

Introduction/Kupu Arataki

You are going to develop a basic quiz program, to help students improve their Māori vocabulary. This assessment activity requires you to plan, trial, test and develop the quiz program. You will utilise an iterative development process to help you make informed decisions throughout the coding, testing, and trialling of your program and show on-going refinement to improve the functionality and quality of your program.

You will be assessed on how effectively you plan your development, decompose the problem into smaller components, and test and refine your program so that it is a high-quality response to the task (e.g., well-structured, logical, flexible, robust and comprehensively tested).

When planning and developing your program, you must ensure your program uses:

- variables storing at least two different data types (e.g., numeric, text, Boolean)
- sequence, selection and iteration control structures
- input from a user, sensors, or other external source and produces output.

AND includes:

- data stored in 2 or more collections (e.g., lists arrays, dictionaries)

OR

- 2 or more user-defined methods, functions or procedures.

Your program can use lists AND functions, but there must be at least 2 of one of these e.g., 2 lists OR 2 functions.

You must use sensible naming conventions and code commenting that describes code function and behaviour. Your program should be comprehensively tested and debugged in an organised manner.

The due date for this assessment is: **Sunday 21st May**

Task/Hei Mahi

Your Māori language quiz can be on any topic provided that the questions you ask do not break copyright and are suitable for your chosen audience (i.e., not too easy and not too hard).

Your quiz could include any of the following....

- Māori numbers 1-10
- Months of the year – in Te Reo
- Days of the week – in Te Reo
- A multiple-choice quiz testing Māori vocabulary or knowledge of tikanga

You need to think about:

- Who your quiz is aimed at – your ‘target’ users.
- What user inputs you will need.
- How the questions and answers will be stored.
- How you will give feedback to the user.

Planning: You must...

- Plan how you will develop your quiz by decomposing the problem into smaller components/sub-components.
- Create a test plan that allows you to confirm that your program works for expected and relevant boundary cases

Developing and testing: You must

- Try various options when creating your quiz. You should choose the options which work best and provide evidence of your trialling.
- Comment your code.
- Code, test, and debug each component/sub-component before moving on. Create a new version of your program for each iteration.
- Systematically test your code (follow your test plan). Include screenshots showing that your program's output matches the plan's expected values and has been tested with relevant boundary cases.

Additional Evidence

Provide evidence to show how you have addressed relevant implications, for example:

- how your quiz will be suitable for your chosen audience.
- how you will honour copyright
- how you will make sure that your quiz has taken into account relevant usability principles.

Hand In:

- Evidence of your planning, testing, and iterative developments
- Include links to
 - your Trello board
 - the final completed version of your program
 - all other versions of your program

Important Note - for the 1.8 standard (Use basic iterative processes):

Testing is about confirming decisions. Testing and Trialling are NOT the same thing. Trialling is about trying out different ways of doing the same thing.

For Achieved you do not need evidence of TRIALLING, although you still need evidence of TESTING.

For Merit, you need to trial multiple components and/or techniques and select the most suitable. This means trialling different ways to solve the same sub-problem and selecting the best. To get a grade better than Achieved you **MUST** have evidence of how you did the for **AT LEAST TWO** of your components.

For Excellence, your evidence needs to show how you have applied the information from the planning, testing AND TRIALLING of components to develop a high-quality outcome.