do this, we collect details of employees who resigned and who stayed. The data contains things like their age, how long they worked, how many leaves they took, if they came late often, and their work performance.
- Then, we will use this data to train a ml model. After learning from the data, the model will be able to guess which current employee might resign soon.
- If the company knows this early, they can plan and avoid problems.

B) Find out the 3 -Stage of Problem Identification

- Problem Definition
- Problem Analysis
- Problem Solving with representation

C) Name the project

Employee Resignation Predictor

D) Create the dummy Dataset.

| EmpID | Dept | Years | Leaves_taken | Performance_Score | Resigned |
|-------|---------|-------|--------------|-------------------|----------|
| E101 | IT | 3 | 5 | 8.5 | No |
| E102 | HR | 5 | 10 | 6.0 | Yes |
| E103 | Sales | 1 | 3 | 9.0 | No |
| E104 | IT | 8 | 15 | 5.5 | Yes |
| E105 | Finance | 4 | 4 | 7.8 | No |