# DAT Academy: Real-World Sales Report Automation Project

Welcome to your capstone automation project!

In this project, you'll simulate a real-world scenario where you:

 - Receive messy weekly sales data

 - Clean and join data from multiple sources

 - Perform analysis and extract insights

 - Create a summary chart

 - Email the final report to your manager using Gmail

Project Outcome:

You must send a summary email (automated from your notebook) to:

Email: learn@datacademy.com.au

The email should contain a chart attachment and key highlights from the analysis.

## Instructions

1. Unzip the project folder and open the Jupyter notebook.

2. Install dependencies: pandas, matplotlib, yagmail, python-dotenv, openpyxl.

3. Rename `.env.example` to `.env` and enter your Gmail credentials using an App Password.

4. Open the notebook and run all cells from top to bottom.

5. Check your inbox and confirm the email was sent to learn@datacademy.com.au.

## Required in Your Email Report

- Top 5 Products by Total Sales (Bar Chart)

- Total revenue and profit (computed from merged dataset)

- Region-wise breakdown of sales

- A brief text summary (auto-generated in the notebook)

## Bonus Insight Questions (Optional)

1. Which customer segment (Corporate, Consumer, Home Office) brought the most revenue?

2. Which product category had the highest profit margin?

3. What would you recommend to improve next week's sales?

**Submit your completed report to learn@datacademy.com.au using the automated email cell.**