



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Exemplar for Internal Achievement Standard Digital Technologies Level 3

This exemplar supports assessment against:

Achievement Standard 91907

Use complex processes to develop a digital technologies outcome

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade: Excellence
1.	<p>For Excellence, the student needs to use complex processes to develop a refined digital technologies outcome.</p> <p>This involves:</p> <ul style="list-style-type: none"> • synthesising information gained from the planning, testing and trialling of components • discussing how this information led to the development of a high-quality digital technologies outcome. <p>There is no student work currently available at this grade.</p> <p>The student has synthesised information from the planning, testing and trialling of components. Their outcome is of high quality as a result of effectively using project management tools and techniques, and efficiently managing the trialling, testing and refinement process. User suggestions and feedback have been incorporated to improve the usability, aesthetics and functionality of the outcome.</p> <p>The student has discussed how the information led to the development of a high-quality outcome. They have reflected on how using processes to develop their outcome helped them to effectively test and trial various components to refine and enhance design and functionality.</p>

	Grade: Merit
2.	<p>For Merit, the student needs to use complex processes to develop an informed digital technologies outcome.</p> <p>This involves:</p> <ul style="list-style-type: none"> • effectively using project management tools and techniques to manage development, feedback and/or collaborative processes • effectively trialling multiple components and/or techniques • effectively using information from testing and trialling to improve the functionality of the digital technologies outcome. <p>There is no student work currently available at this grade.</p> <p>The student has effectively used project management tools and techniques to manage development, feedback and/or collaborative processes. For example, they:</p> <ul style="list-style-type: none"> • created versions of the outcome where new versions have improved functionality or added features • shared documents/data and managed feedback using shared cloud storage • managed their workflow using a Trello board, with Kanban techniques and sprints • managed assets effectively using structured file and folder naming conventions, linking and back-ups. This is different to version control and involves careful management of assets, for example when linking files into compositions and sequences. <p>The student has effectively trialled multiple components and/or techniques. They have shown that several options for more than one component were trialled so that informed decisions could be made, and the best options chosen. For example, they have trialled several ways of presenting the selection of choices via the GUI, and selected the one that had the best usability and prevented the user from entering incorrect data.</p> <p>The student has effectively used information from testing and trialling to improve the functionality of the digital technologies outcome. For example:</p> <ul style="list-style-type: none"> • they tested and trialled during development, and they have captured how they improved their outcome using annotated screenshots • changes made to improve the functionality can be seen in their project management tool(s) and logs, including annotations.

	Grade: Achieved
3.	<p>For Achieved, the student needs to use complex processes to develop a digital technologies outcome. This involves:</p> <ul style="list-style-type: none"> • using recognised and appropriate project management tools and techniques to plan the development of a digital technologies outcome. • decomposing the digital technologies outcome into smaller components • trialling components of the outcome • testing that the digital technologies outcome functions as intended • addressing relevant implications. <p>There is no student work currently available at this grade.</p> <p>The student has used recognised and appropriate project management tools and techniques. For example, they have used Agile with a Trello Kanban board to plan and manage the development of their digital outcome.</p> <p>The student has decomposed the digital technologies outcome into smaller components and trialled components of the outcome. Different sorts of digital outcomes will have different types of components, e.g. the modules or functions in a program, or the parts of a webpage or database. For example:</p> <ul style="list-style-type: none"> • the outcome has been broken down into smaller components and these have been trialled and tested • the layout has been trialled, making sure everything was readable and ordered sensibly • the major components have been trialled to confirm they were fit for purpose. <p>The student has combined the components into a working outcome and tested to ensure that it functions as intended. The outcome works for expected input, the navigation works correctly, content is readable and legible, styles such as custom styles work correctly, and it functions properly on a range of devices.</p> <p>The student has addressed relevant implications by providing annotated screenshots of their program to illustrate functionality, usability and accessibility.</p>