Name: _____ Matr.Nr.: _____

Human-Computer Interaction (HCI)

(706.021 3VU Mensch-Maschine-Kommunikation SS 2015)

Multiple Choice Test (15 Minutes)

- Write your name and Matrikelnummer at the top of the page.
- For each choice, clearly mark the circle ⓧ, if that choice is correct (true, T). Clearly mark the box [x], if that choice is incorrect (false, F). Do not mark both the circle and the box, do not leave both empty.
- If you make a mistake, clearly write the word "true" or "false" in the margin next to the boxes.
- There may be zero, one, or multiple correct choices for each question.
- For each question, you will either gain full points or zero points. To gain full points, you must *correctly* identify each choice as true or false (exact match).
- Unless otherwise stated, the questions assume a Microsoft Windows computing environment.
- This is a closed book test. No books, lecture notes, or other materials are allowed.
- No calculators, mobile phones, PDAs, or other electronic devices are allowed.
- A printed English-German dictionary may be used.
- Please place your student id on the desk in front of you.

1. *Mappings*:

T F
- ◯ ☐ A. are possibilities for using an object (or interface).
- ◯ ☐ B. are relationships between controls and their effects on a system.
- ◯ ☐ C. are cultural constraints.
- ◯ ☐ D. may take advantage of physical analogies and cultural standards.

2. Regarding the measurement of usability attributes:

T F
- ◯ ☐ A. Reliability is measured by performing common use cases.
- ◯ ☐ B. Errors are measured by counting both minor and catastrophic errors made by users.
- ◯ ☐ C. Sample expert users are needed to measure efficiency.
- ◯ ☐ D. Learnability is determined by measuring the time it takes to explain an interface to a new user.

3. Which description(s) of *learning curves* for hypothetical systems is (are) correct?

T F
- ◯ ☐ A. The learning curve is independent of the focus of the system on the type of user (novice or expert).
- ◯ ☐ B. The learning curve approximates to a lower value of efficiency if the system focuses on novice users.
- ◯ ☐ C. A system focused on expert users provides higher efficiency at all times.
- ◯ ☐ D. Efficiency increases more steeply in a system focused on expert users.

4. Regarding *brainstorming*:

T F
- ◯ ☐ A. Brainstorming should be done in familiar surroundings.
- ◯ ☐ B. To keep things organised, immediately reject impossible solutions.
- ◯ ☐ C. Sketch in pencil on Post-It notes.
- ◯ ☐ D. Conisder the practicality of ideas only after brainstorming has finished.

5. Which of the following are recognised kinds of *prototypes*:

T F
- ◯ ☐ A. Interactive sketches.
- ◯ ☐ B. Cognitive models.
- ◯ ☐ C. Paper prototypes.
- ◯ ☐ D. Verbal prototypes.

6. Which of these are *usability heuristics* (from Nielsen's 1994 revised list):

T F
- ◯ ☐ A. Don't Make Me Think
- ◯ ☐ B. Match Between System and the Real World
- ◯ ☐ C. Keep It Simple
- ◯ ☐ D. Error Prevention

7. *Cognitive Walkthrough*:

T F
- ◯ ☐ A. is a summative evaluation method.
- ◯ ☐ B. always tracks the correct action sequence.
- ◯ ☐ C. focuses explicitly on learnability.
- ◯ ☐ D. is performed by a single evaluator, who walks through a typical task.

8. Which of the following are valid *testing roles* in the test team?

T F
- ◯ ☐ A. Computer operator
- ◯ ☐ B. Test facilitator
- ◯ ☐ C. Test subject
- ◯ ☐ D. Data logger

9. What are the pros (advantages) of using a *formal experiment*?

T F
- ◯ ☐ A. Finds why problems occur.
- ◯ ☐ B. Usable early in development cycle.
- ◯ ☐ C. Allows comparison of alternative designs.
- ◯ ☐ D. Requires only a small number of test users.

10. Regarding the *Memex*:

T F
- ◯ ☐ A. It was a design based on mechanical levers and microfilm.
- ◯ ☐ B. It was published by Vannevar Bush in 1945.
- ◯ ☐ C. It proposed "trails" of links between documents.
- ◯ ☐ D. It was implemented by Ted Nelson in 1968.