VCE Software Development 2024
Unit 3 School-based Assessment

Video 5
Using the Unit 3 Outcome 1
SAC Template

VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

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Acknowledgement of Country

The VCAA respectfully acknowledges the Traditional Owners of Country throughout Victoria and pays respect to the ongoing living cultures of First Peoples.

VCE Software Development 2024 Unit 3 School-based Assessment
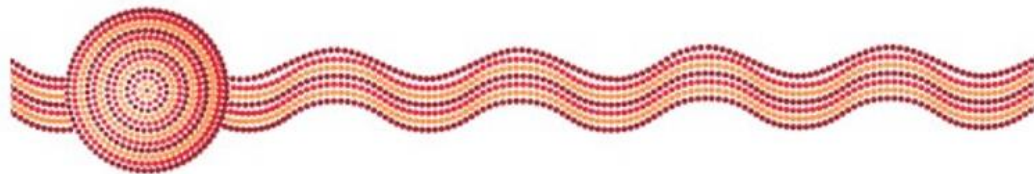
Video 5 Using the Unit 3 Outcome 1 SAC Template

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Purpose of this session

- to build the capacity of teachers to develop compliant, rigorous and engaging VCE assessment tasks in line with the VCE assessment principles

- provide an overview of how to use the Unit 3 Outcome 1 School-assessed Coursework (SAC) task.

Unit 3 Outcome 1

Unit 3 Outcome 1 – The outcome

On completion of this unit the student should be able to interpret teacher-provided solution requirements and designs, and apply a range of functions and techniques using a programming language to develop and test working software modules.

Key knowledge

Data and information

- characteristics of data types
- types of data structures, including associative arrays (or dictionaries or hash tables), one-dimensional arrays (single data type, integer index) and records (varying data types, field index)

Approaches to problem-solving

- methods for documenting a problem, need or opportunity
- methods for determining solution requirements, constraints and scope
- methods of representing designs, including data dictionaries, mock-ups, object descriptions and pseudocode
- formatting and structural characteristics of files, including delimited (CSV), plain text (TXT) and XML file formats

- a programming language as a method for developing working modules that meet specified needs
- naming conventions for solution elements
- processing features of a programming language, including classes, control structures, functions, instructions and methods
- algorithms for sorting, including selection sort and quick sort
- algorithms for binary and linear searching
- validation techniques, including existence checking, range checking and type checking
- techniques for checking that modules meet design specifications, including trace tables and construction of test data
- purposes and characteristics of internal documentation, including meaningful comments and syntax.

Key skills

- interpret solution requirements and designs to develop working modules
- use a range of data types and data structures
- use and justify appropriate processing features of a programming language to develop working modules
- develop and apply suitable validation, testing and debugging techniques using appropriate test data
- document the functioning of modules and the use of processing features through internal documentation.

Unit 3 Outcome 1 – The assessment task

Contribution to final assessment

School-assessed Coursework for Unit 3 will contribute 10 per cent to the study score.

Outcomes	Marks allocated	Assessment tasks
Unit 3 **Outcome 1** Interpret teacher-provided solution requirements and designs, and apply a range of functions and techniques using a programming language to develop and test working software modules.	100	In response to teacher-provided solution requirements and designs, create working modules.
Total marks	100	

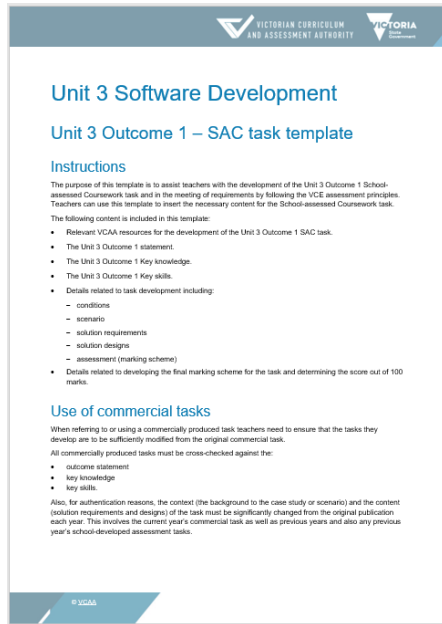# Using the Unit 3 Outcome 1 SAC Template

Why use the VCAA SAC Template?

The purpose of the Unit 3 Outcome 1 SAC Template is to assist teachers with the development of the Unit 3 Outcome 1 School-assessed Coursework task and in the meeting of requirements by following the VCE assessment principles.

It has been developed as a result of the issues we have seen in the Unit 3 School-based Assessment Audit over the last four years.

As a result, Teachers can use this template as a guide to develop the assessment task by inserting the necessary content within the template.

Unit 3 Outcome 1 SAC Template

Content included in this template:

- Relevant VCAA resources for the development of the Unit 3 Outcome 1 SAC task.
- The Unit 3 Outcome 1 statement.
- The Unit 3 Outcome 1 Key knowledge.
- The Unit 3 Outcome 1 Key skills.
- Details related to task development including:
  - conditions
  - scenario
  - solution requirements
  - solution designs
  - assessment (marking scheme)
- Details related to developing the final marking scheme for the task and determining the score out of 100 marks.

Unit 3 Outcome 1 SAC Template

Use of commercial tasks

When referring to or using a commercially produced task teachers need to ensure that the tasks they develop are to be sufficiently modified from the original commercial task.

All commercially produced tasks must be cross-checked against the:

- outcome statement
- key knowledge
- key skills.

Also, for authentication reasons, the context (the background to the case study or scenario) and the content (solution requirements and designs) of the task must be significantly changed from the original publication each year. This involves the current year's commercial task as well as previous years and also any previous year's school-developed assessment tasks.

Unit 3 Outcome 1 SAC Template

VCAA Resources

The following resources for developing the Unit 3 Outcome 1 School-assessed Coursework task can be found on the Applied Computing: Software Development study page:

- Applied Computing Study Design (2020–2024)

- Applied Computing: Software Development: Programming requirements for 2024

- VCE Applied Computing: Software Development School-based Assessment report (2020)

- Advice for teachers (Unit 3 Software Development)

- On-demand videos:

    - Unit 3 School-based Assessment

    - Background to the Unit 3 Outcome 1 SAC

    - Planning the Unit 3 Outcome 1 SAC

    - Assessing the Unit 3 Outcome 1 SAC

    - Using the Unit 3 Outcome 1 SAC Template

    - Unit 3 School-based Assessment Audit

- Support material:

    - 2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 Assessment task development template – blank

    - 2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 Assessment task development template – plan

    - 2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 Developing a marking scheme – sample

    - 2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 SAC Template

The following resource can be found on the VCE General advice and policy page:

- VCE assessment principles

Unit 3 Outcome 1 SAC Template

Unit 3 Outcome 1

On completion of this unit the student should be able to interpret teacher-provided solution requirements and designs, and apply a range of functions and techniques using a programming language to develop and test working software modules.

Key knowledge

Data and information

- characteristics of data types
- types of data structures, including associative arrays (or dictionaries or hash tables), one-dimensional arrays (single data type, integer index) and records (varying data types, field index)

Unit 3 Outcome 1 SAC Template

Task 1

[**Insert** the name of the task here.]

[When developing the first task refer to the *Unit 3 Outcome 1 Key knowledge and Key skills*, *Advice for teachers – Sample approaches to developing an assessment task, Programming requirements for 2024* and the *Unit 3 Outcome 1 Support material* on the study page for further information.]

Conditions

[**Insert** the conditions for the task here.]

Scenario

[**Insert** the scenario here.]

Unit 3 Outcome 1 SAC Template

Solution requirements

[**Insert** the solution requirements here. They can include functional and non-functional requirements.]

Solution designs

[**Insert** two or three solution designs here. Designs tools to select from are: data dictionaries, mock-ups, object descriptions and pseudocode.]

[The scenario, solution requirements and solution designs should provide enough information for students to be able to interpret the solution requirements and designs and develop a working software module.]

Unit 3 Outcome 1 SAC Template

Assessment

[**Insert** the marking scheme for Task 1 here.]

[Determine what you are going to assess and how many marks will be awarded for this task. Refer to the *Unit 3 Outcome 1 Key skills* and the *Advice for teachers – VCAA Performance descriptors* and the *2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 Developing a marking scheme - sample* on the study page for further information. **Note:** Not all performance descriptors need to be included in all tasks.]

[Marking schemes should be clear and accessible for students to help ensure that they can achieve the full range of marks. When developing marking schemes, schools must ensure criteria within the marking scheme are appropriately weighted. Marking schemes should also provide sufficient opportunity for schools to differentiate between levels of achievement. Schools must also ensure that the appropriate number of marks are awarded to the task.]

Unit 3 Outcome 1 SAC Template

Task 2

[**Insert** the name of

[When developing t
teachers – Sample
the *Unit 3 Outcome*

Condition

[**Insert** the conditio

Scenario

[**Insert** the scenario

Task 3

[**Insert** the name o

[When developing
teachers – Sample
the *Unit 3 Outcome*

Condition

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Scenario

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[**Insert** the scenario here.]

Task 4 (If needed)

[**Insert** the name of the task h

[When developing the fourth t
teachers – Sample approache
the *Unit 3 Outcome 1 Suppor*

Conditions

[**Insert** the conditions for the t

Scenario

Task 5 (If needed)

[**Insert** the name of the task h

[When developing the fifth tasl
teachers – Sample approache
the *Unit 3 Outcome 1 Support*

Conditions

[**Insert** the conditions for the ta

Scenario

Task 6 (If neede

[**Insert** the name of the task here.]

[When developing the sixth task refer
teachers – Sample approaches to dev
the *Unit 3 Outcome 1 Support materia*

Conditions

[**Insert** the conditions for the task here

Unit 3 Outcome 1 SAC Template
Final marking scheme

[**Insert** your marking scheme for the School-assessed Coursework task here. **Note:** Do not insert the VCAA Performance descriptors here.]

[Determine the overall number of marks out of 100 that will be awarded for this task. Refer to the *Unit 3 Outcome 1 Key skills* and the *Advice for teachers – VCAA Performance descriptors* and the *2024 VCE Applied Computing: Software Development Unit 3 Outcome 1 Developing a marking scheme - sample* on the study page for further information.]

[Marking schemes should be clear and accessible for students to help ensure that they can achieve the full range of marks. When developing marking schemes, schools must ensure criteria within the marking scheme are appropriately weighted. Marking schemes should also provide sufficient opportunity for schools to differentiate between levels of achievement. Schools must also ensure that the appropriate number of marks are awarded to the task.]

Contact

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