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 predict with the Database of employees who has already resigned, so that we can plan prior to split the work of that Resigning employee with the existing employees.
* Our Goal is to predict who having the possibility to resign.
* 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 Person who may be resign for some reason so that we can 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 by using data collection we can predict the person who may relieve for some reason, by identifying the reason using **MACHINE LEARING,** we can resolve the issues for Resigning and make them to retain for stable employment

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Employee\_ID** | **Age** | **Place of birth** | **Distance of residence** | **Gender** | **Job\_Level** | **Years\_at\_Company** | **Performance\_Score** | **Satisfaction\_Level** | **Workload** | **Promoted\_Last\_3\_Years** | **Attrition (1 = Resigned, 0 = Stayed)** | **Comments** |
| E001 | 29 | Out of station | 100 KM | Male | 2 | 3 | 85 | 0.6 | Medium | No | 1 | Possibility to Resign Reason "coming from out of the station, Not promoted" |
| E002 | 35 | Native | 10 KM | Female | 3 | 7 | 90 | 0.8 | High | Yes | 0 |  |
| E003 | 40 | Native | 5 KM | Male | 4 | 10 | 75 | 0.4 | Low | No | 0 |  |
| E004 | 25 | Out of station | 300 KM | Female | 1 | 1 | 60 | 0.3 | High | No | 1 | Possibility to Resign Reason "coming from out of the station, Workload is High, Not promoted" |
| E005 | 31 | Native | 2 KM | Male | 3 | 5 | 80 | 0.7 | Medium | Yes | 0 |  |
| E006 | 28 | Out of station | 150 KM | Female | 2 | 3 | 65 | 0.5 | Medium | No | 1 | Possibility to Resign Reason "coming from out of the station, Not promoted" |
| E007 | 45 | Native | 8 KM | Male | 5 | 15 | 95 | 0.9 | Low | Yes | 0 |  |