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.

1. A) How will you achieve this in AI?
2. B) Find out the 3 -Stage of Problem Identification
3. C) Name the project
4. D) Create the dummy Dataset.
5. **Problem Identification & Solution:**

* To Resolve this issue, we can create Database of employees who is going to resign next with date and Month, so that we can plan prior to split the work of that Resigning employee with the existing employees.
* Employees who is going to resign should give prior information to the management so that the management can plan accordingly.
* We can create database with employee Name, ID, Date of Joining, Date of Reliving, backup employee for the work.
* Once we created, we can predict the expected time to create a backup employee for the particular project so that I won’t affect the continuation.

1. **How can we use AI in this problem solving:**

* Its absolutely Date prediction for this we can use Time Series Analysis for solving this problem.
* By getting the data base we can use Time Series Analysis predict the employees when they going to resign based on their date of resignation.

1. **The 3 -Stage of Problem Identification:**
2. **Stage 1** : Time Series Analysis
3. **Stage 2**: Supervised Learning
4. **Stage 3**: Classification
5. **Name the project: “Resignation Predictor”**
6. **The Dummy Table below:**

As every employee is liable to work for three months from the date of paper dropped to resign\*\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Employee ID** | **Age** | **Gender** | **Department** | **Date of Paper Dropped** | **Resigning Target 3 Months Notice period** |
| 1 | 29 | Male | Sales | Not Applicable | 0 |
| 2 | 35 | Female | IT | 01-09-2024 | 01-12-2024 |
| 3 | 28 | Female | HR | Not Applicable | 0 |
| 4 | 40 | Male | IT | Not Applicable | 0 |
| 5 | 26 | Male | HR | 25-05-2024 | 25-08-2024 |