

Glossary

Data Analytics



Terms and definitions from Course 6

A

Alternative text: Text that provides an alternative to non-text content, such as images and videos

Annotation: Text that briefly explains data or helps focus the audience on a particular aspect of the data in a visualization

Area chart: A data visualization that uses individual data points for a changing variable connected by a continuous line with a filled in area underneath

AVERAGEIF: A spreadsheet function that returns the average of all cell values from a given range that meet a specified condition

B

Balance: The design principle of creating aesthetic appeal and clarity in a data visualization by evenly distributing visual elements

Bar graph: A data visualization that uses size to contrast and compare two or more values

Box plot: A data visualization that displays the distribution of values along an x-axis

Bubble chart: A data visualization that displays individual data points as bubbles, comparing numeric values by their relative size

Bullet graph: A data visualization that displays data as a horizontal bar chart moving toward a desired value

C

Calculus: A branch of mathematics that involves the study of rates of change and the changes between values that are related by a function

Causation: When an action directly leads to an outcome, such as a cause-effect relationship

Channel: A visual aspect or variable that represents characteristics of the data in a visualization

Chart: A graphical representation of data from a worksheet

Circle view: A data visualization that shows comparative strength in data

Cluster: A collection of data points on a data visualization with similar values

Column chart: A data visualization that uses individual data points for a changing variable, represented as vertical columns

Combo chart: A data visualization that combines more than one visualization type

CONVERT: A SQL function that changes the unit of measurement of a value in data

Correlation: The measure of the degree to which two variables change in relationship to each other

CREATE TABLE: A SQL clause that adds a temporary table to a database that can be used by multiple people

D

Data composition: The process of combining the individual parts in a visualization and displaying them together as a whole

Data storytelling: Communicating the meaning of a dataset with visuals and a narrative that are customized for an audience

Decision tree: A tool that helps analysts make decisions about critical features of a visualization

Density map: A data visualization that represents concentrations, with color representing the number or frequency of data points in a given area on a map

Design thinking: A process used to solve complex problems in a user-centric way

Distribution graph: A data visualization that displays the frequency of various outcomes in a sample

Diverging color palette: A color theme that displays two ranges of data values using two different hues, with color intensity representing the magnitude of the values

Donut chart: A data visualization where segments of a ring represent data values adding up to

a whole

DROP TABLE: A SQL clause that removes a temporary table from a database

Dynamic visualizations: Data visualizations that are interactive or change over time

E

Emphasis: The design principle of arranging visual elements to focus the audience's attention on important information in a data visualization

Engagement: Capturing and holding someone's interest and attention during a data presentation

F

Filled map: A data visualization that colors areas in a map based on measurements or dimensions

Framework: The context a presentation needs to create logical connections that tie back to the business task and metrics

G

Gantt chart: A data visualization that displays the duration of events or activities on a timeline

Gauge chart: A data visualization that shows a single result within a progressive range of values

H

HAVING: A SQL clause that adds a filter to a query instead of the underlying table that can only be used with aggregate functions

Headline: Text at the top of a visualization that communicates the data being presented

Heat map: A data visualization that uses color contrast to compare categories in a dataset

Highlight table: A data visualization that uses conditional formatting and color on a table

Histogram: A data visualization that shows how often data values fall into certain ranges

I

Inner query: A SQL subquery that is inside of another SQL statement

J

K

L

Label: Text in a visualization that identifies a value or describes a scale

Legend: A tool that identifies the meaning of various elements in a data visualization

Line graph: A data visualization that uses one or more lines to display shifts or changes in data over time

Live data: Data that is automatically updated

M

Map: A data visualization that organizes data geographically

Mark: A visual object in a data visualization such as a point, line, or shape

MAXIFS: A spreadsheet function that returns the maximum value from a given range that meets a specified condition

McCandless Method: A method for presenting data visualizations that moves from general to specific information

MINIFS: A spreadsheet function that returns the minimum value from a given range that meets a specified condition

Movement: The design principle of arranging visual elements to guide the audience's eyes from one part of a data visualization to another

N

Narrative: (Refer to story)

O

Outer query: A SQL statement containing a subquery

P

Packed bubble chart: A data visualization that displays data in clustered circles

Pattern: The design principle of using similar visual elements to demonstrate trends and relationships in a data visualization

Pie chart: A data visualization that uses segments of a circle to represent the proportions of each data category compared to the whole

Pre-attentive attributes: The elements of a data visualization that an audience recognizes automatically without conscious effort

Proportion: The design principle of using the relative size and arrangement of visual elements to demonstrate information in a data visualization

Q

R

R: A programming language used for statistical analysis, visualization, and other data analysis

Ranking: A system to position values of a dataset within a scale of achievement or status

Relativity: The process of considering observations in relation or proportion to something else

Repetition: The design principle of repeating visual elements to demonstrate meaning in a data visualization

Rhythm: The design principle of creating movement and flow in a data visualization to engage an audience

S

Scatterplot: A data visualization that represents relationships between different variables with individual data points without a connecting line

SELECT INTO: A SQL clause that copies data from one table into a temporary table without adding the new table to the database

Sort range: A spreadsheet menu function that sorts a specified range and preserves the cells outside the range

Sort sheet: A spreadsheet menu function that sorts all data by the ranking of a specific sorted column and keeps data together across rows

Spotlighting: Scanning through data to quickly identify the most important insights

Static data: Data that doesn't change once it has been recorded

Static visualization: A data visualization that does not change over time unless it is edited

Statistics: The study of how to collect, analyze, summarize, and present data

Story: The narrative of a data presentation that makes it meaningful and interesting

Subtitle: Text that supports a headline by adding context and description

Symbol map: A data visualization that displays a mark over a given longitude and latitude

T

Tableau: A business intelligence and analytics platform that helps people visualize, understand, and make decisions with data

U

Unity: The design principle of using visual elements that complement each other to create aesthetic appeal and clarity in a data visualization

V

Variety: The design principle of using different kinds of visual elements in a data visualization to engage an audience

Visual form: The appearance of a data visualization that gives it structure and aesthetic appeal

W

WITH: A SQL clause that creates a temporary table that can be queried multiple times

X

X-axis: The horizontal line of a graph usually placed at the bottom, which is often used to represent time scales and discrete categories

Y

Y-axis: The vertical line of a graph usually placed to the left, which is often used to represent frequencies and other numerical variables

Z