

This assessment is based on a now-expired version of the achievement standard and may not accurately reflect the content and practice of external assessments developed for 2024 onwards.

## Pilot Assessment Schedule – 2023

### Digital Technologies: Demonstrate understanding of usability in human-computer interfaces (92006)

#### Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Demonstrating understanding of usability in human-computer interfaces</i> involves:</p> <ul style="list-style-type: none"> <li>describing the purpose of human-computer interfaces</li> <li>describing usability principles and their use in human-computer interfaces.</li> </ul>	<p><i>Examining the usability of human-computer interfaces</i> involves:</p> <ul style="list-style-type: none"> <li>explaining how usability principles have been applied in human-computer interfaces</li> <li>explaining the usability of human-computer interfaces in terms of usability principles.</li> </ul>	<p><i>Evaluating the usability of human-computer interfaces</i> involves:</p> <ul style="list-style-type: none"> <li>comparing the usability of human-computer interfaces</li> <li>applying usability principles to suggest improvements to human-computer interface usability.</li> </ul>

#### Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8

**Evidence**

<b>N1</b>	<b>N2</b>	<b>A3</b>	<b>A4</b>	<b>M5</b>	<b>M6</b>	<b>E7</b>	<b>E8</b>
<p>Partially describes the purpose of their chosen interface.</p> <p>Attempts to describe any feature of their chosen interface or the unfamiliar interface that addresses usability principles, OR gives an example without further commentary.</p>	<p>Partially describes the purpose of their chosen interface.</p> <p>Attempts to describe THREE features of their chosen interface or the unfamiliar interface that address usability principles, OR gives examples without further commentary.</p>	<p>Partially describes the purpose of their chosen interface.</p> <p>Describes THREE features of the unfamiliar interface that address usability principles, giving examples.</p> <p>Some parts of the description may be partial or weak.</p>	<p>Describes the purpose of their chosen interface.</p> <p>Clearly describes THREE features of the unfamiliar interface that address usability principles, giving examples.</p>	<p>Explains how THREE examples from the unfamiliar interface address usability principles.</p> <p>Some aspects of the explanation may be partial or weak.</p>	<p>Clearly explains how THREE examples from the unfamiliar interface address usability principles.</p>	<p>Compares the usability of BOTH interfaces, explaining how one is more successful overall in applying usability principles.</p> <p>Recommends TWO improvements to EITHER their chosen interface OR the unfamiliar interface, explaining how these would enable the interface to better address usability principles.</p> <p>Some aspects of the comparison and recommendations may be partial or weak.</p>	<p>Compares the usability of BOTH interfaces, explaining how one is more successful overall in applying usability principles.</p> <p>Recommends TWO improvements to EITHER their chosen interface OR the unfamiliar interface, explaining how these would enable the interface to better address usability principles.</p>

**N0** = No response; no relevant evidence.

**Sample evidence**

<b>Part</b>	<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
(a) (i), (ii)	<p><i>The candidate describes the overall purpose of the interface, as well as identifying specific tasks the user can perform. For example:</i></p> <p>The role of <i>Trade Me's</i> website is to get users to bid for items that are listed by other users. Items can be found by users by browsing the website's numerous categories or using the search bar.</p> <p><i>Trade Me</i> also provides other services such as: comparing insurances, getting insurance, looking for holiday homes, finding services, dating, vehicle reports, and personal loans.</p>		

<p>(b)</p>	<p><i>The candidate selects <b>three</b> activities and identifies how usability principles have been used. For example:</i></p> <p>The “help and documentation” usability heuristic states that interfaces should include some documentation to support users to be able to use the interface. This is shown on the <i>Little Shop of Taonga</i> interface, as it has a FAQ webpage dedicated to helping users with queries and issues.</p>	<p><i>The candidate explains clearly how the examples from the interface relate to usability principles. For example:</i></p> <p>Searches the FAQs:</p> <p>The “help and documentation” usability heuristic refers to whether the user can get access to help if they have any issues or queries with using the website. On the <i>Little Shop of Taonga</i> interface, this heuristic is applied by having a FAQ webpage dedicated to helping users with queries and issues. This page has a search bar as well as navigation bars, so it is easy for the user to browse the page and find the solution they are looking for. It also meets the heuristic “match between the system and the real world” as the search is indicated by a magnifying glass icon. The icon also meets “consistency and design” as the symbol is used by most websites, including Trade Me. The chat feature also enables users to get further information that is not available on the FAQs page, and enables the user to talk to someone to get more information (as shown in the video). The FAQ webpage follows the “aesthetics and minimalist design” heuristic as it hides the answer, with the user being able to press “+” to open it. This keeps the page uncluttered and easier to use. This also meets the heuristics “match between the system and the real world” and “consistency and design” as most people would know that a “+” will expand options, because they will have come across it on other websites.</p> <p>Creates an account:</p> <p>On the <i>Little Shop of Taonga</i> interface, the heuristics “error prevention” and “help users recognise, diagnose and recover from errors” are poorly followed in the sign-up process. There is nothing displayed about the requirements of the email address and users can submit the form with an invalid email address. This is not good,</p>	
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<b>Part</b>	<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
		<p>because the user might think they have signed up when they haven't. It also means that if the company was trying to contact them, they would not be able to (because they would have the wrong email). While "match between the system and real world" is followed with the error text being in red (red being associated with danger / having negative connotations), a message of 'Email is invalid' does not help the user identify what they have typed in wrong, nor how they can correct it. It would need to be more specific so the user can fix the problem.</p> <p><i>Note: at least three examples are required, which may include supporting screenshots.</i></p>	

Part	Achievement	Achievement with Merit	Achievement with Excellence
(c)			<p><i>The candidate compares and contrasts the usability of the familiar and unfamiliar interfaces, using usability principles to justify an assertion that one interface is more successful than the other. Ideas must justify “fitness for purpose” of the design. For example:</i></p> <p>The <i>Trade Me</i> sign-up form is better than the <i>Little Shop of Taonga</i> one in the way that it addresses the “error prevention” heuristic. On <i>Little Shop of Taonga</i>, if the email address is in the wrong format an unhelpful ‘Email is invalid’ error is displayed after submission, requiring the user to re-enter information. On <i>Trade Me</i>, the field is highlighted in red as soon as the user starts typing, until a valid email address is entered. The sign-up button is also disabled until the field is correctly completed. Also, on <i>Trade Me</i> the password field clearly states that the password should be ‘8 or more characters’, whereas <i>Little Shop of Taonga</i> has no information about requirements until after the form is submitted. This means that users could easily try to enter a password that isn’t long or secure enough. By doing these things, <i>Trade Me</i> prevents users from entering invalid email addresses and passwords, and better meets the “error prevention” heuristic (which makes sure errors are prevented before they can even happen).</p> <p><i>Note: multiple comparisons are required.</i></p>

Part	Achievement	Achievement with Merit	Achievement with Excellence
(d)			<p><i>The candidate recommends improvements to the usability of the unfamiliar interface based on usability principles. For example:</i></p> <p>Improvement 1:</p> <p>I would recommend that <i>Little Shop of Taonga</i> interface adds a statement like '5 or more characters required' below the password field on the sign-up page, to prevent users entering an invalid password. They could also have the password field show a red border until a valid password has been entered, at which point it could change to green. This would address both the 'error prevention' heuristic as well as making use of the 'match between the system and the real world' heuristic. They could follow <i>Trade Me's</i> example by disabling the submit button until all fields are valid, as this would more successfully address 'error prevention'.</p> <p>AND/OR</p> <p><i>The candidate suggests improvements to their chosen interface, explaining how these would enable it to better address usability principles. For example:</i></p> <p>Improvement 2:</p> <p>I would make it so that the search panel would initially be in a compressed state when you enter a webpage. The search panel could then be expanded if the user wanted to perform a more advanced search. This would improve the aesthetics and minimalist design of the website as there would be less clutter on the webpage. This means it would be easier for users to see the listings, making their experience more enjoyable. This might lead them to use the website more often in the future, increasing sales.</p> <p><i>Note: multiple improvements are required, which may include supporting screenshots.</i></p>