

# 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?

First, we need to select the domain, then choose which learning method to use. After that, we need to determine whether it is a classification or regression problem. Using employee data such as job satisfaction, years of service, and performance, we can train the model to predict which employees are likely to resign, and finally set the 'call to action,' i.e., resign or not resign.

B) Find out the 3 -Stage of Problem Identification

**1-Stage : Domain Selection**

Machine Learning

**2-Stage : Learning Selection**

Supervised Learning

**3-Stage : Classification or Regression**

Classification

C) Name the project

Resignation Prediction

D) Create the dummy Dataset.

Emp id	Age	Dept	Jobrole	Salary	Working Years	Job satisfaction	Resigned/not resigned
A101	30	IT	Developer	65000	2	5	Not resign
A102	37	HR	Manager	80000	7	3	Not resign
A103	42	Sales	Sales Lead	75000	10	2	Resign
A104	28	Marketing	Analyst	55000	3	4	Not resign
A105	44	IT	Tech Lead	95000	12	2	Resign
A106	33	Sales	Sales Rep	50000	5	1	Resign