# Business Success Criteria

* Develop an AI solution that helps companies to determine employee salaries.
* Develop an Ai solution that eliminates bias and unfair wages.

# Requirements

* Employee Data (Age, gender, Job title, Education Level, Years of experience, Salary)
* Technical requirements
  + Amazon Web Services cloud servers
  + Programming languages: Python
  + Cloud deployment environments
  + Internet access for people working on the project
* Human requirements
* Access to company experts who understand the HR and finance context.
* Trainee for staff to know and understand the software

# Constraints

* Resource budget
* Human resource and finance compliance
* POPIA compliance (in case employees do not give permission to use their data)
* Data

# Risks

* Gathering people information such as age, gender, education and years of experience and salary records may lead to privacy breaches if not properly secured.
* The is a possibility that the system might replicate existing inequity instead of fixing them.
* Companies might misuse the tool to justify lower salaries under the guise of Ai fairness tool.

# Tools

* Programming
  + Python libraries
    - Sk-learn
    - Matplotlib
    - Numpy
    - Pandas
    - Random
* Github Developer platform
* Git
* Python IDE (Coding platform)
* AI programs

# Techniques

* Data preparation
  + Converting non-numeral data into numerical data to be understood by machine (One-hot encoding)
  + Remove NaN values
* Model Training
  + Supervised Machine learning approach
  + Use classification Algorithm
  + Random Forest classifier
  + Train test split
* Evaluation Metrics
  + Accuracy Score
  + Precision Score
  + Recall Score
  + F1 Score