VCE Software Development: Programming requirements

The reaccredited Computing study design (2016−2019) advises that there are mandated programming requirements that students are to use when developing working modules and purpose-designed solutions. This means that schools use these requirements as the basis of choosing a programming language for study, rather than selecting a language from an approved list.

For assessment purposes, students must be familiar with all of the listed programming requirements; however, not all requirements must be addressed in each task. Teachers would be expected to select the appropriate requirements based on the key skills outlined in the study design.

In the development of the modules and solutions, the chosen programming language should provide students with the ability to carry out the development stage of the problem-solving methodology within three conceptual layers: interface, logic and data source.

Interface

Programming requirements for interface layer:

* develop a graphical user interface (GUI), for use in digital systems such as laptops, gaming consoles, mobile phones, tablets, robots.

Note that databases are not to be used in the interface layer.

Logic

Programming requirements for logic layer:

* construct and use data structures
* design and apply data validation techniques
* use program control structures: selection, iteration and sequencing
* use modularisation and code optimisation
* use objects, methods and event-driven programming functions.

Data source

Programming requirements for data source layer:

* design, construct and use external storage and access technologies
* retrieve data from external sources.

It should be noted that while modules and solutions can be created in one language, other languages may be used to embellish its features.

Teachers of VCE Software Development should note that the list of programming requirements is considered each year and the list’s annual publication will be announced annually in the *VCAA Bulletin*.