Week3-ProblemIdentificationAssignment

Scenario Based Learning

***Assumptions:***

Assuming previous resignation of employee data (Reason) is available in the database.

1. **How will you achieve this in AI?**

Since the data is already available and we are going to make a model to match the records with the current employee and make a prediction, it comes under **machine learning/Deep learning** assuming the input and output are clear, but we don’t have any images to deal with as the data seems to be numbers. We are **proceeding with Machine Learning.**

1. **Find out the 3 -Stage of Problem Identification**
2. Domain selection – **Machine Learning**
3. Learning – As we have the input details and the output (Resign/Retain) it falls under **supervised learning.**
4. Since we have to predict whether the employee will resign or not, it seems to be categorical data, hence it comes under **Classification.**
5. **Name the project**

Employee Resignation Prediction

1. Create the dummy Dataset.

The employee resignation can be of various factors, hence including the below- mentioned details in the dummy data set.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EmpID** | **Exp** | **Salary** | **JobSatisfaction (1-5)** | **WorkLifeBalance (1-5)** | **Promotion InLast2Yrs** | **Years In Company** | **Resigned (Target)** |
| 101 | 2 | 40000 | 2 | 3 | 0 | 2 | 1 |
| 102 | 5 | 80000 | 4 | 4 | 1 | 5 | 0 |
| 103 | 3 | 60000 | 3 | 2 | 0 | 3 | 1 |
| 104 | 11 | 100000 | 5 | 5 | 1 | 10 | 0 |
| 105 | 2.5 | 50000 | 2 | 2 | 0 | 2 | 1 |