

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.

A) How will you achieve this in AI? Here we can think like as below

We need to collect the employee details who ever left the company across all department with age, salary, how long they retain in position, experience and level of employee.

-> Level of employee = Senior Level (above 12 yrs), Mid Level(6 to 12 yrs), junior level (below 6 yrs) -> Senior Level Salary starts from 80K, Mid level salary starts from 40K to 80K and junior level salary less than 40K

-> Each level need to classify as below

- 1) Experience high with low salary
- 2) Experience high without promotion for past 4 yrs
- 3) Travel long from Home - It can be arrested from giving WFH

Based on above categorization, we can predict which employee going to left in future

B) Answer for B would be

Stage 1- Machine Learning - Numerical Value

Stage 2 - Supervised Learning - Here we have input is employee details and output is exit criteria

Stage 3 - Classification - Able to classified the employee who left the company based on the salary, promotion and Travel

C) Answer for C is Employee Resignation prediction

D) Dummy Data

Employee _Count	Employee Level	Salary in correct Range	Promot ed in last 3 yrs	Travel to Home (exclude less than 1hr)	Label for resign Prediction
20	MID	Yes	Yes	No	Yes
10	MID	No	No	Yes	Yes
5	MID	Yes	No	Yes	Yes
5	MID	No	No	No	Yes
100	MID	Yes	Yes	Yes	No
10	Senior	Yes	Yes	No	Yes
5	Senior	No	No	Yes	Yes
5	Senior	Yes	No	Yes	Yes
5	Senior	No	No	No	Yes
25	Senior	Yes	Yes	Yes	No
50	Junior	Yes	Yes	No	Yes
25	Junior	No	No	Yes	Yes
25	Junior	Yes	No	Yes	Yes
20	Junior	No	No	No	Yes
200	Junior	Yes	Yes	Yes	No