NZQA | Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Level 1 Digital Technologies RAS 2023

92006: Demonstrate understanding of usability in human-computer interfaces

Credits: Five

SAMPLE ASSESSMENT

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of usability in human-computer interfaces.	Examine the usability of human-computer interfaces.	Evaluate the usability of human-computer interfaces.

Enter your National Student Number (NSN) and School Code into the space above.

Complete ALL report prompts in this document.

You should aim to write no more than **1200 words** in total.

Your answers should be presented within the expanding text boxes.

Your answers may include only information you produce during this assessment session.

Internet access is not permitted.

By saving your work at the end of the assessment session, you are declaring that this work is your own. NZQA may sample your work to ensure this is the case.

PART A – SHORT-ANSWER QUESTIONS

(i)   Why should usability principles be considered and applied to human-computer interfaces?

(ii) In interface design, which usability principle focuses primarily on delivering users clear, informative feedback regarding the system's operations?

(iii) Give a definition of Nielsen's heuristic **Visibility of System Status**.

(iv) In the context of web design, describe the difference between **internal** and **external consistency.**

PART B – MATCHING QUESTIONS

In this question, match the usability principle with its description.

1.	A set of general principles that help evaluate the HCI design.
2.	This principle aims to ensure that users with disabilities can effectively use the HCI.
3.	This heuristic encourages the use of terms and concepts familiar to users, reducing the learning curve.
4.	This heuristic aims to help users avoid mistakes and provides easy ways to recover from errors.

Enter the number corresponding to the description above in the box next to the heuristic below:

|			
Accessibility		Error prevention	
Match between the system and the real world		Nielsen's Usability Heuristics	

PART C – REAL-WORLD EXAMPLES

Tui is going to see her family and needs to book a flight to Whangarei. She uses the Air New Zealand website to book her flight.
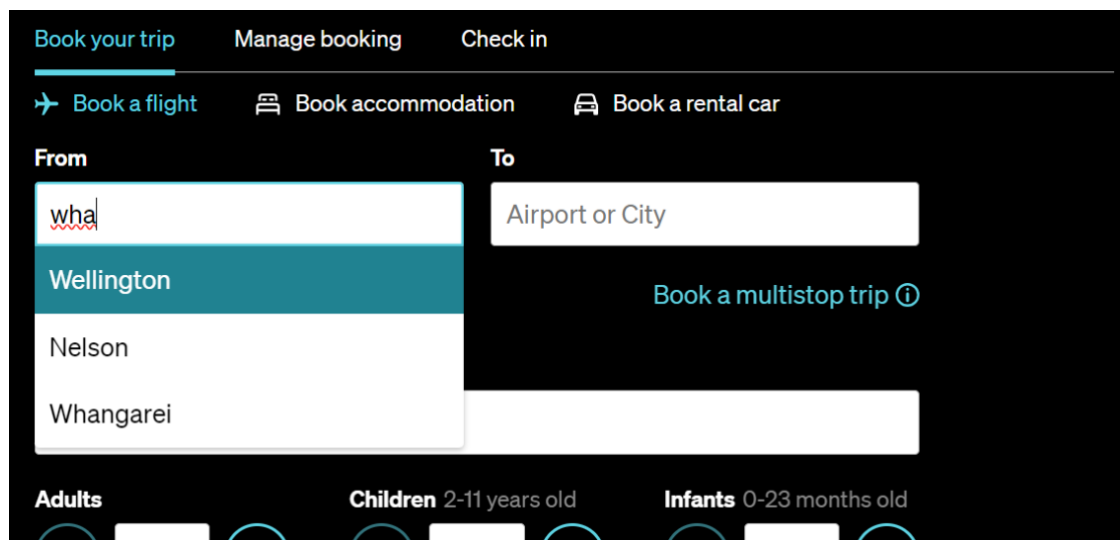
(i)   What is the interface doing that helps her select the city she will depart from? Which of Nielsen's usability heuristics is shown in the screenshot?

(ii) Tui hasn't seen her niece in a long time, and it is her birthday next week. She plans to purchase a Lego set to give to her when she arrives in Whangarei.
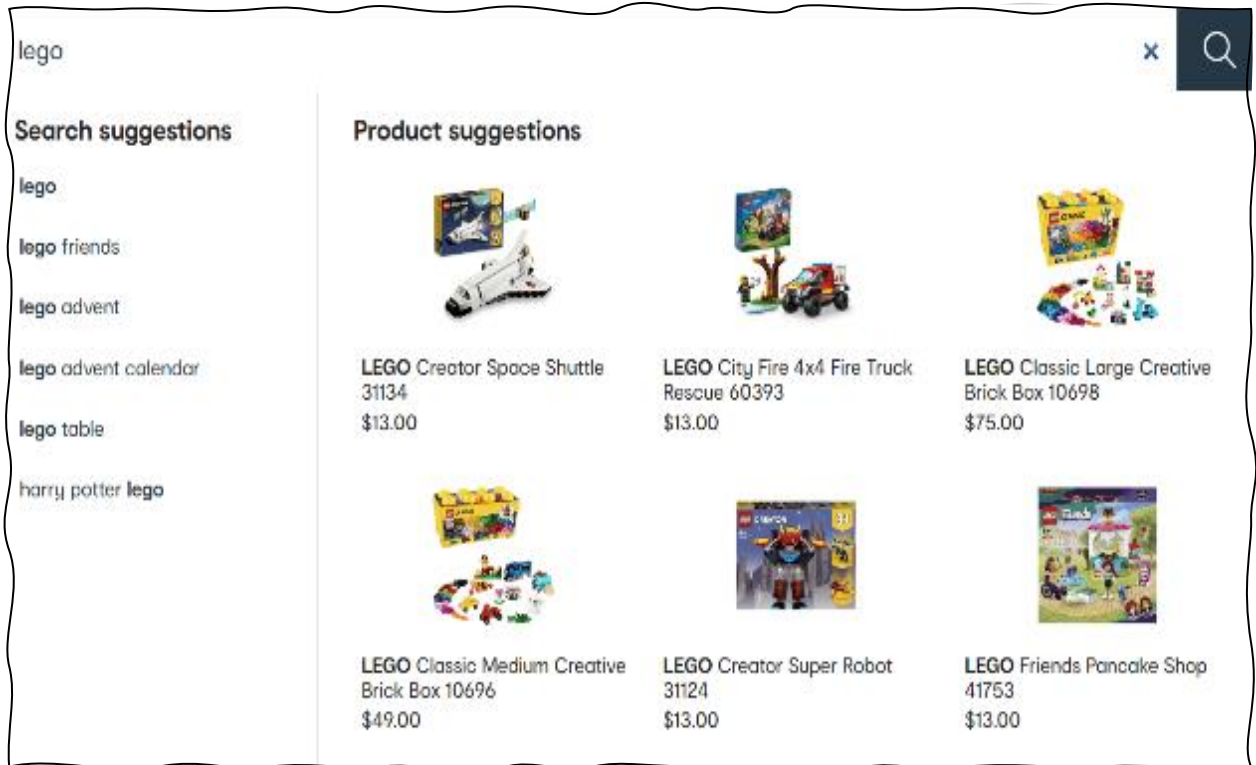
Identify the usability principles that Tui can see in the screenshot above.

PART D – SCENARIO QUESTIONS

Choose ONE of the following scenarios and write your answer in the box below:

(i)   Imagine you are designing a mobile app to help elderly users easily access transportation services in their area. How would you apply usability principles to create an interface that caters to their needs? Discuss at least TWO usability principles you would consider, and how you would implement them.

OR

(ii) Discuss specific ways in which Māori principles, such as using te reo Māori and incorporating tikanga Māori, can be implemented in a mobile app for Māori users to enable them to easily access transport in their local area. How would you apply Māori usability principles to create an interface that caters to their needs? Provide practical examples to illustrate your points.

Scenario chosen: _____

PART E – OWN INTERFACE

In the following questions, discuss an interface you have studied.

Name of interface: _____

(i) Provide examples of how applying usability principles has improved the overall user experience of the chosen interface.

(ii) Referring to usability principles, suggest improvements that could be made to the interface you studied to improve usability.