CTHCI Lab
Final Exam Preparation

Media Computing Group | RWTH AACHEN UNIVERSITY

Exam Scope (1/2)

- Lectures

  - S01 Research Approaches in HCI

  - S02 Experimental Research

  - S03 Statistical Analysis in HCI Research

  - HCI Design Patterns

  - Interactive Museum Guide Systems

  - Touch and Tangibles on Large Interactive Surfaces

- Reading assignment (in depth)

  - (Wobbrock, 2014) 7 Research Contribution Types in HCI

  - (McGrath, 1995) Methodology matters

  - Required reading of the above lectures

Media Computing Group

RWTH AACHEN UNIVERSITY

Question Types

- Memory: recall facts

  - Name, describe, explain, sketch

- Convergent: Integration of memorized information

  - Compare and contrast concepts

  - Analyze the given examples

- Divergent: Encourage free generation of ideas

  - Agree/disagree and justify your answer

  - Give an example of concepts

- Application: Apply knowledge/skill to a new situation

  - Extracting contribution, experimental design, criticizing validity

Nur Al-huda Hamdan - CTHCI

Media Computing Group

RWTH AACHEN UNIVERSITY

Terminologies

- Research approaches:

  - Empirical science, ethnography, engineering & design

- Research contributions

  - Empirical, artifact, methodological, theoretical, dataset, survey, and opinion

- Empirical research strategies

  - Descriptive, relational, experimental

- Experimental design

  - Within-subjects, between-subjects

Nur Al-huda Hamdan - CTHCI

Statistics: Knowing what's missing & how to fix

- Chat conducted an experimental study comparing task completion time between two keyboard layouts. Chat presented the following results and conclude that users were faster with layout A than with layout B. Identify flaws in his conclusion and suggest improvements.

- What central tendency is used?
- Missing spread (CI, SD, variance)
- Missing unit
- Standardized effect size

Nur Al-huda Hamdan - CTHCI