Final Capstone Guidelines

Projects to be done in teams of 3-4

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Capstone Team Assignments

How team assignments will be done

Team assignments will be done on the final technical session of the SQL Challenge. You'll be added to teams of 3-4 based on your career interests.

Go to the 30-Day Challenge Slack Channel, you'll find a message asking you to drop a thumbs-up on your industry of interest so that we can add you to your ideal project group.

Note: To be added to a final capstone team, <u>you should have completed the two weekly projects on SQL Databases</u>.

Choose from one of the following on Slack

Here are the most common industries:

- 1. Finance and Credit/Risk
- 2. Sales & Customer Success
- 3. Marketing and Advertising
- 4. Business and Entrepreneurship
- 5. Technology & Telecommunication
- 6. Logistics and Supply Chain
- 7. Healthcare and Medicine
- 8. Transport and Mobility
- 9. Accounting and Tax
- 10. Education/Ed-Tech

Here are more niche project areas:

- 1. Sports
- 2. Entertainment
- 3. Food and Hospitality
- 4. Economics (GDP/Social Data)
- 5. Agriculture and Climate Change
- 6. Non-Profit and Social Causes
- 7. Mining and Manufacturing

Note that there are more industries but these are the ones we can find data for.

Capstone Project Guidelines

Part 1: Design SQL Database

Your project will be assigned to you as a Github repository with data in CSV or XLSX format which you can open with Microsoft Excel to view.

Your first task is to design an SQL Database for your data. Populate the database tables with data from your CSV. Since it is tedious to populate all your data, just enter at least 3 rows per table when building your database. Make sure that you are using relationships well on SQL Database and that you are following the normalisation properties of SQL Databases.

Your submission should have **the final database** as well as **an image showing your database structure** which you can design easily on <u>Lucid Chart</u>, <u>Miro</u>, or any other tool your team prefers.

Part 2: Build a PowerBI Dashboard

The second phase involves **connecting your datasource to PowerBI and building a dashboard of visualisations.** The core goal of your dashboard should be to derive insights from your data that would be valuable to the associated business/organisation.

Your final submission should have a PowerBI dashboard and a Slide document communicating the insights derived from the dashboard. This will also be the slide document you present as a team to culminate the challenge.

Part 3: Data Storytelling Presentation

To culminate the final capstone, you'll need to make a final presentation. In this presentation, you'll be required to present:

- 1. The **defined business problem/question** your data seeks to answer
- 2. **The data**, where it was sourced, and what it entails (Info on data used)
- 3. The **SQL database design** (tables and relationships) for your project
- 4. The **visualisations generated on Power BI**, <u>the insights derived</u> from the dashboard, and <u>how the insights tie into the defined business problem</u>
- 5. What are the **next steps for your project**? This could be gaps in your data or opportunities to be explore to generate even richer insights.

Do you want to upskill further into Data Science?

Upskill into Data Science with Zindua School

Post the challenge, we recommend you delving deeper into Data Analysis and Data Science. We have **a robust 25-week Data Science program** covering Python, Python Data Analysis, Machine Learning, and Big Data Engineering.

SQL and PowerBI are great assets to have as a newbie in Data Science, however, the core program delves deeper into all the advanced skills needed for a modern day data job. <u>Learn more about the core program here</u>

We are **known for our learn-now-pay-later financing** which makes the program even more accessible. <u>See financing options here</u>. More importantly, the **core program is extremely personalised**: 7:1 teacher-to-student ratio.

The next intake is on October 16th

LaunchZINDUA your career in Data Science:

- → For Any Inquiries: Reach out to Joan Waweru or Cyril Michino (Slack/WhatsApp)
- → Website: https://zinduaschool.com
- → Apply Today: zinduaschool.com/apply

