

# COMPUTER SCIENCE Level 3

## Common Assessment Task

### Work Requirements:

Social issues, professionalism and ethics

### Assessment Type:

Extended response

### Criteria being assessed:

- Criterion 7 - element 4
- Criterion 9 - all elements

### Suggested conditions:

- This task should take learners 2.5 hours total.
- Part three - 300-500 words maximum. In total your response should be no greater than 1000 words.
- This task requires an individual response by each learner.

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### Task Description:

Human-Centred Design (or Human-Computer Interaction) is a very important, but often neglected, part of creating any computer system. Most programs are intended to be useful to people in some way, so how people will interact with the system should be part of the design.

This task has three parts based on Human-Centred Design. You must complete all three parts and your overall response can be up to 1000 words.

Part 1: background reading for the task

Part 2: write a summary of five principles of usable design

Part 3: write a short response (350 – 500 words) to compare an example of good and bad interface design

### What you need to do:

You need to complete all three parts in a separate document. Clearly identify each section of your response.

#### **Part 1: Read the background articles based on Human-Centred Design**

You MUST read:

- Principles for Usable Design  
<http://www.usabilitybok.org/principles-for-usable-design>

- CS Field Guide: Human Computer Interaction  
<http://www.csfieldguide.org.nz/en/chapters/human-computer-interaction.html>
- Computer Science for Fun – cs4fn: Cognitive Walkthrough  
<http://www.cs4fn.org/usability/cogwalkthrough.php>

Some SUGGESTED resources:

- Pilot Error and Space Invaders <http://www.cs4fn.org/humanerror/spaceinvaders.html>
- Human Computer Interaction FUNdamentals <http://www.cs4fn.org/fundamentals/hci.php>
- Bad Designs <http://www.baddesigns.com/ranges.html>
- Web Usability articles <https://www.nngroup.com/topic/web-usability/>

## **Part 2: Write a summary of five principles of usable design**

- Select five principles of usable design that are meaningful to you.
- For each principle, in your own words, provide a definition and an example.

## **Part 3: Write a short response (350 – 500 words) to compare an example of good and bad interface design**

- Choose an example of bad interface design in a computer program or computer-based device and a contrasting example of good interface design in a similar program/device.
- You can choose examples that you are familiar with (such as a DVD player, mobile phone or dishwasher) OR undertake an internet search for “bad interface design”.
- Your response should consider:
  - What in particular make these examples of bad or good design?
  - What could have been done differently to make the bad design better?
  - Use language from the articles listed above, include images to demonstrate your points, and remember to include references.

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### **Teacher use only - What needs to be submitted for assessment?**

Learners respond to the questions in a separate document, clearly identifying each section they are responding to. Your response should be no greater than 1000 words.