Power BI + SQL NHS Informatics Project

Project Purpose

You're building a mini dashboard to simulate performance-tracking work in NHS Informatics using tools like SQL and Power BI.

This project shows you can:
- Understand healthcare data structure
- Query that data with SQL
- Visualise it clearly in a dashboard
- Use industry-standard tools

The Scenario

You're analyzing A&E visit data for two hospitals stored in a SQLite database.
Your job is to:
- Store the data in SQLite
- Query it using SQL
- Build a dashboard in Power BI

Data Structure

Table: ae_visits
Columns:
- id (INTEGER)
- hospital_name (TEXT)
- visit_date (DATE)
- attendances (INTEGER)
- seen_within_4hrs (REAL)

Tools Used

SQLite / DB Browser: Create and manage your .db file
SQL: Write queries to explore/summarize data
Power BI Desktop: Build your interactive dashboard

What You'll Build

Power BI Dashboard including:
- Line chart of A&E attendances over time
- Bar chart comparing % seen within 4 hours by hospital
- KPI card showing total visits
- Dropdown filter for hospital name

Optional Enhancements

- Add SQL queries to calculate averages or detect issues
- Show NHS 4-hour target line on charts

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- Add tooltips, slicers, or interactivity
- Expand dataset with dummy fields like referral source

Presentation Options

- Export as PDF or screenshot for your portfolio
- Publish to Power BI Online
- Add a one-slide summary explaining insights