

No part of the candidate evidence in this exemplar material may be presented in an external assessment for the purpose of gaining credits towards an NCEA qualification.

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NEW ZEALAND QUALIFICATIONS AUTHORITY
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COMMON ASSESSMENT TASK

Level 1 Digital Technologies 2021

91886 Demonstrate understanding of human computer interaction

Credits: Three

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of human computer interaction.	Demonstrate in-depth understanding of human computer interaction.	Demonstrate comprehensive understanding of human computer interaction.

Type your School Code and 9-digit National Student Number (NSN) into the space below. (If your NSN has 10 digits, omit the leading zero.) It should look like “123-123456789-91886”.

Make sure you have the TWO video files.

Answer ALL parts of the assessment task in this document.

You should aim to write **800–1500 words** in total.

Your answers should be presented in 12pt Times New Roman font, within the expanding text boxes, and may include only information you produce during this assessment session. Internet access is not permitted.

Save your finished work as a PDF file as instructed by your teacher.

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

Merit

TOTAL

05

ASSESSOR'S USE ONLY

Instructions

The video files each show a user interacting with a website. The task in this assessment requires you to review the interactions in terms of the usability heuristics below.

In parts (a), (b), (c), and (d) you will refer to ONE of the websites. In part (d) you are also to refer to another website – this can be the one shown in the other video, or another that you have studied.

Read all parts before you watch the videos. You may play, pause, and restart the videos as often as you like. *Note: The videos have no sound.*

You should illustrate your answers with screenshots from the videos.

Resource: Nielsen's Ten 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 ten usability heuristics summarised 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, updated 2020). 10 Usability Heuristics for User Interface Design. <https://www.nngroup.com/articles/ten-usability-heuristics/>

Assessment Task

State the name of the website shown in the video that you will write about in your answers.

EB Games

- (a) Briefly describe the purpose of this website. What does the user want to achieve while they are using it?

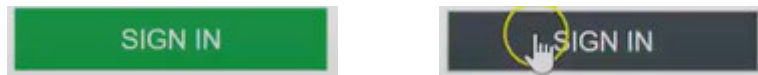
The role of the website of EB Games is to advertise and sell different products listed on their website. These products include video games for various operating systems/consoles, gaming consoles, accessories and merchandise.

The intended user of EB Games website is anyone who is interested in video games or any associated products.

(b) Describe a way each of the following usability heuristics is shown in the website interface. Illustrate your answers with screenshots from the video.

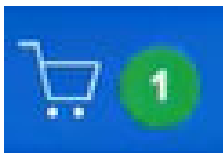
(i) Visibility of the system's status

The heuristic of visibility of system status entails being able to see that when you are interacting with the website in question that your actions are having an effect or that everything is working as it should. The EB Games website follows this heuristic well, as when hovering your cursor over certain buttons or interactable objects within the website, they will change colour to indicate that your action has an effect and will work when you



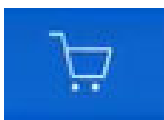
click.

Another good example of this is the 'cart' function. After adding an item to their cart, the user can clearly see that the item is where it is where it is supposed to be and that them clicking 'add to cart' that the item they were intending to be added to the cart was indeed added to their cart.



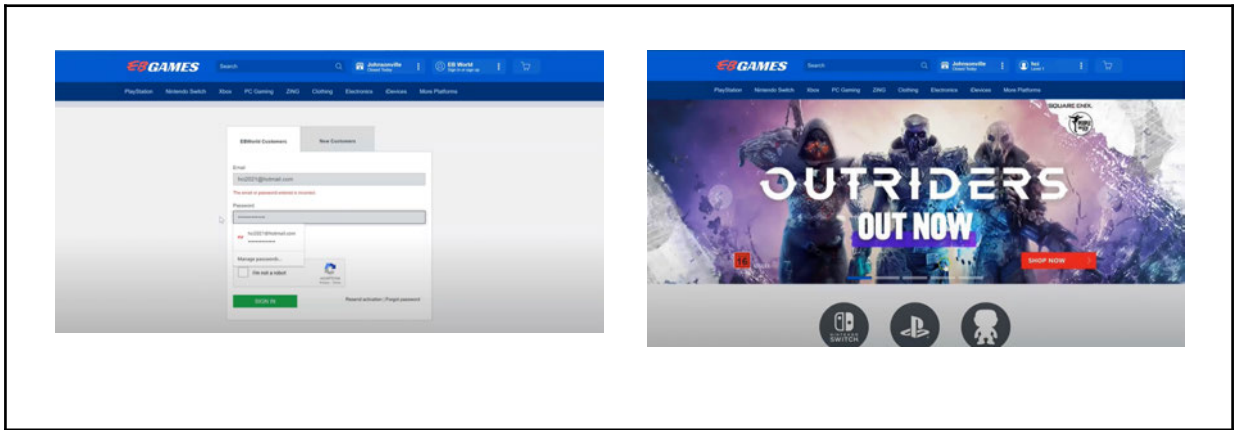
(ii) Match between the system and the real world

The heuristic of match between the system and the real world entails that when a user is on their chosen website, they will already have an idea of how things work or what they do. A good example of this and what the EB Games website itself uses is the shopping cart icon. In real life, people use shopping carts in supermarkets or other shops to gather the items that they intend on purchasing. By using a familiar object as the symbol for where their online items are, it helps people use and learn the website quicker.



(iii) Aesthetic and minimalist design

The heuristic of aesthetic and minimalist design is about whether or not a website has too much all cluttered together on one page, whether it contains information that is irrelevant to the website, or other such things that cause a website to look bad or waste the users time. The EB Games website seems only to contain information relevant to what the user might want, such as new releases of games or hardware. The website sticks to a consistent blue and white colour scheme and each page maintains an even amount of items listed, selection/navigation and filtering tools.



(iv) Help users recognise, diagnose and recover from errors

The heuristic of 'help users recognise, diagnose and recover from errors' dictates that a website should be able to inform the user when something goes wrong, what exactly did go wrong and how to fix or recover from the mistake. An example of this heuristic within the EB Games website is when a user is attempting to sign into the website and incorrectly type their password, the website will display a message in red text detailing that the email or password that the user entered was incorrect.

Email

The email or password entered is incorrect.

Password

This means that either the details of the account were spelled incorrectly, or the user input the wrong information by mistake.

(c) Discuss how successfully – or unsuccessfully – each of the following usability heuristics is demonstrated in the website interface.

(i) Visibility of the system's status

The heuristic of visibility of system status entails being able to see that when you are interacting with the website in question that your actions are having an effect or that everything is working as it should. I believe that this heuristic was used quite successfully on the EB Games website. There are many examples of this heuristic in use: the cart displaying the number of items in the cart, the login page informing the user if their inputted details are incorrect, when hovering over certain buttons/items they will change colour to indicate that the user is indeed hovering over the object.



Email

hci2021@hotmail.com

The email or password entered is incorrect.

Password

.....

(ii) Consistency and standards

The heuristic of consistency and standards is about keeping with what is widely accepted by many people and not implementing elements into your website that the user is unfamiliar with and may confuse and discourage them from using the website. I believe that the EB Games website follows the heuristic of consistency and standards successfully. This is because it keeps with common navigation themes and techniques. A common tool of navigation seen in many websites today is the nav bar.

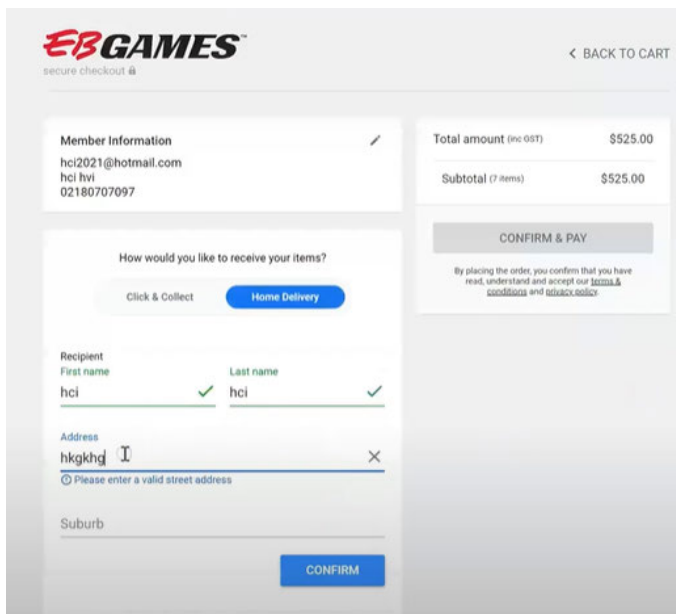


This tool usually allows the user to easily navigate to popular categories, topics and products. Another standardised function of websites in the 21st century is the autofill feature. This tool makes it easier and quicker to find what you are looking for in the search bar.

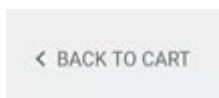


(iii) User control and freedom

The heuristic of user control and freedom entails that after performing any action, a user should have the option to easily go back, exit or undo the action. This is so the user is not forced into completing an action or process that they no longer wish to, or initiated by mistake. I believe that the EB Games website has marginal success with this heuristic, seen best at the website checkout page.



Instead of forcing you to continue paying for any item/s you have selected and in your cart, the EB Games website gives you an option to back out and reconsider whether or not you wish to purchase those items.





I called this marginal success because this is the only example of having a clearly marked exit I could find and the button is the same colour as the rest of the background, making it harder to spot.

(d) In this part you will also refer to the website interface shown in the other video or another that you have studied.



If you do wish to refer to another website that you have studied, state its name and briefly describe its purpose here.

(i) Comment on similarities and differences between the two interfaces in terms of at least TWO of the usability heuristics on [page 2](#). Which interface follows these heuristics best, and why?

The Mighty Ape and EB Games websites both have similarities and slight differences between them in the context of the heuristic of visibility of system status. When hovering your cursor over interactable buttons, they will change colour to indicate they can be clicked in order to perform an action, although, where the EB Games websites buttons tend to darken, the Mighty Ape’s buttons tend to light up.

Mighty Ape:  EB Games: 

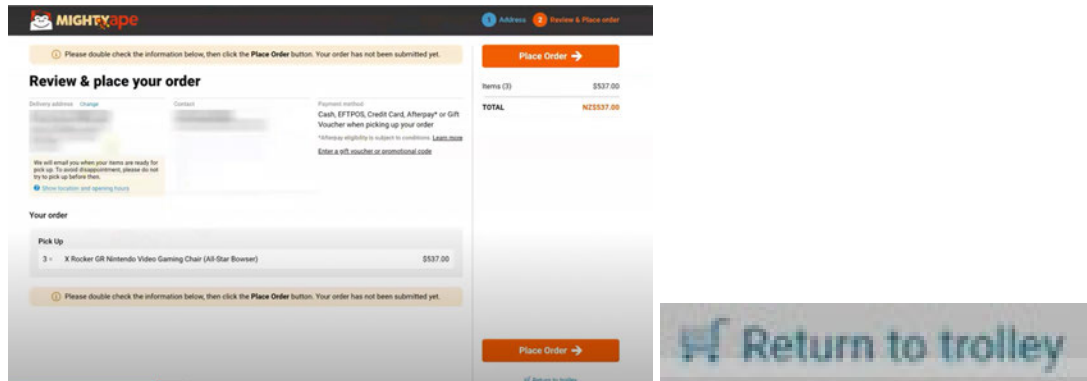
Both websites also indicate the number of items in your cart using a number on a shopping cart icon.

Mighty Ape:  EB Games: 

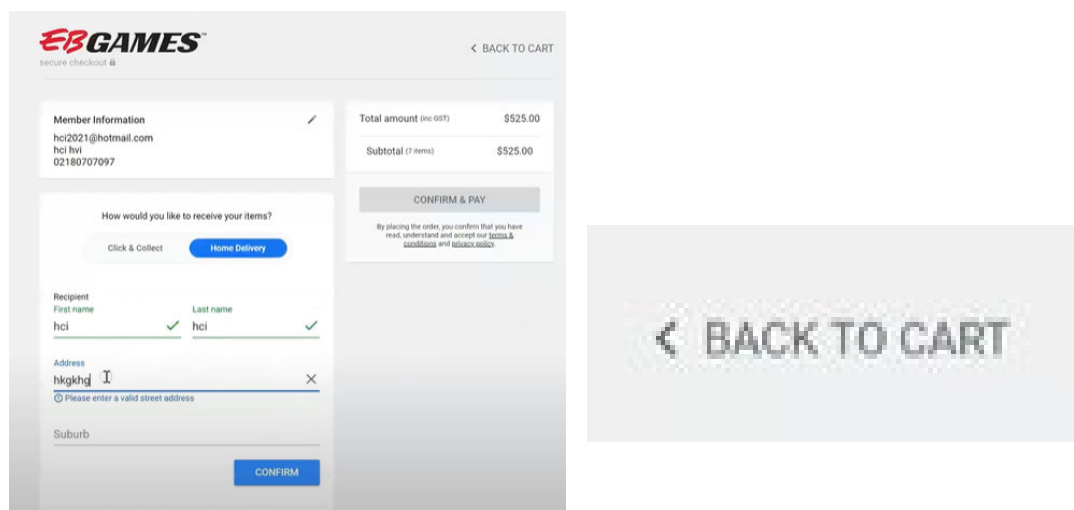
The Mighty Ape website, however, does have text next to the shopping cart icon ‘trolley’, a common name alternative for shopping cart, whereas the EB Games website does not. The text next to the icon may be useful for anyone who does not know what the icon means.

The similarities between the Mighty Ape and EB Games websites in the context of the heuristic ‘user control and freedom’ are quite noticeable, having only slight differences. When at the checkout stage in either website, there is an option to return to your cart if you wish to rethink purchasing the items in your cart.

Mighty Ape:



EB Games:



While both websites provide a return to trolley/cart option, Mighty Ape's button to do so is arguably more noticeable, as the button is directly underneath the continue/place order button, whereas EB Games button is around a fifth of the screen above. And while the EB Games website's return button is larger, it is easier to miss as it blends into the background more while the Mighty Ape website's button is blue, directly contrasting with the white background and orange button it is underneath.


- (ii) Referring to the usability heuristics, suggest and explain how you would apply ideas from one of the interfaces to make at least two improvements to the other one.

The heuristic of visibility of system status is one area where I think both websites can improve on. The Mighty Ape website could apply the idea of selecting a particular store so that the user could tell if the store near them is closed on that day or if the store near them had the item/s they wanted in stock.

EB Games website:



This could improve the effectiveness of the Mighty Ape website in two ways. It would help by letting the users know if their store is open, as if they were planning on going there, they would know that they would have to wait for another day or later the same day, depending



on the time. The second way this change would improve the Mighty Ape website is by selecting the particular store the user wants, they would be able to find out whether or not the item/s they want are in stock or if they would have to search somewhere else or wait for them to come back in stock.

Merit Exemplar 2021

Subject	Level 1 Digital Technologies	Standard	91886	Total score	05
Q	Grade score	Annotation			
1	M5	The candidate has given their own opinion as to how successfully or unsuccessfully the website incorporated the listed heuristics, and has provided examples (screenshots) to support their reasoning. However, the suggestions for improvements are weak and refer to only one heuristic.			