Universität Stuttgart

Logging Interactions to Learn About Visual Data Coverage

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und Interaktive Systeme

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

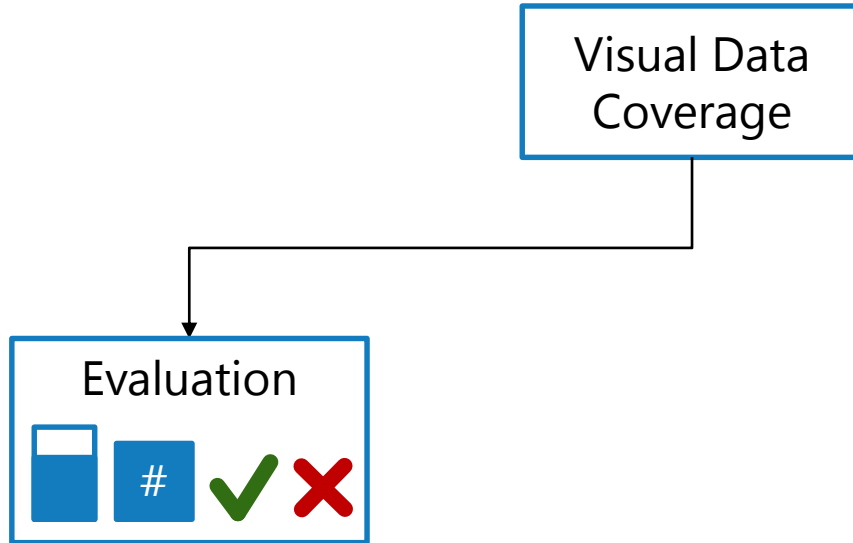   How much of the data was explored at which level of detail?

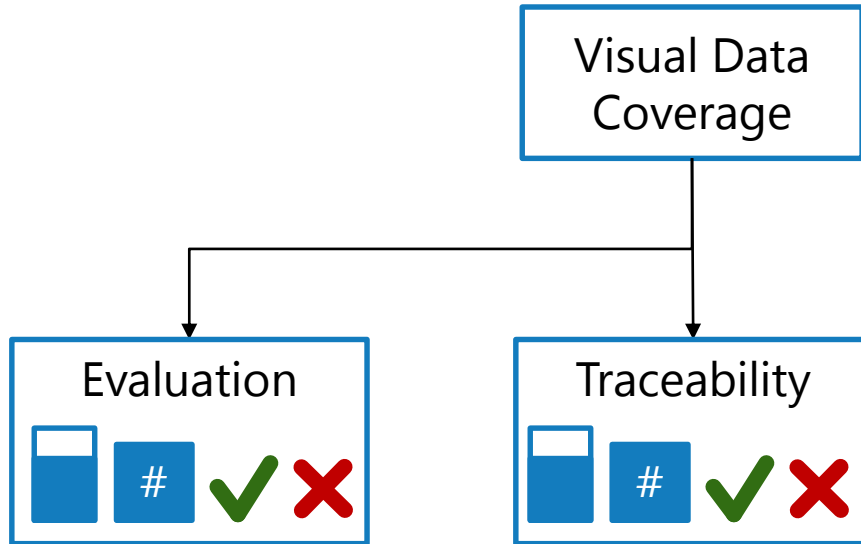   How often was the same data item inspected?
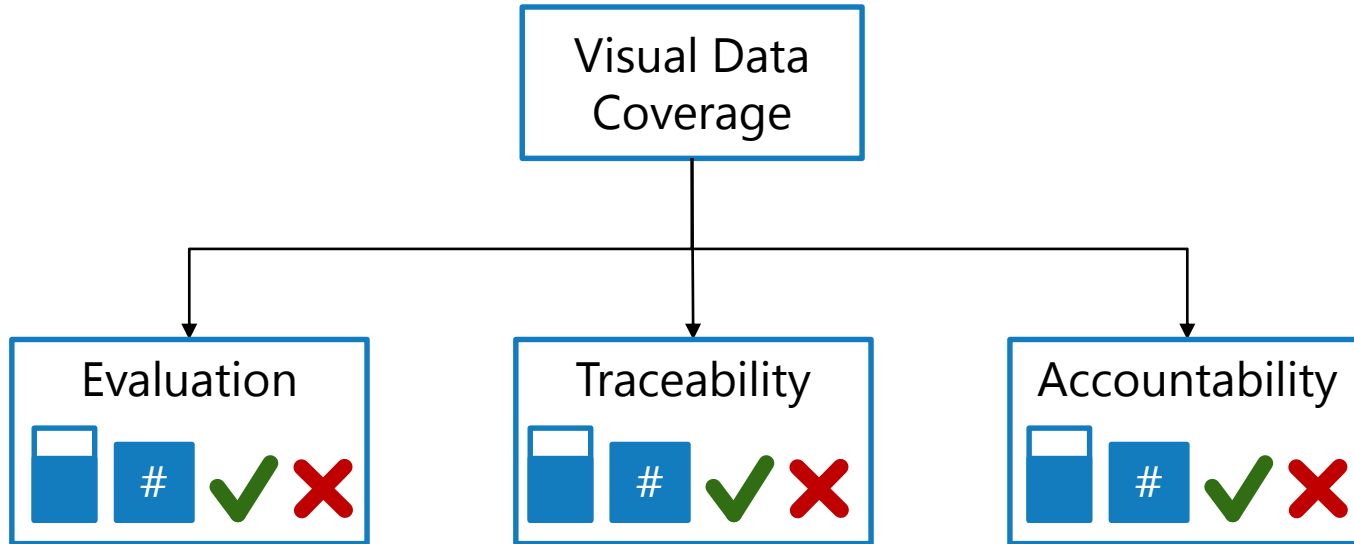
    Was the right data investigated?

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Visual Data Coverage
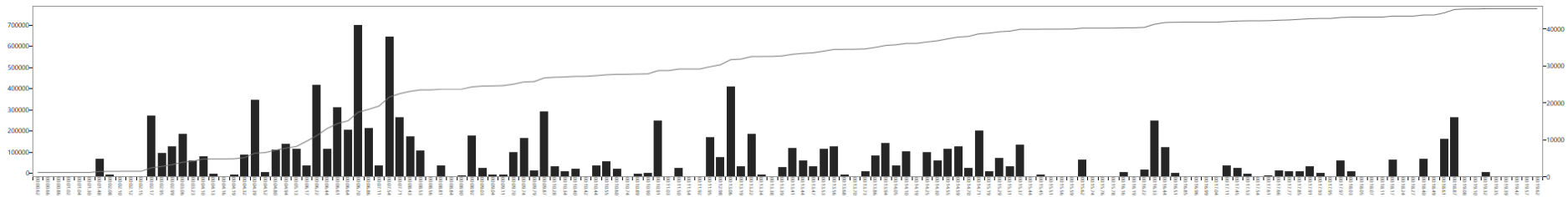
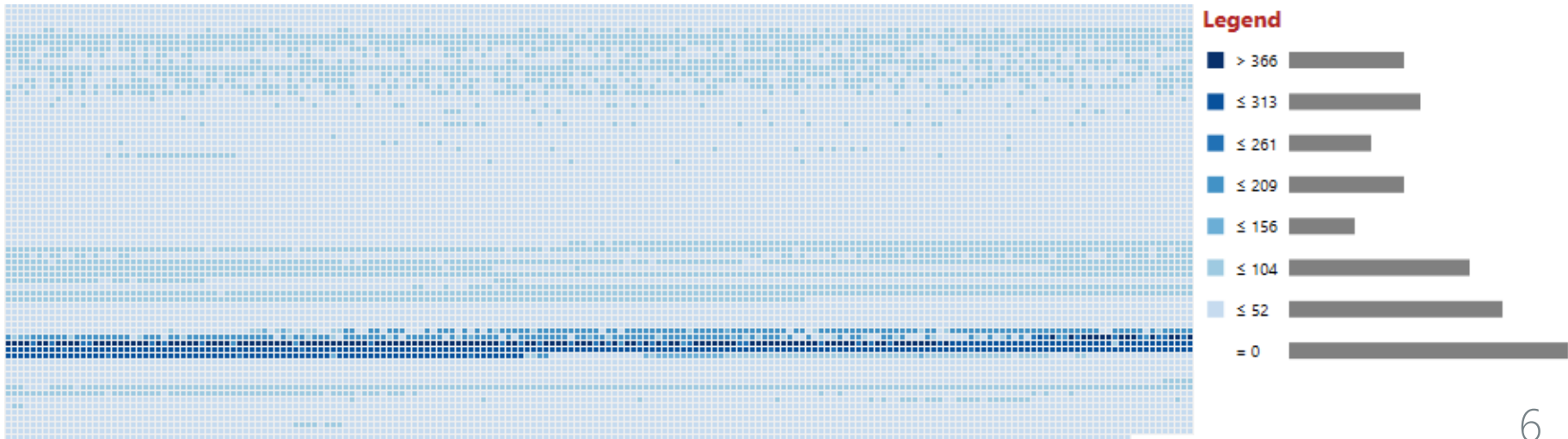# Visual Data Coverage

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

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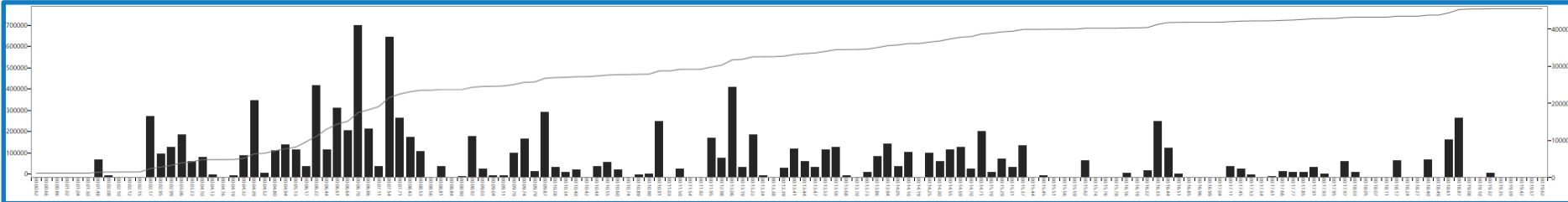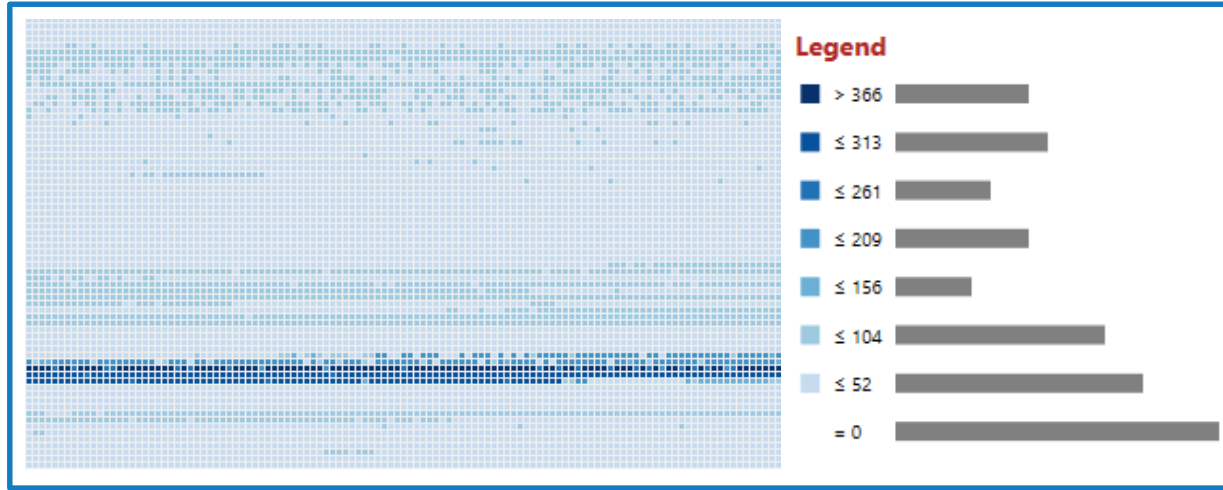
Visualization of Data Coverage

- 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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