A Web Framework for Explainable and Malleable Visualisation

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Explainability & Malleability

The data model consists of editable and executable Python code, for a smaller divide between pre-processing and visualisation.

The visual model maps output from the Python data-model into visual marks, and can be modified with a dockable options pane.

Key Features

Create child Charts

Common Python libraries

Code shared between Charts

Compare nodes and their edges between charts

Case: The Political Compass

(1) Load in dataset and create child Charts

(2) Write shared functionality in Utility Library

(3) Lock in nodes to compare their positions across algorithms

(4) Compare kNN before and after dimensionality reduction

Architecture

1 Reminiscent of the Visualization Reference Model design pattern [Heer & Agrawala 2006]

Project website: https://vis-au.github.io/webframework/
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*1 Reminiscent of the Visualization Reference Model' design pattern [Heer & Agrawala 2006]