

Human Computer Interface (IT359)

Tutorial 4

1. Briefly describe the differences between physiology and perception. [6 marks]
2. What is RSI and why is it an increasing problem for computer users? [10 marks]
3. Briefly describe the links between high staff turnover, poor working conditions, Health and Safety legislation and problems such as Carpal Tunnel Syndrome. [10 marks]
4. The Johnson Corporation have been asked to perform what is called a 'human reliability assessment' of a well-known company's IT department. As a result of this study they have decided to produce a leaflet that can be given to employees to show them what a good typing posture should look like. Your task is to draw up a first version of this leaflet. Marks will be awarded for diagrams indicating both good and bad posture. [24 marks]
5. Define Fitt's Law and explain what is meant by fields, context and control when used in forms interface design. [15 marks]
6. The following interface has been designed for a parts ordering company. The parts department will complete this form in response to telephone orders from various sites, each person ordering has a unique client code. Two pull down menus at the top of the screen allow the user to enter the part type and the destination. An order will be sent on pressing the "Send" button.
Criticise the design and suggest ways to improve it. Your answer should include 4 criticisms and a suggestion of how to improve each. [20 marks]

Car Parts Ordering System

Client code

7 8 9
4 5 6
1 2 3
0

Parts Destinations

Parts Destinations

Fan Belt Auchterarder

Send

Alternator
Brake
Clutch
Diode
Electric Window
Fan Belt
Grommet
Hand Brake
Indicator

Auchterarder
Birmingham
Carlisle
Doncaster
Edinburgh
Forfar
Glasgow
Hatfield
Inverness

7. Given an implementation of the original system and the system revised according to your suggestions, explain how you would plan an evaluation to show that your system is more usable. Your answer should include a definition of what you mean by usable. [20 marks]