

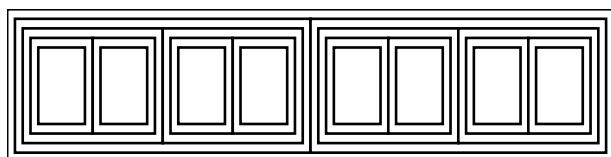
# Cascaded Treemaps

## Examining the Visibility and Stability of Structure in Treemaps

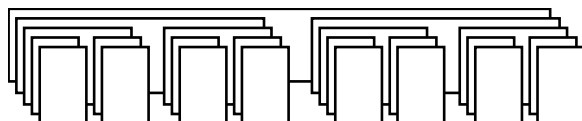
### Cascaded Treemaps are a new treemap presentation technique

- Provide clearer visibility with less space

Nested Presentation



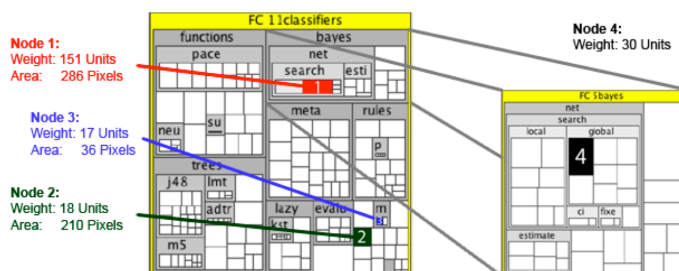
Cascaded Presentation



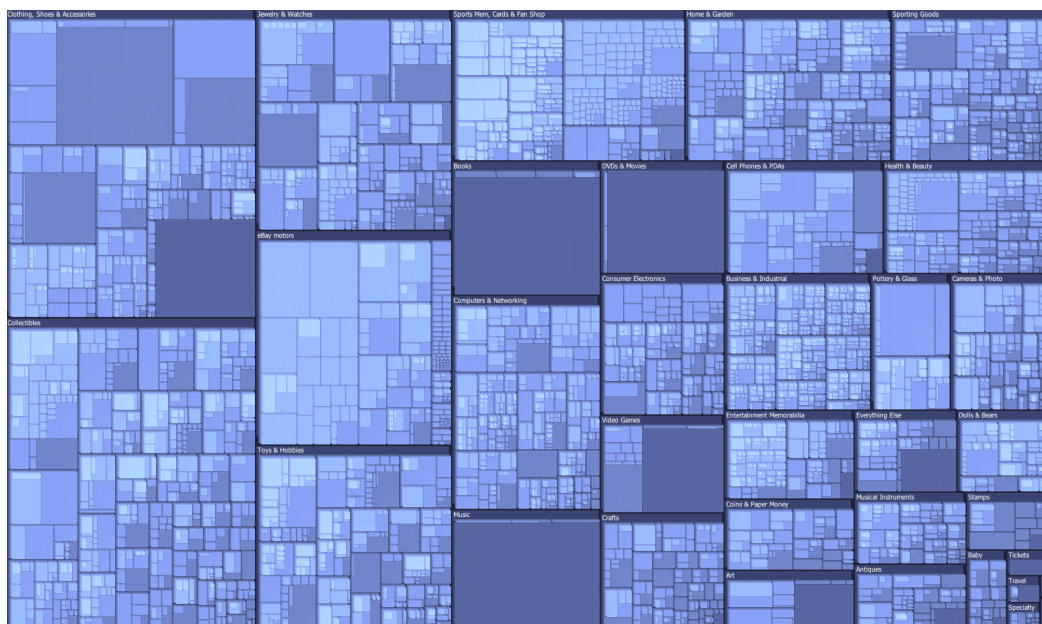
Bruls et al. construct this example to illustrate the difficulty of understanding structure in a nested presentation. In contrast to the maze-like lines in the nested presentation, our cascaded presentation naturally creates additional padding between siblings closer to the root of complex hierarchies and create a clearer view.

### Our new layout algorithm addresses two important issues in the existing treemaps applications

- Distortion of node size
- Stability in zooming



Existing treemap layout algorithms ignore the space dedicated to presenting structure. This leads to a distortion of node sizes and the notable complete absence of nodes. Furthermore, it can cause rearrangement of the layout in the zoom out view. These two issues can be noticed in the above example, generated by the University of Maryland's reference Treemap implementation.



eBay Hierarchy (all 30,380 categories), rendered at resolution 1920x1200