Engenharia Informática (DI/FCT/UNL)

2009/2010

Interacção Pessoa-Máquina
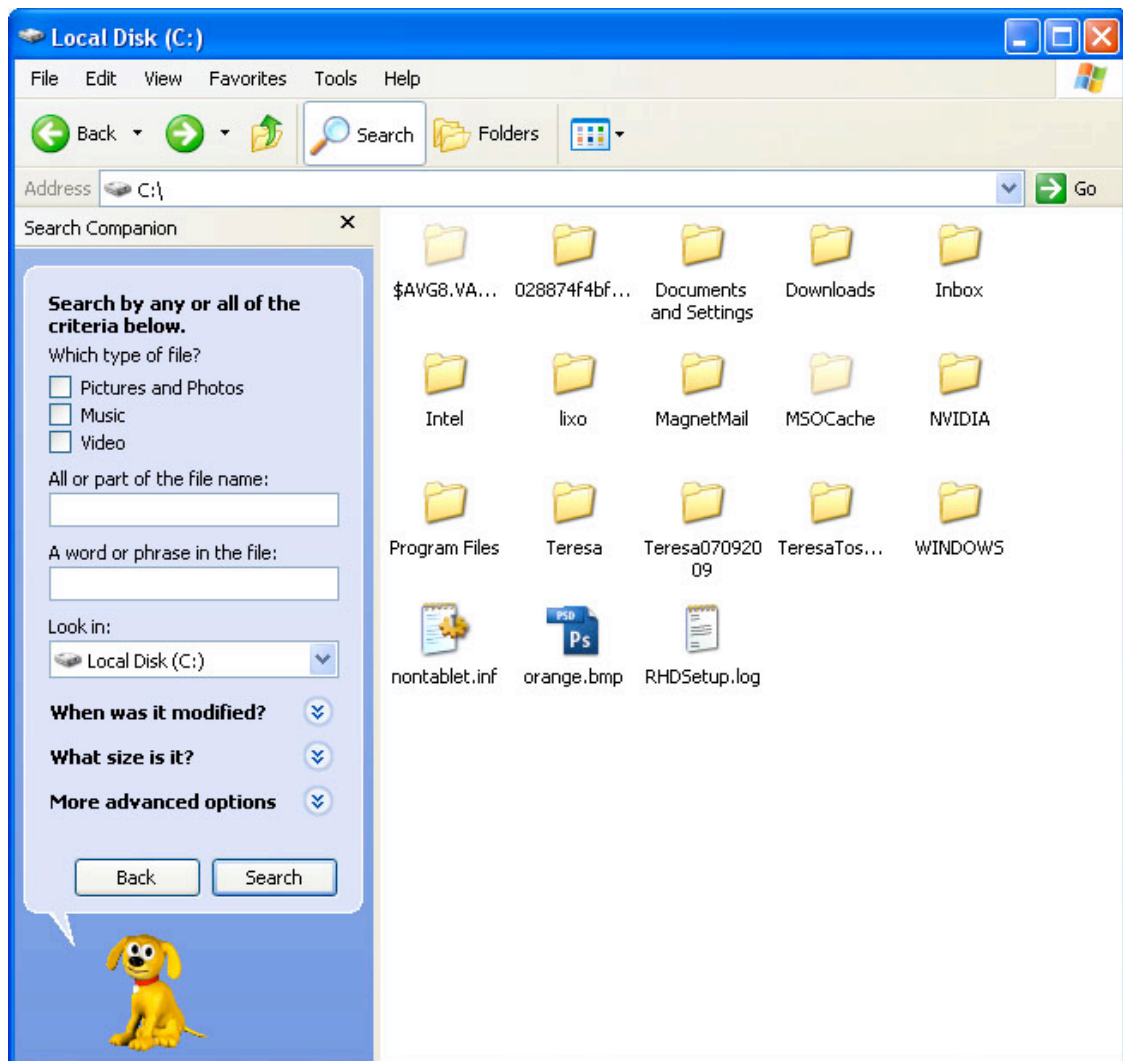
Exame Recurso

February 10, 2010

Duration: 2h

The exam is in English. You may answer the questions in English or Portuguese. Either way, you should be concise and clear.

1) Describe the advantages of using the Spiral model for the development of interactive systems.

2) Explain the differences between the user's and the designer's models of an interactive system, and describe how they relate to the interface model.

3) When is form filling a more appropriate approach than menu selection?

   a) When a command is frequently used
   b) For data entry of text and numeric values
   c) For choosing an item form a list
   d) To express instructions to the computer directly

4) What is participatory design?

5) You have been hired to design a menu-based interface for the room booking system of the University (the room booking process has been a manual process until now). During interviews with potential users they revealed:
   "None of us knows how to use a computer and we are a bit afraid of them. We have all been doing this (room booking) for a few years now. We have very busy periods when we book all the rooms for the coming year and we spend the whole day making bookings. Then it goes quiet for a few months..."

   a) Briefly explain why your target users would be experts, novices or a blend of the two.

   b) Not all usability aspects can be given equal weight in a given design project. Consider the usability attributes and explain which are the most important in the given situation.

6) What is external consistency?

7) When would you use a serif font?

8) Why "All-caps" style is not appropriate for body text?

9) What are usability heuristics?

10) Explain why it might be difficult to obtain the appropriate information from expert users during interactive systems requirements specification.

11) a) What are "think aloud" evaluation techniques? And it works?

b) Describe 2 problems with "think aloud" usability evaluations.

12) Consider the following screen-shot from Microsoft XP. It helps users to search for files on their computer (C hard drive in this case). Describe the positive aspects of the interface that support the users in their task.

GOOD WORK!