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. *Short-Term Memory (STM)*:

T F
- ◯ ☐ A. cannot retain information for more than 7 ± 2 seconds.
- ◯ ☐ B. is extremely fragile.
- ◯ ☐ C. is the memory of the past.
- ◯ ☐ D. is limited to 11 ± 2 items at a time.

2. Regarding gear-up accidents:

T F
- ◯ ☐ A. Pilots frequently lowered the landing gear instead of the flaps after take-off.
- ◯ ☐ B. Lt. Alphonse Chapanis dicovered the cause of the problem in 1975.
- ◯ ☐ C. The flap control knobs were replaced by beer tap handles.
- ◯ ☐ D. Shape-coded wheel and flap controls are still used today.

3. Regarding *usability engineering*:

T F
- ◯ ☐ A. Usability engineering is a process.
- ◯ ☐ B. Iterative design refers to "Design, Test, Redesign.".
- ◯ ☐ C. The usability engineering lifecycle includes the phase "Usability Research".
- ◯ ☐ D. The usability engineering lifecycle includes the phase "Cognitive Design".

4. A *persona* in the context of goal-oriented interaction design:

T F
- ◯ ☐ A. is a real person.
- ◯ ☐ B. represents a particular type of user.
- ◯ ☐ C. represents the average user.
- ◯ ☐ D. is used to role-play through an interface design.

5. What is true for *vertical protoyping*?

T F
- ◯ ☐ A. It is a particular kind of working prototype.
- ◯ ☐ B. It provides some in-depth functionality.
- ◯ ☐ C. It provides full interface features.
- ◯ ☐ D. It is designed to show how much vertical scrolling is acceptable.

6. Which of these are components of the CE+ model of exploratory learning behaviour?

T F
- ◯ ☐ A. Problem-Solving Component
- ◯ ☐ B. Exploration Component
- ◯ ☐ C. Learning Component
- ◯ ☐ D. Execution Component

7. Which of these are usability *testing methods*?

T F
- ◯ ☐ A. Thinking Aloud
- ◯ ☐ B. Cognitive Walkthrough
- ◯ ☐ C. Observational Studies
- ◯ ☐ D. Interviews

8. 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.

9. Regarding font sizes and styles:

T F
- ◯ ☐ A. 1 pt = $\frac{1}{32}$ inch.
- ◯ ☐ B. Examples of serif fonts include Times Roman and Helvetica.
- ◯ ☐ C. Examples of sans serif fonts include Arial and Verdana.
- ◯ ☐ D. A serif is a slight embellishment at the end of a letter stroke.

10. If *icons* are well-designed they:

T F
- ◯ ☐ A. are large and stand out easily.
- ◯ ☐ B. can be recognised quickly in a busy visual environment.
- ◯ ☐ C. help interfaces become international.
- ◯ ☐ D. fascinate the user with their many colours.