Data Visualization Pipeline

Geometric Description

Data

The data which we wish to visualize. This data can be in different formats such as dataframe or a relational database.

Trasnformed Data

Apply transformations such as aggregation, filtering, sampling.

Encoder

The encoder is responsible for translating the data into the geometric representation.

High-Level Representation

High-level language for producing vector graphics.

Existing Vector Graphics Format

Geometric representation translated into a vector graphics format such as SVG or PostFix.

Backend:
The same geometric representation can be translated to SVG, PostScript or even directly rasterized. Each possible implementation consists in a different backend.

Rasterization

Turning graphical representation into pixels in the screen