

No part of the candidate's evidence in this exemplar material may be presented in an external assessment for the purpose of gaining an NZQA qualification or award.



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Level 1 Digital Technologies RAS 2023

92006 Demonstrate understanding of usability in
human-computer interfaces

EXEMPLAR

Achievement

TOTAL 04

INSTRUCTIONS

The task in this assessment is in four parts:

- In part (a), you will refer to an interface you have studied at school (“your interface”).
- In part (b) you will refer to the video, which shows a user interacting with a website.
- In part (c) you will compare the usability of the interfaces.
- In part (d) you will make recommendations on how to improve the usability of both interfaces.

You are required to discuss the usability of the interfaces in terms of mātaōpono Māori (Resource A) or the usability heuristics (Resource B) on [page 3](#).

You may include up to five screenshots from each interface to illustrate your answers. Do not use more than 10 in total.

Read all parts of the task before you watch the video. You may play, pause, and restart the video as often as you like. *Note: the video has no sound.*

RESOURCE A: Mātāpono Māori

- the accurate and clear use of te reo Māori (including macrons) within the interface
- whether tools such as spell-checking and word prediction work accurately with te reo Māori
- how the interface facilitates and allows for the expression and use of tikanga and mātauranga Māori.

RESOURCE B: Nielsen's 10 Usability Heuristics

“Usability heuristics” are general principles or “rules of thumb” to help measure the effectiveness of a user interface. You will be familiar with Jakob Nielsen’s 10 usability heuristics listed below.

1. Visibility of the system’s status
2. Match between the system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognise, diagnose, and recover from errors
10. Help and documentation

Source (adapted): Nielsen, J. (1994, April 14, updated 2020, November 15). *10 usability heuristics for user interface design*. Nielsen Norman Group. <https://www.nngroup.com/articles/ten-usability-heuristics/>

ASSESSMENT TASK

Maia is studying usability in human-computer interfaces and has asked you to help her learn key concepts by discussing an interface that you have studied at school and one that she has used recently.

An interface that you have studied at school

- (a) (i) State the name of your interface.

Air New Zealand

- (ii) Briefly describe the purpose of your interface. What does the user want to achieve while they are using it?

Through the interface that my user is using on Air New Zealand they are wanting to achieve to book flights and Accomodation my interface that I have been studying does this by giving th user a series of different pages to help book and organise flights and accommodation by using several of the 10 heuristics throughouth their interface.

An interface that Maia has used recently

Maia recently shopped online on the *Little Shop of Taonga* website for her brother's 18th birthday gift.

You have been provided a video of Maia interacting with the website.

In the video, Maia:

- reads the "About Us" page and subscribes to the newsletter
- creates an account and adds her address
- browses categories and adds items to the cart
- searches the FAQs for the returns policy and uses the chat feature to find out shipping times
- decides on a gift, removes an item she doesn't want from the cart, and checks out
- uses the contact form for an enquiry about commissioning a unique piece for her parents' anniversary

Video timings

Activity	Timestamp
(1) Reads "About Us" page and subscribes to the newsletter	00.06
(2) Creates an account and adds her address	01.30
(3) Browses categories and adds items to the cart	03.40
(4) Searches the FAQs and uses the chat feature	04.58
(5) Checks out	06.42
(6) Uses the contact form for an enquiry	07.28

- (b) Choose THREE of the activities from the list on [page 5](#).
- (i) For each activity, explain how mātāpono Māori OR usability heuristics are used. If you discuss usability heuristics, provide a description of each.

You may support your answer with screenshots from the video.

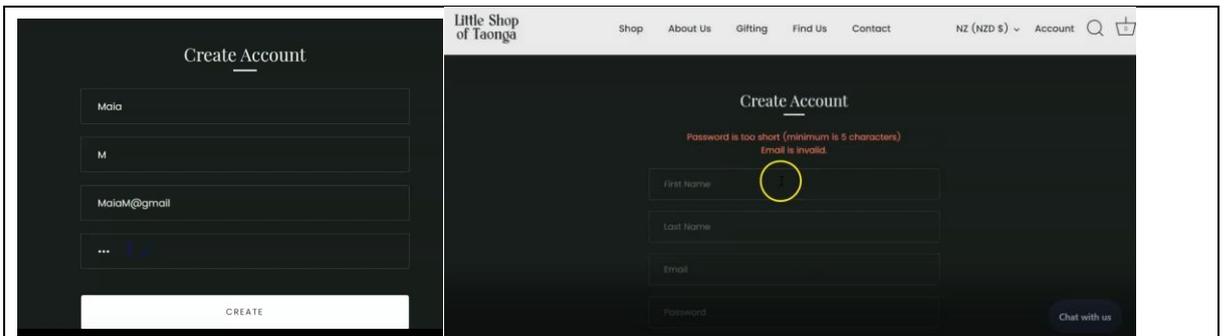
Activity: Reads “About Us” page and subscribes to the newsletter

Response:

Visability of the system status, it can be seen that when the user hovers their surser over the arorrow button the be able to see more of the product, the interface can be seen to change the colour of the arrow when the cursur is hovering over it to show that the systems status is recognising that the user is clicking or going to use the arrow button and can also be seen when hovering over the product banners in the sense of how it changes to a darker shade of colours and has a new quick view option under the photo.

Activity: Creates an account and adds her address

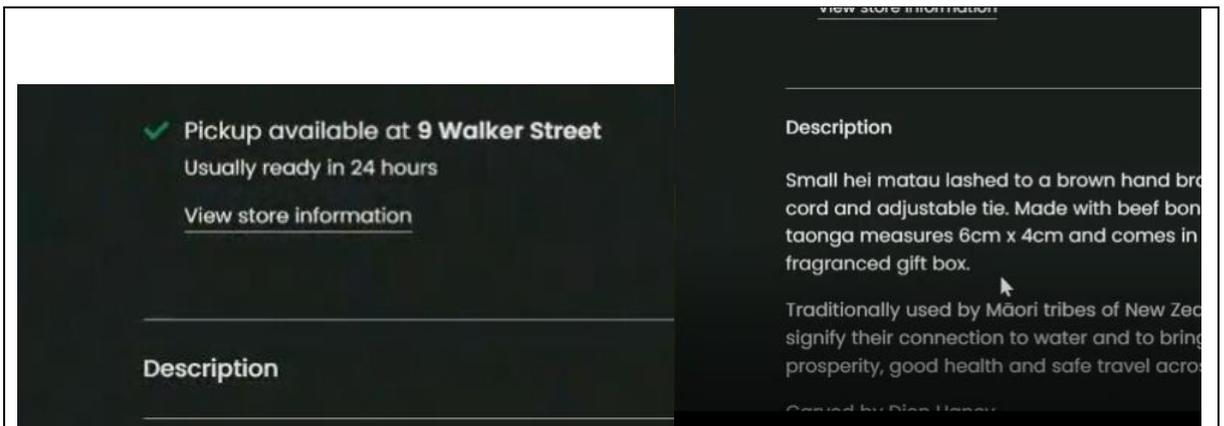
Response:



Helps users recognise, diagnose and recover from errors, the user can be seen to have not put in a long enough password to be able to create an account the interface has recognised this and given the user a written warning and has asked her to rewrite her details with a longer password allowing her to recognise and recover from her error.

Activity: Browses categories and adds items to the cart

Response:



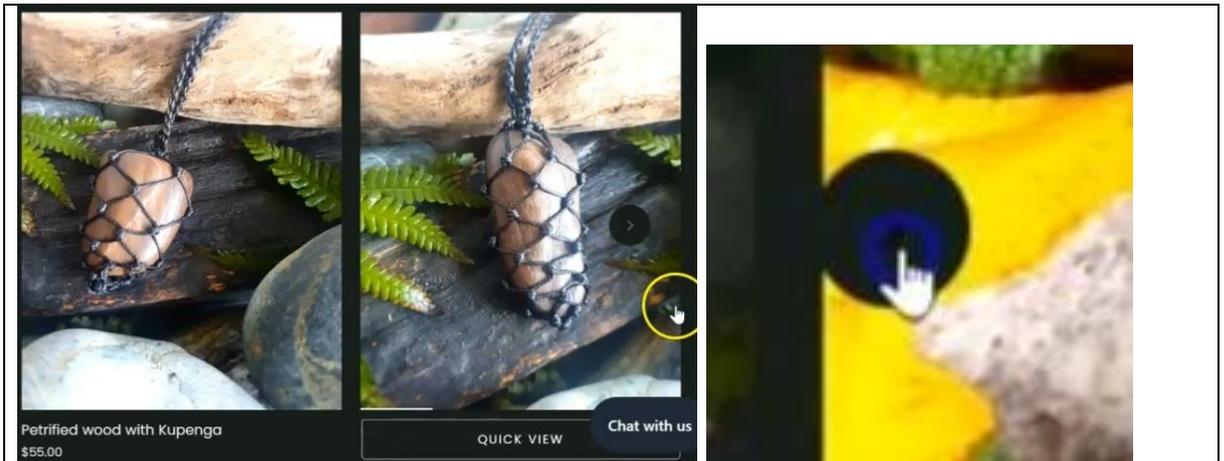
Help and documentation, and flexibility and efficiency of use these two heuristic can be seen when the user clicks on a description box of the product she is looking at it can be seen that there is given documentation on the product and flexibility and efficiency of use with the user being able to choose whether they would like to have that box.viewable or tucked away where you can no longer see the documentation.

- (ii) Evaluate how successfully mātaḗpono Māori OR usability heuristics have been applied in each activity.

You may support your answer with screenshots from the video.

Activity: Reads “About Us” page and subscribes to the newsletter

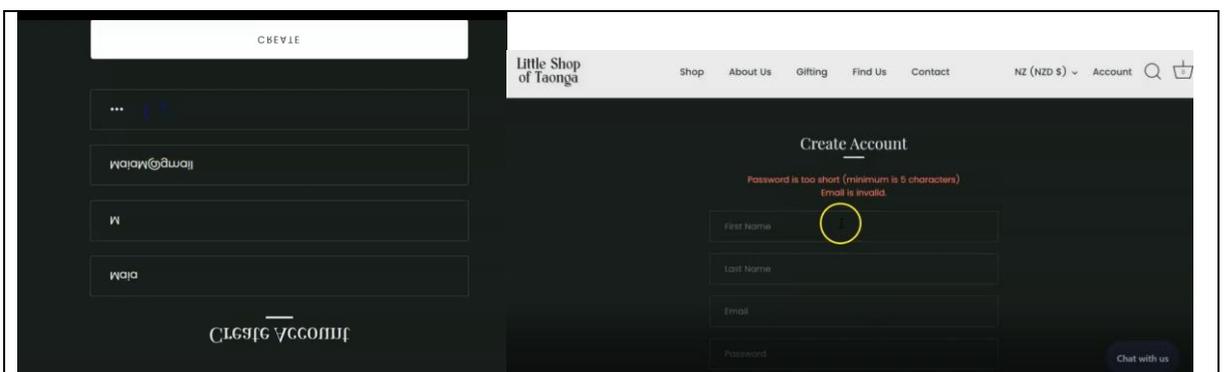
Response:



In this activity there can be seen to have one main use of heuristic of Visibility of the system status they have successfully implemented for when the user hovers over a button the the user can identify the the interface recognises that they are wanting use or click on this button which they have successful applied for many options.

Activity: Creates an account and adds her address

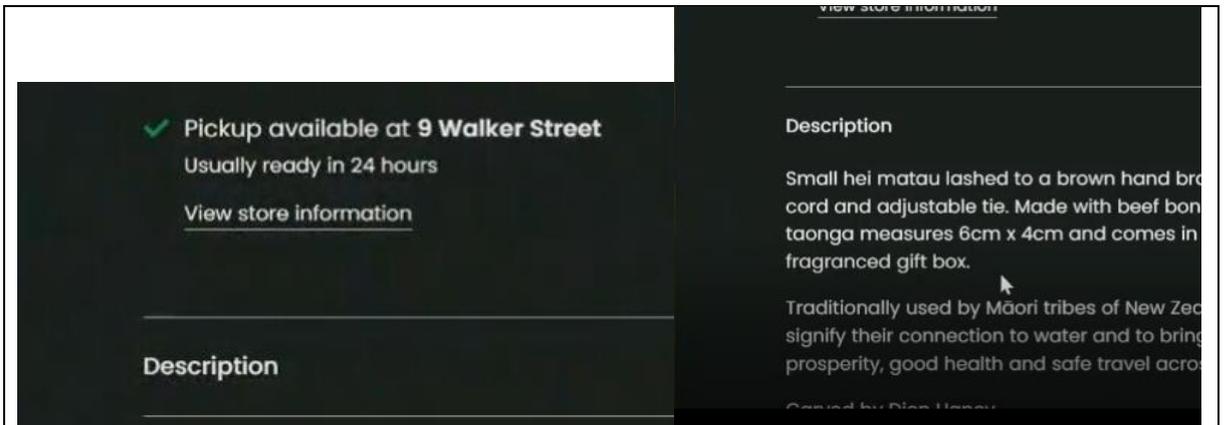
Response:



In this activity the interface has successfully applied the heuristic of Helps users recognise, diagnose and recover from errors, it does this by adding a pop up text at the top of the users screen to help the user identify her error she has made and gives her another chance to input her information into the boxes to make an account and has been applied successfully.

Activity: Browses categories and adds items to the cart

Response:

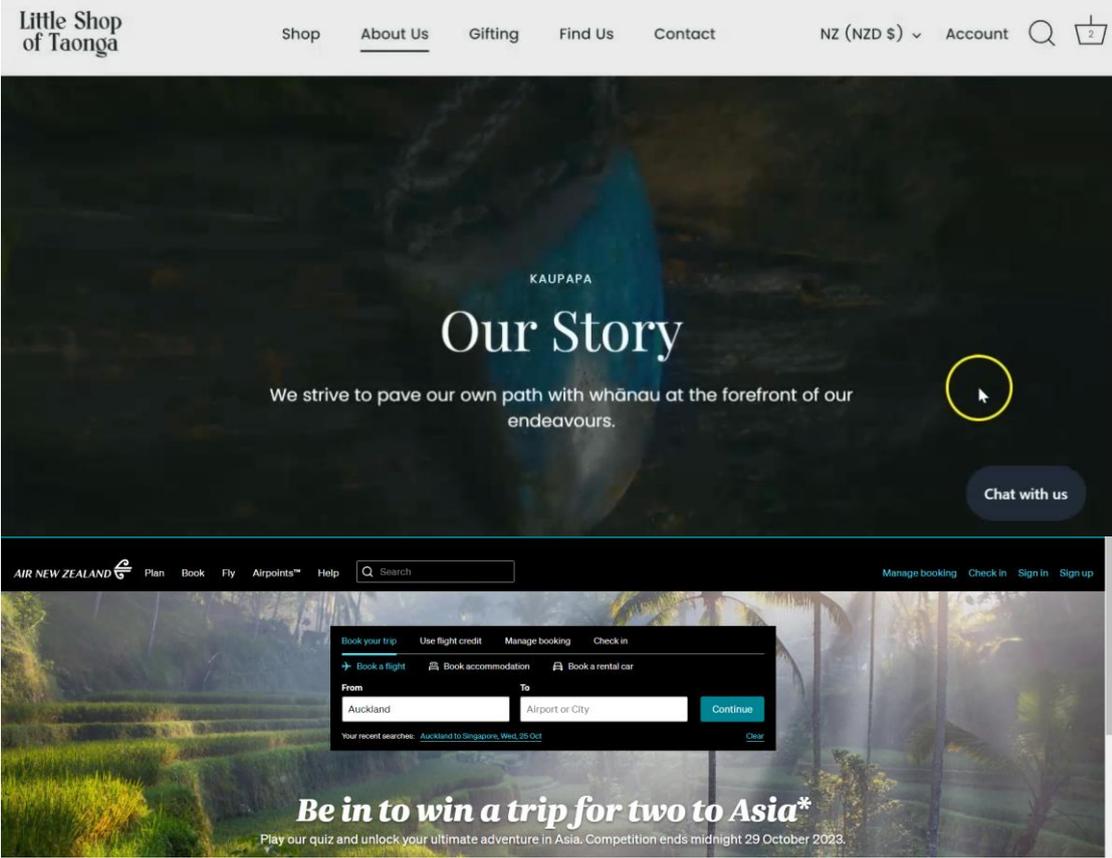


It can be seen that the heuristics of Help and documentation, and flexibility and efficiency of use. Are being applied to this drop down description box when the user clicks on it as you can see when the box saying description is dropped down and you can see that there is documentation written and the flexibility of whether the user would like the documentation to be viewable or no by clicking on the description box and has been applied successfully.

Comparison

- (c) Compare the *Little Shop of Taonga* interface with your interface. Discuss the similarities **and** differences between the interfaces, and identify which addresses mātaḗpono Māori OR usability heuristics best, and why.

Use screenshots to support your answer.

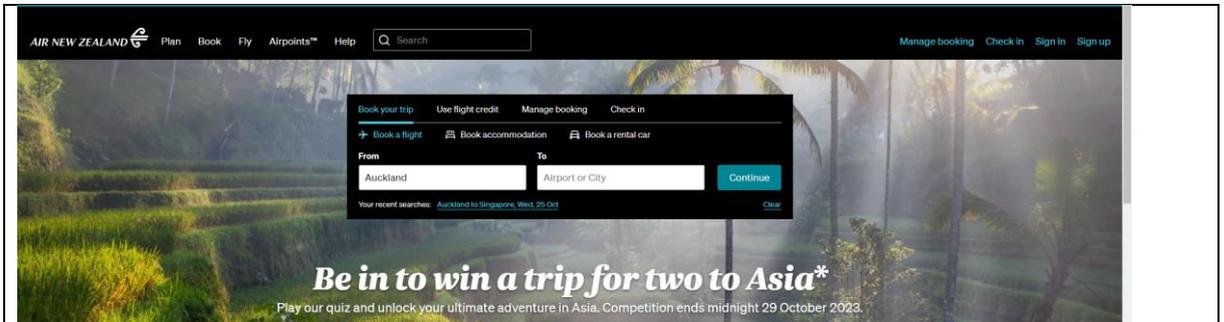


It can be seen that the two interfaces have many similarities such as both of the navigations for the website are along the top of the screen, they both have a search bar which uses the heuristic of match between the system and the real world by having the symbol of a magnifying glass, both of the websites also both have their logos in the top left of the page, they also both have a banner and use many of the same heuristics.

Recommendations

- (d) (i) Recommend improvements that could be made to **your interface** by applying mātaḗpono Māori OR usability heuristics. Explain how these will improve the usability of the website in terms of the user's experience.

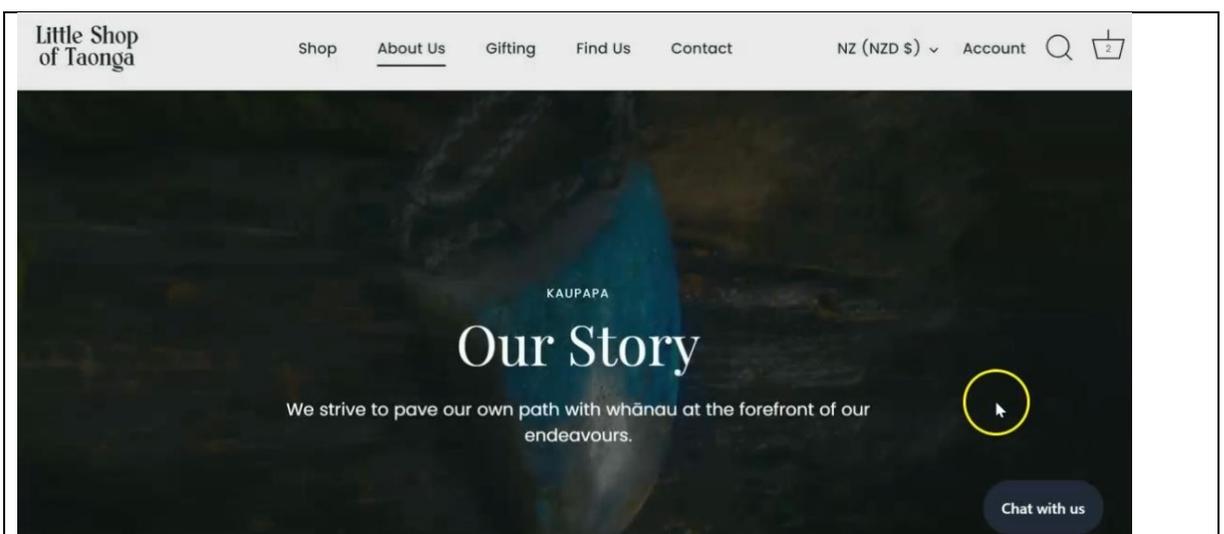
You may support your answer with screenshots.



Improvements that could be made to my interface are more heuristics such as of match between the system and the real world, if this heuristic was used more often throughout the website the user could cope a larger understanding of what certain buttons and functions are I feel like this interface defeint lacks this and can make the user more confused on what they are trying to achive. If more of this heuristic was used it would make the site more easyeir to use and better functioning for the user.

- (ii) Recommend improvements that could be made to the **Little Shop of Taonga** interface by applying mātaḗpono Māori OR usability heuristics. Explain how these will improve the usability of the website in terms of the user's experience.

You may support your answer with screenshots.



For this interface I feel like again more heuristics such as of match between the system and the real world are surtial with this site where somethings can be confusing and hard to use if only ceratain small matches betewn system and real world were implemented onto the site such as a person icon instead of it just having the word account, this would make the site easyeir to use and give the user a greater

understanding of what certain things are for.

Achievement

Subject: Digital Technologies

Standard: 92006

Overall grade: 04

Grade	Marker commentary
A4	<p>The candidate has described the role of their interface.</p> <p>They have accurately identified three different heuristics used in the unfamiliar interface. They have included screenshots to illustrate their examples.</p> <p>They have incorrectly identified “flexibility and efficiency of use”.</p> <p>In their comparison of the two interfaces, the candidate successfully identified “match between the system and the real world”. They also described “consistency and standards” without directly identifying it.</p>