Providing Infrastructure for Expert Studies

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About us …

• Our research field:

Usable Security and Privacy for Developers & Administrators
Lab-Studies vs. Online-Studies
Lab-Studies vs. Online-Studies

• High effort + cost to recruit professionals
• Small sample sizes :(
Browser-based Virtual Laboratory Framework

• Framework for conducting online (expert) studies with remote developers

• Invited participants solve tasks in provided virtual environments using online code editors (e.g. Jupyter)

• Add benefits of lab-studies: Collect data on solving strategies
Data

• Automated data collection:
  – Current state of developed code
  – How many times code executed
  – Error codes, Warnings, Exceptions
  – Copy-and-Paste of Code
  – ...

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Validity Requirements

• Different Condition Assignment Strategies (e.g. Sorted, Randomized)

• Equal study environment
  – Same software/library versions

• Ecological validity
  – Usage of own equipment/setup
  – No additional software required
Technical Requirements

• Pseudonymous or anonymous participation
  – Privacy is crucial

• Isolation of participants
  – Don't see/alter other participant's results

• Multiple participants simultaneously
Technical Requirements

• Reliability
  – Start/Pause/Stop anytime

• Primarily for Java development
  – Otherwise, multi-language support quite desirable
Own ideas

• Any **own project ideas** concerning expert studies? Or in other areas of Usable Security and Privacy?

GREAT!

• Feel free to let me know!
Application

• Please send your exposé to:
  herzog@cs.uni-bonn.de

**Deadline for exposé: 2nd October**

• On the **5 October** you will be informed whether you were chosen/not chosen for your favourite lab topic
• **Register deadline for the lab in BASIS:** 31.10.2018