Data Vis

Spring 2021

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Assignment 2 (12 points)

- Due Date: April 9, 2021, 11.00 PM

Description

DATASET: ACT, GPA, SATM, SATV - **available for download on Canvas in Modules section.**

This dataset contains standardized scores for all Calvin College 2004 seniors that have taken both the ACT and the SAT, together with their GPAs. There are 271 data points and 4 dimensions.

Problem 1: Interactive Scatter Plot (6 Points):

Create a scatterplot of SAT's mathematics scores (SATM) versus SAT's verbal scores (SATV). In other words, the x coordinate of the plot should encode the SATM variable, and the y coordinate should encode SATV. Use the radius of the points to represent ACT scores, and color to represent the GPA scores.

The plot should be interactive, having the following features:

1. Zoom and Pan interactions
2. Tooltips showing SATM, SATV, ACT, and GPA
3. Legends

Problem 2: Scatter Plot with Linked Brushing (6 Points)

Visualize this dataset with two scatterplots: one with SATM and SATV, the other one with ACT and GPA.

These plots should have linked views with brushing techniques (see example of brushing and linking here: Multi-panel Scatter Plot with Linked Brushing — Altair 4.1.0 documentation, or here: Scatterplot Matrix Brushing d3v4).