DATA REQUIREMENT:

The project necessitates access to a comprehensive historical dataset spanning the past five years, containing detailed information on employee performance, demographics, departmental data, performance ratings, and relevant metrics. This dataset should be extracted from INX's internal HR database. [For dataset access, kindly refer to the "Data" directory.]

ANALYSIS REQUIREMENT:

The analysis aims to identify trends and patterns in performance across different departments to discern variations within organizational units. The primary objective is to develop a predictive model capable of forecasting future employee performance based on the available data, with a minimum accuracy target of 80%.

TOOLS AND SOFTWARES:

For data preprocessing, model development, and visualization, the project will utilize Python along with essential libraries such as numpy, pandas, matplotlib, seaborn, and scikit-learn. Both Jupyter Notebook and VScode will serve as the primary platforms for code execution and documentation.

HARDWARE:

Efficient handling of large datasets requires a machine equipped with at least 8GB of RAM and an octa-core processor. However, for moderate data science workloads, quad-core processors suffice. Access to a GPU is preferred to accelerate model training.