# Activity sheet 1.5: How hardware and software influence user interfaces

*Learning outcome A: Understand interface design for individuals and organisations*

*A1: User interfaces*

1. Define the following terms.
   1. Operating system

* 1. Platform

1. Explain why some mobile phone apps are only available for iPhones and not Android phones.

1. Pick one product from each of the following types:

* desktop computer (e.g. HP ProDesk)
* mobile phone (e.g. Samsung Galaxy)
* digital watch (smartwatch) (e.g. Apple Watch).

Find out information about the hardware and software available on each of these three devices. Use this information to complete the following table.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Device | Product name | Operating system | Size of screen | Type of screen | Method of user input | Processing power | Amount of RAM |
| Desktop computer |  |  |  |  |  |  |  |
| Mobile phone |  |  |  |  |  |  |  |
| Digital watch (smartwatch) |  |  |  |  |  |  |  |

1. Use the information from the previous table to complete the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| Hardware and software | How the hardware and software will affect the type of user interface on each device | | |
|  | Desktop computer | Mobile phone | Digital watch (smartwatch) |
| Operating system |  |  |  |
| Size of screen |  |  |  |
| Type of screen |  |  |  |
| Method of user input |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Hardware and software | How the hardware and software will affect the type of user interface on each device | | |
|  | Desktop computer | Mobile phone | Digital watch (smartwatch) |
| Processing power |  |  |  |
| RAM |  |  |  |

Take it further

A smartwatch manufacturer makes products that do not have touchscreens. It wishes to introduce a new smartwatch that will include a navigation system where users can be directed to a location using maps stored on the device.

Explain the possible implications of introducing the navigation system for the hardware and software for the new smartwatch.