FORECASTING EMPLOYEE RESIGNATION USING AI

Based on problem statement, we can achieve this by using “***Supervised Learning – Classification***” from ***Machine Learning domain.***

**Dataset:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Emp ID** | **Age** | **Dept** | **Exp in years** | **Leave Taken** | **Appraisal Rating** | **Salary** | **Promotion** | **Output/Label** |
| 101 | 28 | IT | 3 | 9 | 2 | 40000 | 0 | Resigned/1 |
| 102 | 35 | HR | 7 | 2 | 5 | 75000 | 1 | Stayed/0 |
| 103 | 35 | IT | 6 | 4 | 4 | 68000 | 0 | Stayed/0 |
| 104 | 26 | IT | 2 | 10 | 1 | 35000 | 0 | Resigned/1 |
| 105 | 30 | Admin | 4 | 3 | 3 | 52000 | 1 | Stayed/0 |

**Justification for choosing below stages:**

**Machine Learning** – Here data are number format (i.e row and column)

**Supervised Learning** –

* The problem statement is “Which employee may resign next? – So, requirement is clear.
* From the created dataset, input and output are available with all data –So, Input and output are present.

**Classification** – We can categorise like “Resigned or Stayed” based on input.

**AI Based Solution:**

* Collect the employee ID, age, department, years of experience, leaves taken, performance rating, salary, promotion and output data from the database.
* Inform this data to Model and Predict the probability of resignation risk. If risk is high(ex. 75%), then perform call to action like send an email to HR to take preventive action else no action is required.

**FLOW CHART:**

