Implementing Conformance Checking Visualizations and Tasks for Empirical Research

UNIVERSITÄT MANNHEIM
Fakultät für Betriebswirtschaftslehre

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Motivation

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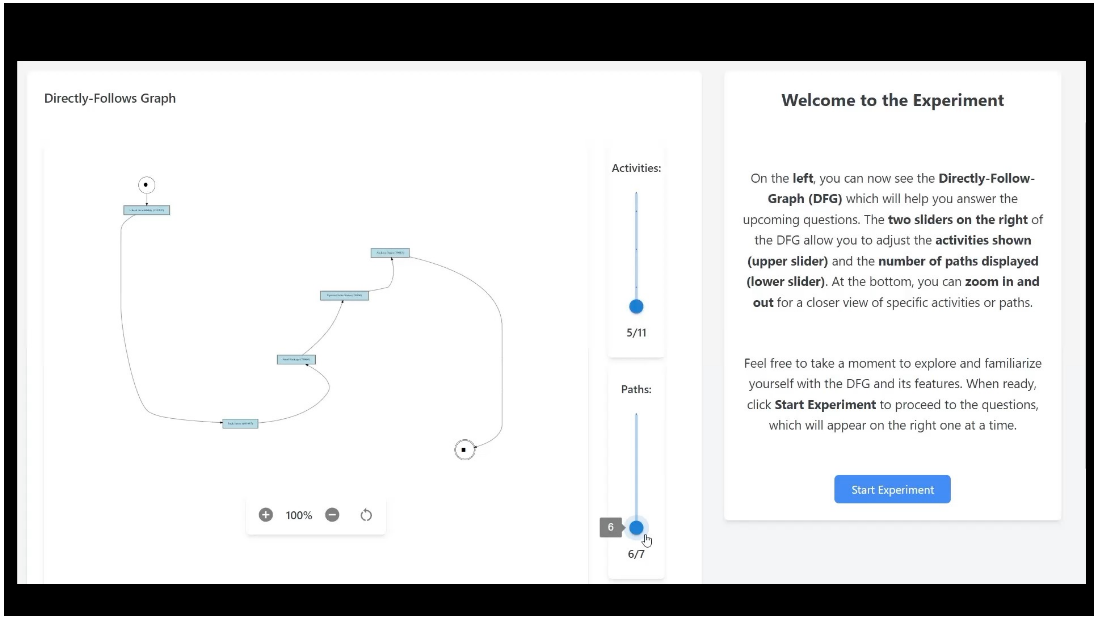
Problem

- So far, no empirical research on conformance checking tasks and their visualizations
- We conducted a first survey on user preferences of different visualization idioms for specific tasks but only with screenshots

Goal

- Implementation of conformance checking visualization idioms for specific tasks independent from tool design
- Provide platform for empirical study to assess idioms' suitability for different conformance checking tasks by measuring the performance

Current Status
Website for empirical research available



- One experiment conducted
- Different focus than conformance checking (visualization of Directly-Follows Graphs)
- Code & infrastructure can be used

Project Goals

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- **Implementation of different conformance checking visualizations**
  - Different input event logs possible
  - Include interactivity e.g., filtering options, zoom etc.
- **Adaption to allow switch between different types of experiments**
  - Change structure of backend so that it can support switching between the different types of experiments (between layouting and visualizations experiment)
  - Adapt frontend and include for administrator selection option of experiment type
- **Incorporate logic of question assignment for experiment**
  - Develop logic where each user only is presented one idiom for one task but distribution between idioms should be equal in the end

Project Requirements

- **Language:** English
- **Duration of the project:** 6 Months
- **Number of participants:** 4-6
- **Prerequisites:**
  - **Recommended:** IS515 or IS514, Interest and Basic Understanding in Process Mining
  - **Highly recommended:** Programming Skills in Web Development
- **Applicable to MMDS**
- **Person of Contact:** michael.grohs@uni-mannheim.de
- **Online:** no