

Presentation Topic: Group 3 - Change Views

Andrew Struthers

January 2023

Statements

1. You can change the encoding, arrangement, order of attributes, or sort of values in order to make a more coherent visualization. This includes changing data from numeric to spacial (encoding), sorting the values by least to greatest or greatest to least, etc.
2. Animating state changes when users are interacting with visualizations have been proven to keep the interest of users much more than static state changes. An example of this would be imagine how disorienting it would be to jump from location to location in Google Maps instead of smoothly moving the screen between two points.
3. Three essential parts of navigation on a visualization are zooming, panning, and rotating. Zooming can be viewed as the camera moving closer or further relative to the view, panning can be seen as the camera sliding on top of the visualization, and rotating will change the angle of view between the camera and the visualization.

Questions

1. Can there be a mixture of constrained and unconstrained navigation, where the camera is unconstrained enough that it is free to move around except inside of objects (camera clipping), or would that just be considered “constrained” navigation?
2. What is the difference between a slice and a cut, if both of them are eliminating some level of data to a 2D or 3D plane?
3. Could you do a projection on an object of higher than 3 dimensions, or does that not make sense?
4. If projection gets rid of a lot of data, and there are a lot of downsides to projection, what are some benefits of projection over slicing, cutting, or other visualization methods?