

Test 2 Design and Evaluation of HCI

Module: Intelligent Interaction Design

Bachelor 2 BIT/TCS/CreaTe (EWI)

Module code: 201600105 (BIT/TCS), 201600106 (CreaTe)

Date: December 8, 2016

Time: 8:45-9:45 hr

Module-coordinator: dr. M. Theune

Instructor: dr. ir. D. Reidsma

Type of test: Closed book

Allowed aids during the test: Nothing

Attachments: Multiple Choice form

The test consists of two parts:

- 4 multiple-choice questions. Each multiple-choice question has one correct answer. All students have to answer all of the multiple-choice questions.
- 5 open questions. Answers can be given in Dutch or English.
NB CreaTe students do not have to answer the last open question. Other students have to answer all of the open questions.

All questions have equal weight. The two parts are separately scored. The overall score is the weighed (according to the number of questions) average of both scores.

For the multiple choice part a standard correction for guessing is applied. For the general case of n questions and p correct answers the formula for the score of the multiple choice part is:

$$\max(10 \cdot (p - 0.25 \cdot n) / (n - 0.25 \cdot n), 0)$$

Before leaving the room you must hand in

- the answer form for the multiple-choice questions (we need this for automatic answer analysis)
- the answers for the open questions.

Each page must clearly state your name and student number.

Multiple-choice questions

1. Given are two statements about the concepts validity and/or reliability in the context of qualitative analysis.

- (i) A main issue is the confidence that one might have in a given interpretation.
- (ii) A common measure is the rate of agreement among coders.

Is each of these statements typical for validity or reliability?

- (a) Both statements (i) and (ii) are about validity.
- (b) Both statements (i) and (ii) are about reliability.
- (c) Statement (i) is about validity, statement (ii) about reliability.
- (d) Statement (i) is about reliability, statement (ii) about validity.

2. Consider the following two statements about differences between subjective and objective coders.

- (i) Objective coders code only observable facts, while subjective coders code also their feelings.
- (ii) Objective coders were involved in developing the coding scheme, subjective coders were not.

Are these statements true?

- (a) Both statements (i) and (ii) are true.
- (b) Only statement (i) is true.
- (c) Only statement (ii) is true.
- (d) Both statements (i) and (ii) are false.

3. Consider the following two statements about expert-based testing.

- (i) Expert-based testing should come after user-based testing.
- (ii) The experts in expert-based testing are typically experts in the task domain of the involved system.

Are these statements true?

- (a) Both statements (i) and (ii) are true.
- (b) Only statement (i) is true.
- (c) Only statement (ii) is true.
- (d) Both statements (i) and (ii) are false.

4. Consider the following two statements about the Wizard-of-Oz method.

- (i) In this method responses are not determined by a computer system, but by a human being.
- (ii) In this method no users are involved.

Are these statements true?

- (a) Both statements (i) and (ii) are true.
- (b) Only statement (i) is true.
- (c) Only statement (ii) is true.
- (d) Both statements (i) and (ii) are false.

Open questions

1. Which of the following activities are typical for phase 2 (lo fi prototyping and conceptual design)?

1. Adapt the user requirements
2. Describe the system architecture
3. Explore possible interfaces of the system
4. Explore several design options
5. Identify characteristics of the users
6. Make grounded design decisions

If in doubt, you can explain your answer.

2. Given is next statement about a difference between playtesting and usability testing:

(i) In playtesting you only use tissue testers, in usability testing you can use more kinds of testers.

Is this statement true? Explain your answer.

3. When using a grounded theory approach for qualitative data analysis, what comes first: the theory or the data? Explain your answer.

4. Given is the following statement about the number of users in a usability study:

(i) Five users is enough, they will find approximately 80% of the usability problems in an interface.

Is this statement true according the textbook Research Methods? Explain your answer.

5. **NB This question is only for BIT and TCS students.**

Given is the following statement about the goal of prototyping:

(i) The ultimate goal of prototyping is to get feedback.

Is this statement true? Explain your answer.