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?

We can achieve this problem using time series analysis.

B) Find out the 3 -Stage of Problem Identification

Stage 1 :

Time series analysis

Stage 2:

Supervised learning. We know input and the expected output also. We can take this from employee database of previously resigned employees and filter them by year, date, accordingly. Since we have the data, we can say this can be supervised learning.

Stage 3:

Classification :
1. Let's say for example, if employee resigns right after appraisal date. For eg : at a particular date of the year after year . June .
2. we can categorize employees and take past data around this date. Similarly, if employee resigns right after the work anniversary date , we can categorize those employees.
3. Also, some employees might resign right after completing 5 years to be eligible for gratuity allowances.
4. Some employees will resign right after annual bonus and performance bonus.

C) Name the project

Predicting employee Resignation / Employee Resignation Prevention

By gathering above data , we can also propose like giving them star of the month around that time period , or providing the particular employee more bonus around that time period, more appraisal and giving employee perks around that time period , so that resignation can be avoided.

D) Create the dummy Dataset.

Employee	Date	Resignation Prediction
A	01-05-2021(Around performance bonus time period)	Resignation possible
B	05-07-2020 Nearing work anniversary period	Resignation possible
C	02-03-2018 Project completion period	Resignation possible
D	01-09-2016 Critical project delivery	Resignation possible
E	04-07-2015 Annual performance bonus period	Resignation possible
F	03-02-2019 Nearing 5 year work anniversary period for gratuity bonus procurement	Resignation possible