

Engenharia Informática (FCT/UNL)

2007/2008

Interacção Pessoa-Máquina

Exam

January 28, 2008

Duration: 2h

- 1) Explain the importance of task analysis as a first step in the user-centered design process.
- 2) Briefly describe three techniques that can be used to collect information during the task analysis.
- 3) In the scope of interface design, comment the sentence: "Not all the knowledge needed for a specific conduct has to be in the head."
- 4) Explain the "Interaction Framework" proposed by Abowd & Beale.
- 5) Identify the main reasons that make the paper prototypes appropriate during the early stages of interface design.
- 6) Which of the following problems are least likely to be revealed by testing a paper prototype?
 - a) The help menu is not in the proper position.
 - b) The users do not know the term "algorithm".
 - c) The toolbar buttons are too small.
 - d) The system does not provide a specific essential functionality.
- 7) Describe the formal process of heuristic evaluation (including the consolidation of the evaluations of the several experts).
- 8) The use of metaphors can facilitate the communication of the conceptual model. However, the use of metaphors may also cause some problems. Indicate which ones and justify.

9) Command-based interfaces violate some of the usability heuristics.

- Indicate the two most relevant ones and justify your answer.
- Identify the advantages of this interaction style.

10) Identify the graphic design problems in the following Web page.

The screenshot shows a Microsoft Internet Explorer browser window displaying a web page. The page has an orange background. The content includes a bibliography section, a table of classifications, and links for practical work. Annotations with arrows point to various elements:

- Purple**: Points to the text "Human-Computer Interaction" and "The Design of Everyday Things" in the bibliography.
- Yellow**: Points to the text "Usability Engineering" in the bibliography.
- Blue**: Points to the browser's address bar.
- Red**: Points to the text "Próxima deadline: 10 de Dezembro".
- Purple**: Points to the text "Trabalho 1", "Trabalho 2", and "Trabalho 3".
- Green**: Points to the text "Consultar soluções aqui".
- Yellow**: Points to the text "Horários".
- Orange background**: Points to the overall background color of the page.

Grupo	Nota
85628, 78575, 94885	14
74661, 94116, 54653	15
65899, 88748, 97467	9
68345, 79243, 91984	15
85538, 76435,	12
77441, 69364, 89176	10

The remaining text is in black.

Good work!