COMPUTING: User interfaces

What is a user interface?

A user interface is the method by which the user and the computer exchange information and instructions. There are three main types command-line, menu driven and graphical user interface (GUI). They can be divided into:

- **Command Line user Interface**
- **Menu driven interfaces**
- **Graphical user interfaces**

Types of user interfaces

Command Line user Interface – A command-line interface allows the user to interact with the computer by typing in commands. The computer displays a prompt, the user keys in the command and presses enter or return. In the early days of personal computers, all PCs used command line interfaces

Menu driven interfaces – The user is offered a simple menu from which to choose an option. One menu often leads to a further menu. Part of the screen may have an instruction followed by a numbered list of options to choose from.

Graphical user interface – Sometimes shortened to GUI. The user chooses an option usually by pointing a mouse at an icon representing that option.

Core Principles

1. **Clear and Simple**
   Ask yourself 'Is everything deadly obvious'?
   Clear and easy to use
2. **Flexible**
   Design something which can be good in all situations
   Think through all possible content situations
3. **Familiarity**
   Keep things simple – our eyes love seeing simple and familiar things. Spend less time re-inventing the wheel and use common solutions well
4. **Efficient/User Friendly**
   Make sure the user can complete their task in the most efficient way. A lot of shortcuts provide more efficient strategies for users
   They do what they're supposed to do, quickly!
5. **Consistent**
   A way to start feeling familiar about certain things, even if they were unknown before. Consistency and structure help us feel at home.

Features of GUI's

Features of GUIs include They are much easier to use for beginners. They enable you to easily exchange information between software using cut and paste or 'drag and drop'. They use a lot of memory and processing power. It can be slower to use than a command line interface if you are an expert user. They can be irritating to experienced users when simple tasks require a number of operations.

Important Vocabulary

User interface   Command line   Menu driven   Graphical user interface (GUI)   User   Features   Design