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COMMON ASSESSMENT TASK

# Level 1 Digital Technologies, 2019

## 91886 Demonstrate understanding of human computer interaction

Credits: Three

Achievement Criteria		
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 header at the top of this page. (If your NSN has 10 digits, omit the leading zero.)

Make sure you have the TWO video files.

**Answer all parts of the assessment task in this document.**

Your answer should be presented in 12pt Arial font, within the expanding text boxes, and may only include information you produce during this examination session.

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

**Save your finished work as a PDF file** with the file name used in the header at the top of this page ("SchoolCode-YourNSN-91886.pdf").

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 that this is the case.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**

## INSTRUCTIONS

You are to watch a screen-capture video that shows a website's user interface, and then respond to all parts of the assessment task.

You may play, pause and restart the video as often as you need to. (The video has no sound.)

In your answers, you should use the snipping tool (Windows) or take screen shots (Mac) from the video to illustrate the points you make.

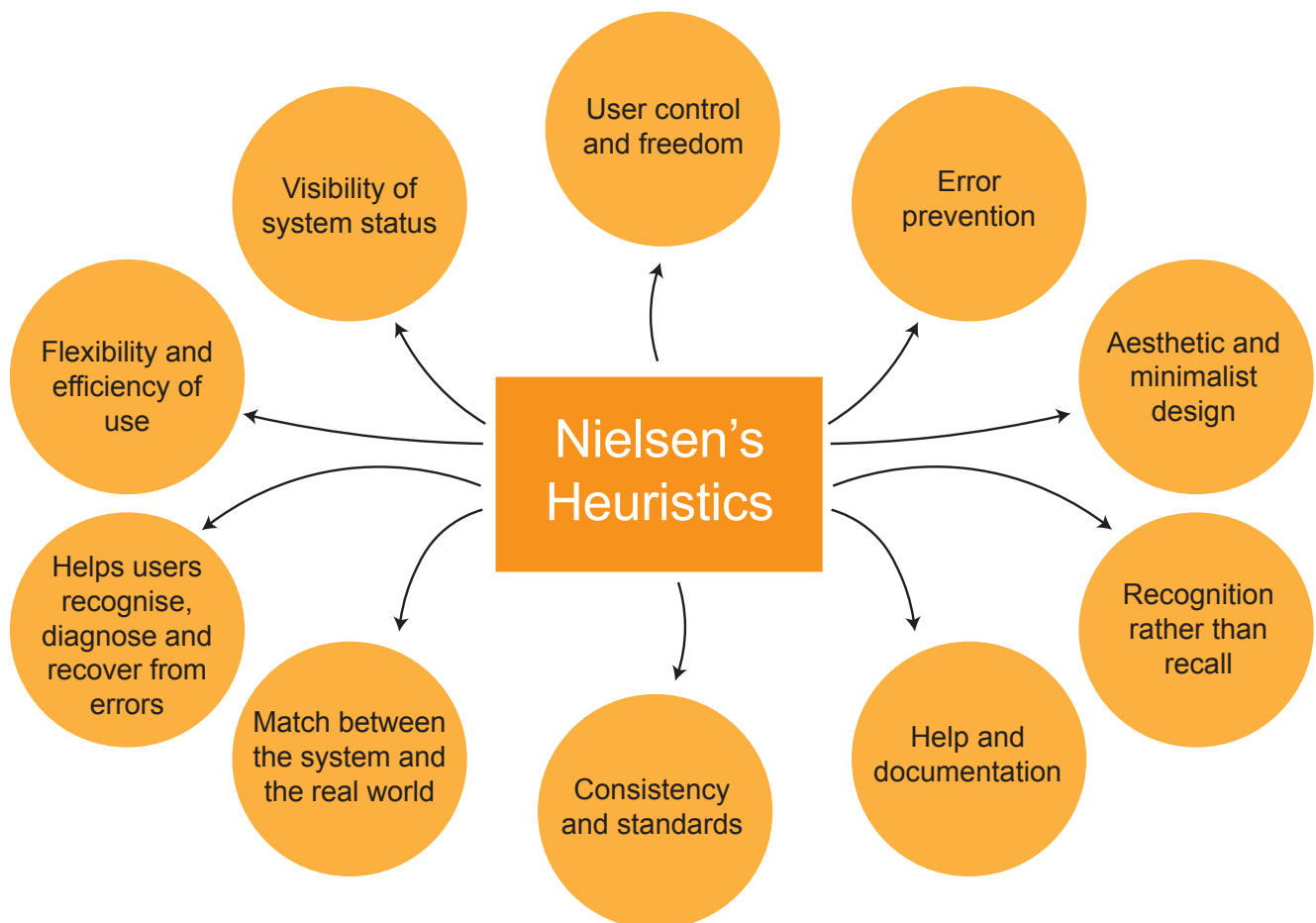
Read all parts of the assessment task before you begin.

From the two videos provided, type your chosen screen-capture video in the space below:

Google

Begin your answers on page 3.

## RESOURCE: Nielsen's Heuristics



Source (adapted): <https://www.nngroup.com/articles/ten-usability-heuristics/>.

## ASSESSMENT TASK

- (a) Describe the role of the interface of your chosen website.

This website is mostly for students, teachers, business people, and also for anybody who wants to create and access their Google Account. It guides users through the process for signing up to the service, and allows users to monitor and change settings for their account, access the other Google services. It has features such as email, text editor, and file viewer. It is a popular web service that many people use on a daily basis.

- (b) Identify examples from the interface that illustrate at least FOUR of Nielsen's Heuristics, which are shown on page 2. Illustrate your answer with screenshots from the video.

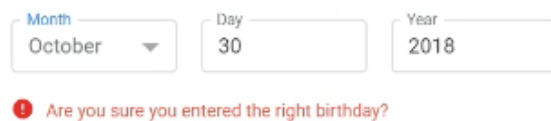
When a password is entered wrong, the password confirmation box goes red, and red text appears that says "Those passwords didn't match. Try again." It also shows a red circle with an exclamation point. The red is an example of the "Match between the system and the real world" heuristic.



The error message that is displayed is also an example of the "Help users recognise, diagnose and recover from errors" heuristic.

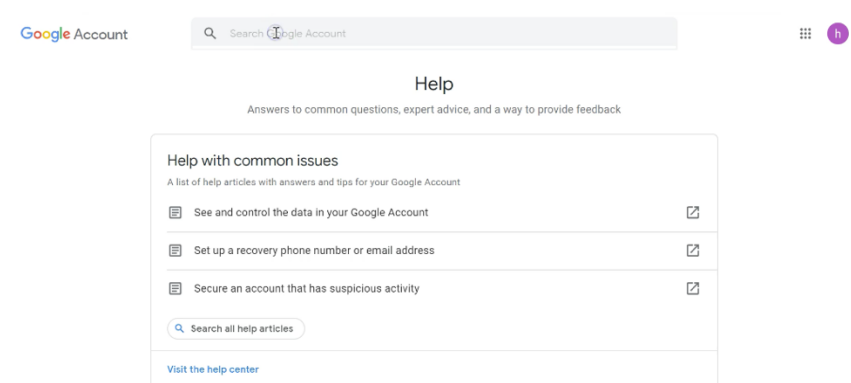


The interface also demonstrates the "Error prevention" heuristic when a user types in an unlikely birthday, in this case October 30 2018 was used.

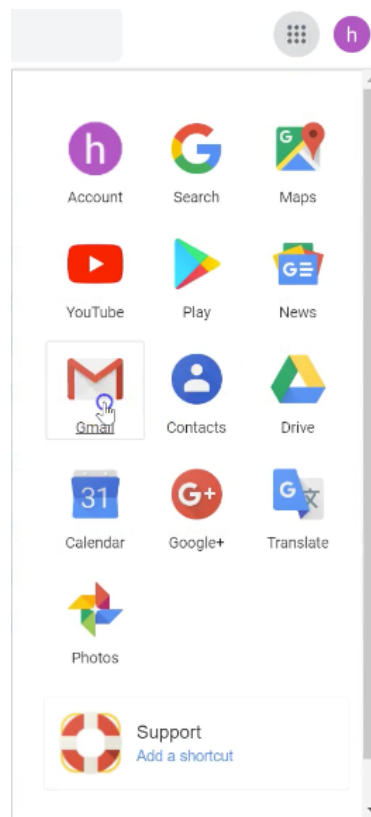


This birthday is unlikely because this would mean the account is for someone that is less than a year old. This could happen if a parent was making an account for their child, so the website still allows this date, but gives the user a warning if try to enter it. This makes the user realise they most likely put in the wrong date, and they can fix the issue if they didn't realise.

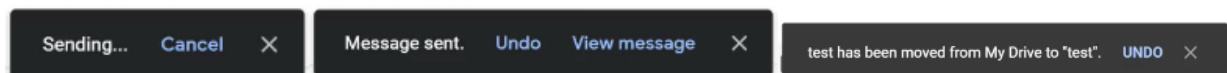
The Google account site also features the "Help and documentation" heuristic, for users that cannot find out what they are looking for.



The website also demonstrates the “Flexibility and efficiency of use” heuristic by having a quick access menu to go to the other Google sites.



The interface also gives messages when doing tasks such as sending an email or deleting files. This relates to the “Visibility of system status” heuristic.











This is also an example of the “User control and freedom”. These messages have undo and cancel buttons for the users if they change their minds or have made an error. It gives users a choice if they wish to proceed doing something like sending an email.

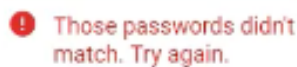
The “Aesthetics and minimalist design” heuristic is present in the menu bar on Google Docs. It does not overwhelm the user with information and icons, instead it has the commonly used functions, and has menus to do the other less used tasks.



- (c) Evaluate the effectiveness of the interface using Nielsen's Heuristics. To demonstrate an in-depth understanding, evaluation of more than FOUR heuristics is recommended. Illustrate your answer with screenshots from the video.

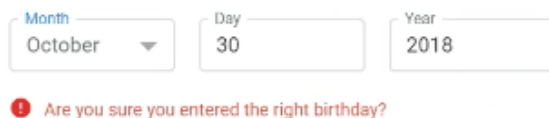
The "Match between the system and the real world" heuristic is demonstrated well. Using red is helpful for user because on traffic lights and stop signs, red is associated with stop. It is used here to show that an error has occurred, and the user needs to fix their mistake. The website uses icons in other places to make it clear to users what the menus mean. Icons are also good for users who don't speak the language and are common across sites, such as the menu icon:  and email icons:       

The "Help users recognise, diagnose and recover from errors" heuristic is also done well to help the user on the site.



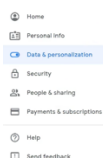
If the website didn't progress when the passwords were entered wrong, the user would not know what had gone wrong and how to fix the issue. This is why it is important to provide the user with error messages.

The "Error prevention" heuristic is also effective in making the user check the date, because they may have entered it wrong, and then their details could be wrong forever if they didn't notice.



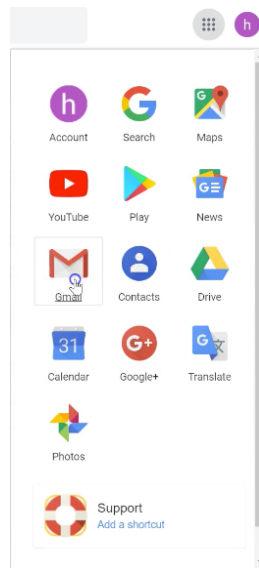
Having age correct is important for the service, because it then knows what is relevant to the user. For example, Google turns on Safe Search if the users are young. An adult probably wouldn't want this on, so the details need to be correct.

The "Help and documentation" heuristic had some issues. The general help page doesn't come up if the users searches the word "help". While the user could search for the issue from this bar and get relevant results, a novice user might not be able to find the help page. The help page was also able to be accessed from the sidebar, which was the only way to access the main help page.



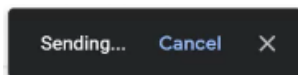
Once on the main help page, it had common problems that users have first which is good for users, because they would be able to solve their problems quickly.

The “Flexibility and efficiency of use” heuristic was done well. It was an easy find way to access Google’s other services.



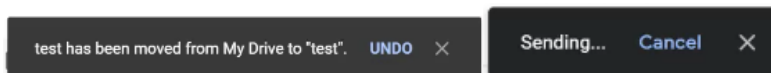
Having this quick access is good for advanced users and general users alike because it means they don't have to type the URL, for the Google site they want to visit. It was very accessible and visible which is good for getting the users where they want to be easily and quickly.

The “Visibility of system status” heuristic was done well.



Google gave appropriate feedback when tasks were completed so you knew if what you had done, had actually happened. This is helpful because you might be wondering if a large email has sent. The website tells you if it is still sending or if the file has been sent.

The “User control and freedom” heuristic was very helpful for the user, if they change their mind, they are given an opportunity to change that. It allows users to undo and gives them freedom after they have done something.



The “Aesthetics and minimalistic design” heuristic was clear for users.



There were very few sub menus for users to search through for functions. Although it may not have every little function a user may use, it can still do everyday tasks easily and well. The interface is clear; commonly used function are available and lesser used functions are under menus.

- (d) Compare and contrast the interface in terms of Nielsen's Heuristics with another interface of your choice. This second interface could be from the other screen-capture video provided, or an interface you have studied.

The Office 365 sign-in interface was very similar to the Google one. Being similar makes the interface intuitive to use. A small change was that the error messages were yellow instead of red like on Google's interface.

Incorrect user ID or password. Type the correct user ID and password, and try again.

The red that Google uses is more effective because red is something that needs to be addressed, like a stop, whereas yellow is a caution, usually meaning you can still continue. This relates to the "Match between the system and the real world" heuristic.

Another thing the Office 365 sign-in did different was that it asked the user if they wished to stay signed in.

Stay signed in?

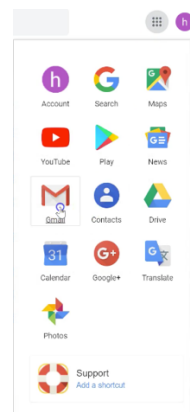
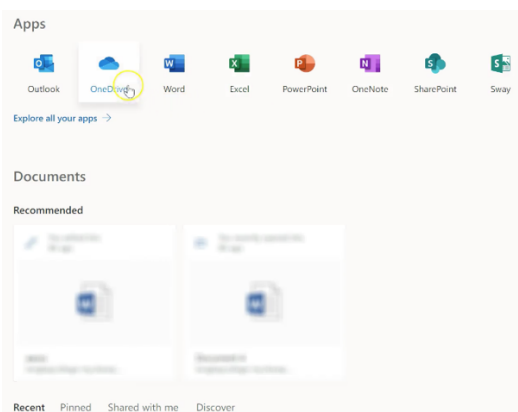
Do this to reduce the number of times you are asked to sign in.

☐ Don't show this again

No Yes

This allows the user a choice and freedom, instead of just assuming the user wants to stay signed in like the Google page. This relates to the "User control and freedom" heuristic.

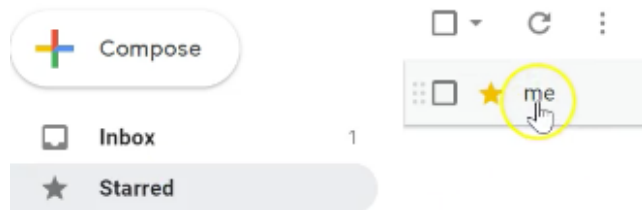
Office 365 also had a quick access menu which was available on all the Office 365 sites, just like how Google did it.



A change Office 365 made was that they gave the user a home page to have quick access to not only the sites, but also recent files, which is helpful for the user to pick up where they left off. This relates to the "Flexibility and efficiency of use" heuristic.

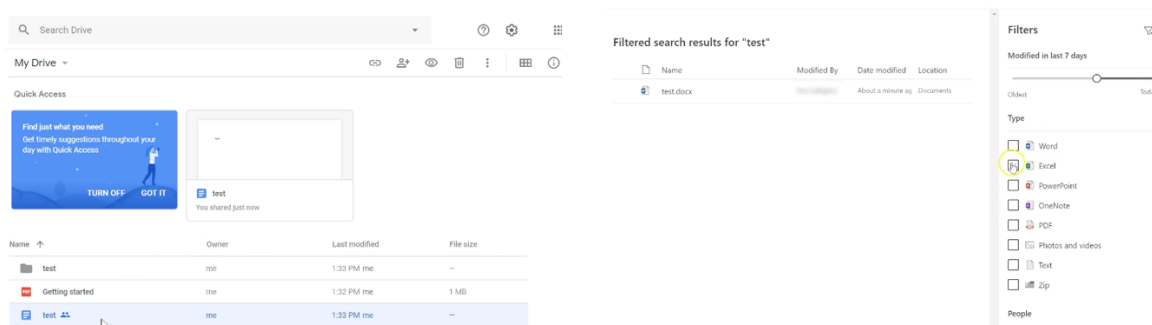
Google's Gmail allows user to star emails, which puts them in folder.





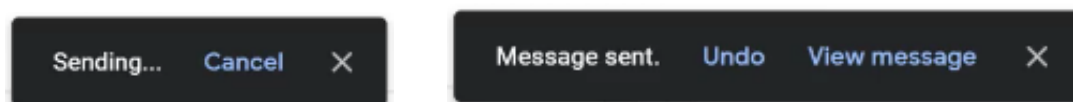
This can be used to keep important emails in one place. Office 365 does not have this feature where you can star an email and automatically have it added to a folder.

Office 365's search for files has more filters, whereas with Google's interface you can only sort and search for titles.



Office 365 has done this better so that you can find multiple files matching something or all PDF files for example. Google does not have a feature like this. This relates to the "Flexibility and efficiency of use" heuristic.

Google provides relevant messages when you are doing something so you know it has worked.



For example, Google provides you with an undo and cancel function when sending emails. Office 365 does not do this, which makes it hard for the user to know if an email has sent, and does not allow them to undo if they change their mind. Although Office does confirm deletions. This relates to the "User control and freedom" heuristic.

Office's change password button takes you the page where you can change your password.

## change password

Change or reset <sup>(T)</sup>your password

You can change your password for security reasons or reset it if you forget it. Your Google Account password is used to access many Google products, like Gmail and YouTube.

Computer   Android   iPhone & iPad

Change your password

1. Open your [Google Account](#). You might need to sign in.
2. Under "Security," select [Signing in to Google](#).
3. Choose [Password](#). You might need to sign in again.
4. Enter your new password, then select [Change Password](#).

[Change password](#)

User ID

Old password

Create new password

Confirm new password

[submit](#) [cancel](#)

Google's page has tutorial on how to change password, and a link the actual page to change your password. Both methods work well. Google's may be slower, but shows the user how to change their password on other devices, and has helpful information. Office 365's method is quicker and direct.

Google's word editor's interface is direct and concise.

Untitled document

File Edit View Insert Format Tools Add-ons Help

100% Normal text Arial 11 B I U A

Word Online

test

File Home Insert Page Layout References Review View Tell me what you want to do Edit in Word

Share Comments

Calibri (Body) 11 A<sup>+</sup> A<sup>-</sup> A<sub>0</sub>

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- (e) Use the comparisons you made in (d) as a starting point to recommend possible improvements to your chosen interface. Justify your recommendations in terms of Nielsen's Heuristics.

Overall Google's interface is easier to use than Office 365's, but Office 365 does have the advantage of more features for advanced users, at the cost of ease of use and a learning curve for new users.

Google achieved most the heuristics well, but they could improve the "Flexibility and efficiency of use" heuristic with a few changes.

Google might want to make the help page more accessible and easier to find for users.

Google could improve their interface by possibly being able to change your password on the help page itself. This would both give users information and help about what they are doing, and also not make them go to another page.

Google could also add more filters and functionality to their Google Drive search. They could add a selection for certain time, or the ability to view only certain file types.

To go along with the new search, Google could add a homepage for their services, with a Google Search and a search for files, and quick access to recent files and their other services. This could be integrated into Google's main service, Google Search. They could add the ability to search for files from Google Search, and well as search the web.