Lab: Option B - Building a Dashboard with Google Looker Studio

Estimated time needed: 60 minutes

Introduction

In this assignment, you will create visualizations using the 2024 Stack Overflow survey dataset and add them to dashboards in Google Looker Studio.

Software used in this assignment

Google's Looker Studio

Prerequisites

You need access to Google Looker studio. This [Google Looker studio lab](#) will guide to get your access to Google Looker studio, and also get you started with how to use it to analyze the data.

Dataset used in this assignment

The data set used in this assignment is the Stack Overflow Developer Survey data is available at: https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/HLOosvsPgIwt5dgOOh1RSg/survey-data-updated.csv

We are using a modified subset of that data set for the assignment, so to follow the assigment instructions successfully, please use the data set provided with the assignment, rather than the data set from the original source.

Guidelines for the submission

Extract the file and upload : **survey_results_updated.csv** file s as data assets to your Googel Looker Studio.

1. **Current Technology Usage** - Use the 2 x 2 rectangle areas template:

   - Panel 1: Top 10 Languages Used (Stacked Bar)
   - Panel 2: Top 10 Databases Used (Stacked Column)
   - Panel 3: Top 10 Platforms Used (Word Cloud)
   - Panel 4: Top 10 Web Frameworks Used (Scatter Bubble)

2. **Future Technology Trends** - Use the 2 x 2 rectangle areas template:

   - Panel 1: Top 10 Languages Desired Next Year (Stacked Bar)
   - Panel 2: Top 10 Databases Desired Next Year (Stacked Column)
   - Panel 3: Top 10 Desired Platforms (Tree Map)
   - Panel 4: Top 10 Desired Web Frameworks (Scatter Bubble)

3. **Demographics** - Use the 2 x 2 rectangle areas template:

   - Panel 1: Respondents by Age (Pie Chart)

   - Panel 2: Respondent Count by Country (Map Chart)

   - Panel 3: Respondent Distribution by Education Level (Line Bar Chart)

   - Panel 4: Respondent Count by Age, Classified by Education Level (Stacked bar Chart)

     Hint: To create a Word cloud graph use Vega/Vega-Lite form the Community Visualization. For more details [click here](#)

Ensure to apply filters to exclude null values where necessary.

Instructions for submission

Capture screenshots of your dashboard and save them locally, as they will be required in the final presentation.

Grading information

The grading will consider:

- Creation of required tabs
- Accuracy of visualizations per dashboard page
- Correct chart types, features, and titles
- Accurate representation of data

  Note: Grammar and spelling will not be graded.