**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 arrenge alternative to avoid such problem. As an AI Engineer you must give solution to this.**

**A, How will you achieve this AI?**

**🡪Data Collection**

**🡪Model seclections**

**🡪Model Training and Evaluation**

**🡪Feature Engineering**

**🡪Deployment alert to predictions**

**B, Find out the 3-stage of problem identification:**

**🡪Stage-1 –Machine Learning**

**🡪Stage-2-Supervised**

**🡪Stage-3-classification**

**C, Name the project:**

**🡪 Employee Resign Alert**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.N** | **Employee**  **ID** | **Age** | **Shift hours per week** | **Work-place** | **Last\_ promotions**  **Level** | **payment**  **Level** | **Satisfaction**  **Level** | **Performance\_ Score** | **Resigned** |
| **1** | **101** | **35** | **40** | **HR** | **2** | **Medium** | **0.8** | **4** | **No** |
| **2** | **102** | **45** | **50** | **Sales** | **1** | **Low** | **0.3** | **2** | **Yes** |
| **3** | **103** | **32** | **55** | **Finance** | **3** | **High** | **0.6** | **5** | **No** |
| **4** | **104** | **28** | **60** | **IT** | **2** | **Medium** | **0.7** | **4** | **Yes** |

**D, Create the dummy Dataset.**

**Dataset**