Logging Interactions to Learn About Visual Data Coverage

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Introduction

- Typically, interactions are recorded by type
- However, data items a user inspected can also be of interested
  - Visual data coverage
  - Increase insight generation
Introduction

- Questions answered with visual data coverage

• How much of the data was explored at which level of detail?
• How often was the same data item inspected?

✔️ ✗ Was the right data investigated?
Visual Data Coverage
Visualization of Data Coverage

- X-axis: time
- Y-axes
  - Overall data amount
  - Visual data coverage for each time step
- Line: overall amount of data a participant investigated over time
- Bars: amount of detail data explored interactively over time during the study
- Provides information about how much of the data a participant analyzed
Visualization of Data Coverage

- Rectangles: individual data items
- Color of each rectangle: how often data item was explored using binning
- Bars: how many data points were investigated in each range (frequency)
- Infer which part of the data and how often each data item was investigated
Conclusion

Visual Data Coverage
- Evaluation
- Traceability
- Accountability

More on Interaction Logs
VAST paper presentation (Holiday 4+5)
Friday, October 28th 8:30-10:10 am
Visual Analysis and Coding of Data-Rich User Behavior

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