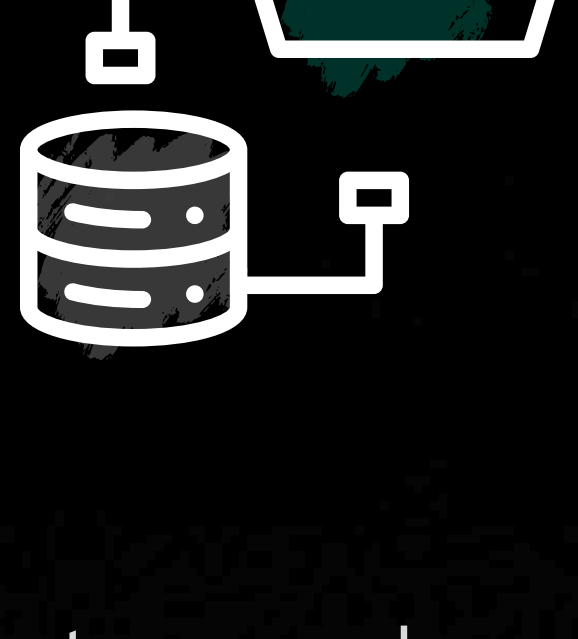


# HR Dashboard Project

## Project Plan

Building Data Source



Building Charts



Building Dashboards



## Welcome!!

This project features an advanced data dashboard, utilizing Python’s Faker library to generate a realistic dataset and Tableau for powerful visualizations. Inspired by Baraa Khatib Salkini’s expert tutorial, this journey provided invaluable lessons in both data visualization and design. I’ve documented each step of the process, following Baraa’s guidance, to highlight the skills and techniques gained in crafting this dashboard.

Disclaimer: The following [Project Scenario](#) and [Project Steps](#) were part of Baraa’s Tutorial

## Project Scenario - HR Dashboard

An HR manager requires a comprehensive dashboard to analyze human resources data. This dashboard should provide both a high-level summary for quick insights and detailed employee records for in-depth analysis.

### Summary View

The summary view should be divided into three main sections: Overview, Demographics, and Income Analysis.

#### Overview

- The Overview section should deliver key HR metrics at a glance, including:
- The total number of hired, active, and terminated employees.
  - Visualization of hires and terminations over the years.
  - Breakdown of employees by department and job title.
  - Comparison of employees between headquarters (HQ: New York) and other branches.
  - Geographic distribution of employees by city and state.

#### Demographics

- The Demographics section should offer insights into the workforce’s composition, including:
- Gender ratio of the company.
  - Visualize the distribution of employees by age group and education levels.
  - Show the total number of employees within each age group.
  - Show the total number of employees within each educational level.
  - Correlation between employees’ educational backgrounds and their performance ratings.

#### Income Analysis

- This section should focus on salary metrics to uncover patterns and discrepancies, including:
- Salary comparison across education levels for both genders to identify any discrepancies or patterns.
  - Correlation between age and salary within departments.

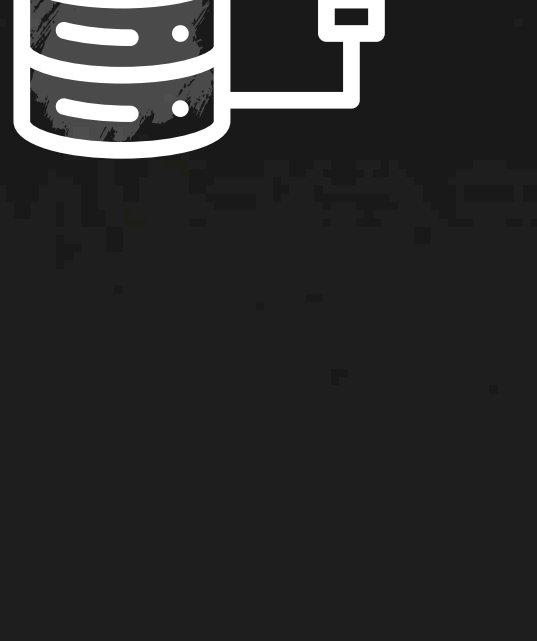
#### Employee Records View

- Provide a detailed, filterable list of employee records containing essential details such as:
- Name, department, position, gender, age, education, and salary.
  - Filters to enable analysis based on any of these columns.

### Project Steps

#### 1 Building Data Source

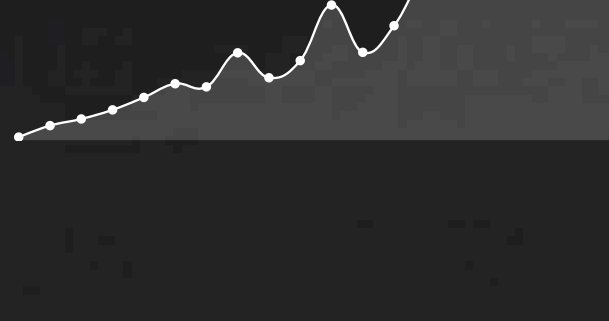
- Create Data using [ChatGPT](#) and [Faker](#) Library
- Collect Data
- Connect Data
- Check Data Quality
- Check Data Types
- Understand & Explore Data



### Project Steps

#### 2 Building Charts

- Analyze Requirements & Choose Charts
- Initial Format of Worksheet
- Create Calculated Fields & Test
- Build Charts
- Format Charts



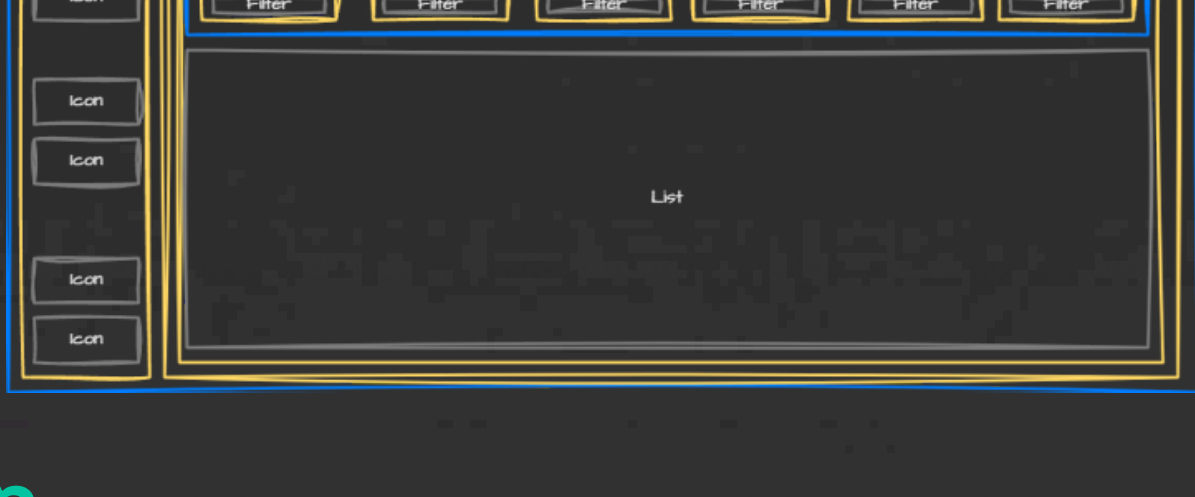
### Project Steps

#### 3 Building Dashboards

- Plan the Dashboard
- Dashboard Mockup (Hand drawn)
- Container Mockup (Draw.io)
- Create Container Structure
- Put All Together
- Fix Colours
- Fix Text
- Refine Charts
- Fix Spacing (Inner/Outer Spacing)
- Fix & Customize Tooltips
- Add Filters & Legends
- Add Logos & Icons (Flaticon)
- Add Info Section
- Create Background & Upload (Figma)



## Tableau Container Mockup in Draw.io



## Final Design



## Lessons Learned

This project laid out a clear, step-by-step roadmap for building a comprehensive Tableau dashboard, providing hands-on experience with a range of essential tools and techniques. Through this process, I honed several key skills, including:

- **Data generation:** Leveraged ChatGPT and Python’s Faker Library to create a realistic, structured dataset tailored for HR analysis.
- **Layout design:** Used Draw.io to create detailed container mockups, ensuring a well-organized and efficient dashboard structure.
- **Icon customization:** Applied Flaticon to enhance visual appeal, adding a personalized touch to key elements.
- **Graphic design:** Created a custom background template in Figma, elevating the dashboard’s professional look and feel.
- **Advanced data visualization:** Mastered advanced techniques in Tableau, applying data visualization principles to build clear, insightful charts and graphs.
- **Dashboard design:** Implemented key dashboard design principles to ensure user-friendly navigation and interaction.
- **Interactive data visualization:** Brought it all together in Tableau, crafting an interactive and dynamic dashboard for in-depth HR data analysis.

This multi-faceted approach not only deepened my expertise in data visualization, design, and dashboard development but also allowed me to contribute personal touches, such as creating and applying additional icons in the "Details" dashboard along with improved tooltip designs. Armed with these new skills, I’m inspired to start building more of my own dashboards, exploring the vast possibilities Tableau offers beyond what I learned through Coursera. As a next step, I plan to revisit my previous TikTok assignment and upgrade the dashboard using the advanced techniques and insights I gained from this project along with taking on new projects starting with a P&L Dashboard.

Again, a special thanks goes to Baraa Khatib Salkini for his comprehensive tutorial, which has instantly leveled up my Tableau skills. You can check out his amazing content on his YouTube Channel “Data with Baraa”