

# Human Computer Interface (IT359)

## Tutorial 5

1. Briefly describe the differences between novices who are frequent users and experts who are infrequent users of an interactive system. [8 marks]
2. Briefly explain why the following interface was designed both to support infrequent access by experts and more frequent access by novices. [10 marks]
3. The Johnson-Dunlop Corporation has been hired to design a form-based interface to a new system that is intended to help Bank Staff process loan applications. When one of the interface design team called on the Bank Staff they asked a long-serving employee what they liked about the existing system:  
"It's really difficult to say - there are some aspects that we like and some that we don't...It all depends..."  
Briefly explain why experts find it difficult to explain the strengths and weaknesses of existing systems. [12 marks]
4. Using your answer to part (c), briefly describe how you would use scenarios and co-operative evaluation to elicit the detailed design requirements for the screen layout of the form system. [20 marks]
5. Dunlop-Johnson Communications (DJC Inc.) are considering developing a phone-in electronic mail service. Their plan is to use speech recognition software to convert the caller's voice into text which will be sent as standard internet e-mail.
  - a) Describe the problems you would envisage with this system. Your answer should address problems of dictating e-mail messages to such a system and controlling the interaction in general. [12 marks]
  - b) The Company is considering running a set of laboratory experiments to test success rates with this voice to e-mail system. Criticize the use of laboratory experiments for this evaluation and suggest an alternative evaluation strategy. [12 marks]

- c) DJC Inc. is currently investigating different input and output devices. They have already decided on full-size, but waterproofed, QWERTY keyboards and are now considering the following pointing devices: mouse, joystick and touch-screen. Discuss the benefits and problems of each of these devices and recommend one for use in the Web-Kiosks (you may recommend one of the devices listed here or an alternative device not listed). [12 marks]
- d) For output DJC Inc. are considering laser printers or bubble jet printers: briefly explain how these printers work and state one benefit and problem of each type of printer for the Web-Kiosk. Make a recommendation. [14 marks]