BUSINESS INTELLIGENCE & VISUALISATION

Data Visualization - My personal dashboard using PowerBI

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1. Introduction

A Microsoft data visualization application, Power BI provides an easy-to-use interface for connecting, modelling, and generating interactive reports and dashboards from a variety of data sources.
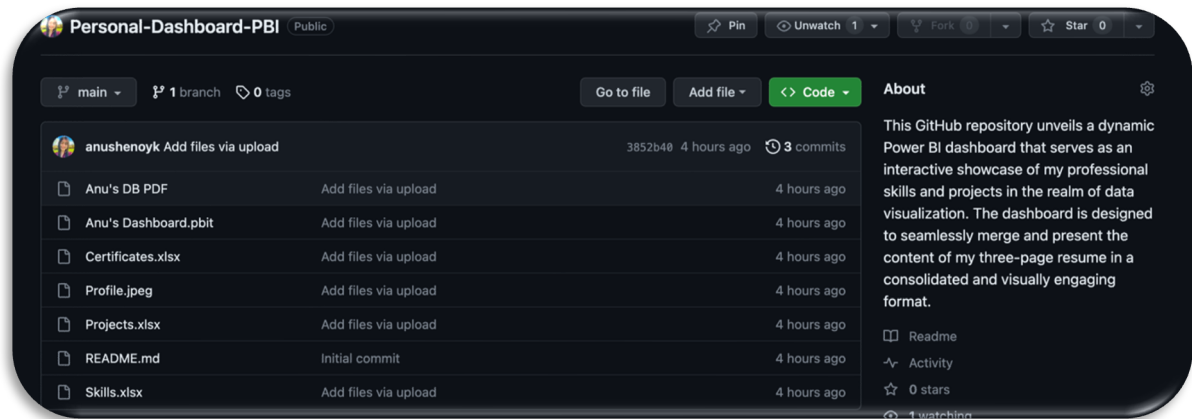
Dashboard Purpose:

With the use of cross-filters to facilitate the recruiting team's quick investigation, this dashboard attempts to interactively combine and present my three-page CV into a single, comprehensive overview of my projects.

2. The Dataset

The dataset is created by my own, featuring tables on my **skills, certificates**, and **projects**, complemented by personal elements like a **profile photo** and a **YouTube thumbnail** related to Flute projects. Link to my dataset publicly available on GitHub - https://github.com/anushenoyk/Personal-Dashboard-PBI

- **Skills** – which include skill and my proficiency level in respective skill
- **Certificates** – includes certification name, photo of issuing authority/company and also year of completion
- **Projects** – this include name of the project followed by type and a one liner description also skills associated with respective project, location of clients for whom I served this project and also latitude and longitude of that region
- **Profile photo** – it's my profile which I used remove.bg to remove the background and I used this upon my background
- **YouTube thumbnail** – which is a snapshot from my YouTube channel and I made it clickable so that user can visit and check my flute projects

The topic of interest centres around showcasing individual expertise and achievements in a comprehensive professional profile.

3. Target Audience

Who they are:
The dashboard is tailored for the hiring team or recruiters tasked with evaluating my candidacy.

What they want to know:
It's my 3page resume shortened into single dashboard so they can quickly assess my skills, certifications, and project experiences without the need to navigate through multiple pages.
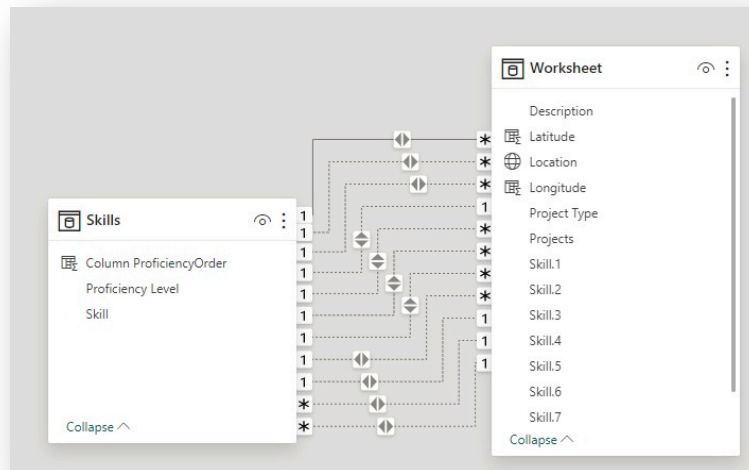
4. Data Transformations

Since the data was created by my own lots of changes had to be done, it was really a bit stressful took a complete day just to set data but was interesting.

Projects table
- Splitted skills column into skill1, skill2, etc., aligning with the skills table for cross-filtering with projects.

```
= Table.SplitColumn(#"Removed Columns", "Skill", Splitter.SplitTextByDelimiter(",", QuoteStyle.Csv), {"Skill.1",
    "Skill.2", "Skill.3", "Skill.4", "Skill.5", "Skill.6", "Skill.7", "Skill.8"})
```

- Set up multiple cardinalities in the model view to connect tables, showcasing proficiency in a pie chart for project-specific skills.
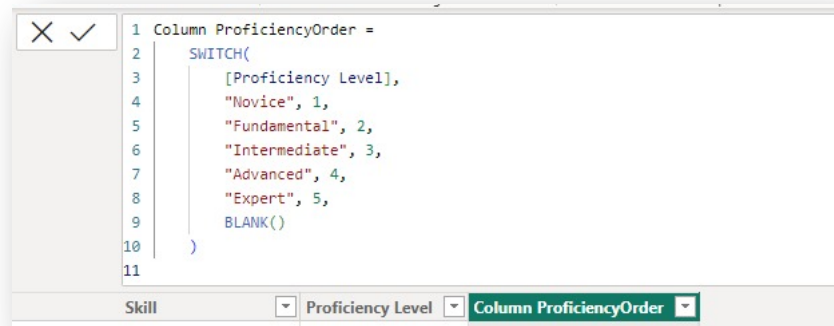

- Converted Location data category to - Country; added latitude and longitude for accurate project mapping.

```
1  Latitude =
2  SWITCH (
3      'Worksheet'[Location],
4      "Ireland", 53.349805,
5      "India", 20.5937,
6      "Dubai", 25.276987,
7      "United States", 37.0902,
8      "Kenya", -1.2921,
9      BLANK()
10 )
```

```
1  Longitude =
2  SWITCH (
3      'Worksheet'[Location],
4      "Ireland", -6.26031,
5      "India", 78.9629,
6      "Dubai", 55.296249,
7      "United States", -95.7129,
8      "Kenya", 36.8219,
9      BLANK()
10 )
```
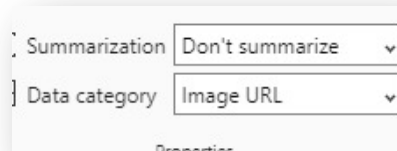
Skills table

- I introduced a "ProficiencyOrder" column, mapping proficiency levels to numerical values for easier analysis
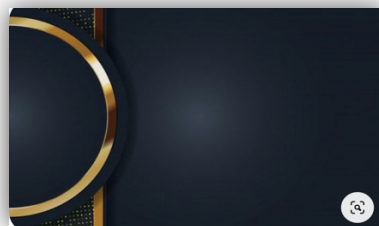
```
1  Column ProficiencyOrder =
2      SWITCH(
3          [Proficiency Level],
4          "Novice", 1,
5          "Fundamental", 2,
6          "Intermediate", 3,
7          "Advanced", 4,
8          "Expert", 5,
9          BLANK()
10     )
11
```

Certificates table

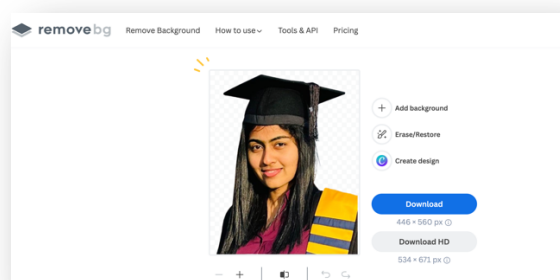- I changed the type of certificate images to Image URL

Background image

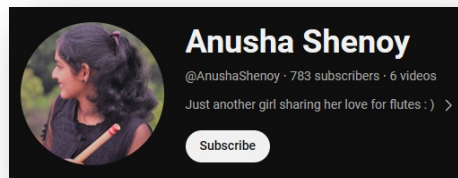- Downloaded from internet, modified a bit using Canva.

My profile image

- Removed background from remove.bg to fit into chosen background.

YouTube thumbnail

- I utilized a screenshot of my YouTube channel profile as an image with a web URL action, redirecting users to my channel upon clicking.

5. Justifications

5.1 Dataset and attention –

I chose to work with my own dataset to engage in creating, modifying, and learning from my data. Despite the challenging deadline, I wanted to push myself and gain valuable experience in developing my dataset. It was a lengthy but worth it.

5.2 PowerBI over Tableau –

I really wanted to use and combine both, but unlike readily available datasets, creating my own took time, and it was difficult to explore in a short amount of time. The versatility of the PowerBI platform made it easy to create and experiment with data, and using DAX gave me a strong and effective approach to modify and analyze the data in accordance with my unique needs. In general, Power BI made the data creation and modification stages of my project more efficient and user-friendly.

5.3 Why particular column? –

My main objective when choosing columns for visualizations was to make the hiring process as easy as possible for them. I wanted them to be able to view important project information, like location, level, and project type, on a single screen, so they wouldn't have to go through several pages of resumes. This resulted in the deployment of cross-filtering and the thoughtful selection of columns.

5.4 Favourite chart –

Even though my original goal was to include a clever narrative, I had trouble getting the data ready for this feature. But the description box turned out to be my favorite chart on the dashboard. I like how I added interactivity and context to improve the user experience overall, and how it changes dynamically based on the project that is selected.

6. Insights

1. **Certification Progress Trend:**

   ▪ The dashboard illustrates a progressive trend in certification from 2019 to 2023, which highlights the candidate's commitment to continuous learning and skill enhancement over these years.

2. **Project Portfolio Integration:**

   ▪ The dashboard effectively blends technology and flute projects, giving recruiters an idea of the candidate's broad skill set and creative approach to producing an eye-catching dashboard.

7.Learnings

7.1 Enjoyable Project aspects : Since visualization is by its very nature creative, I really enjoyed the creative aspects of the project. Particularly fulfilling were creating my own dataset, making original charts, and deriving insightful conclusions.

7.2 Not Enjoyed: Honestly, the 18-hour stretch dedicated to manually entering details without a scraper was challenging. Unlike working with pre-existing datasets, data adjustment and preparation was time-consuming.

7.3 Mistakes: One significant mistake was an overemphasis on text data over numerical representations, resulted in a cluttered appearance. Additionally, including certificate photos that weren't utilized and last-minute data preparation added stress to meet the deadline.

7.4 Start Over Differently: I would proactively compile detailed information about my education and experience for a more seamless experience. For a more thorough presentation, I would combine another dashboard with more tiles and analytics will include client appreciation posts, make use of smart narrative features, and integrate Tableau in addition to Power BI.