



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MATAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

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.

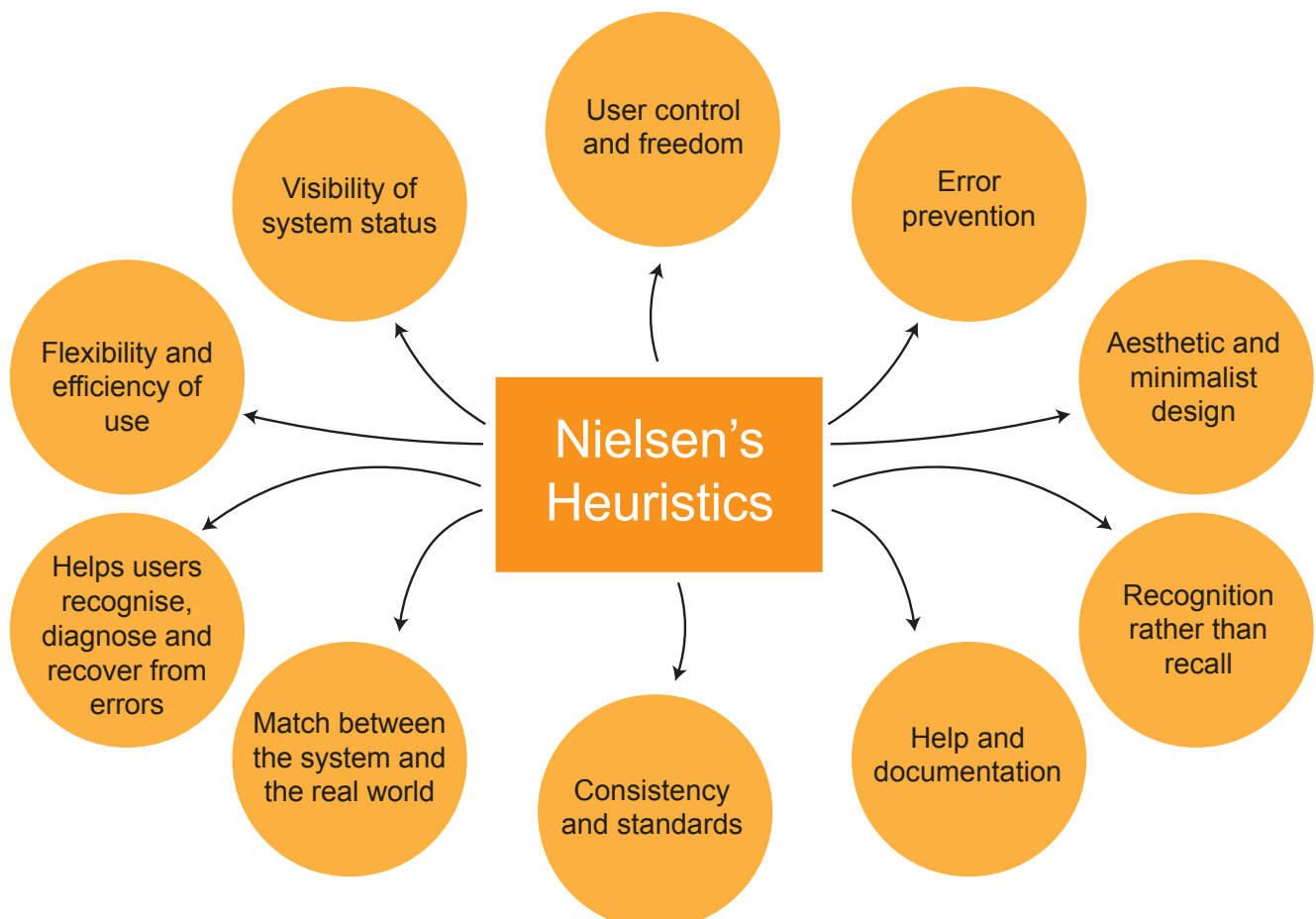
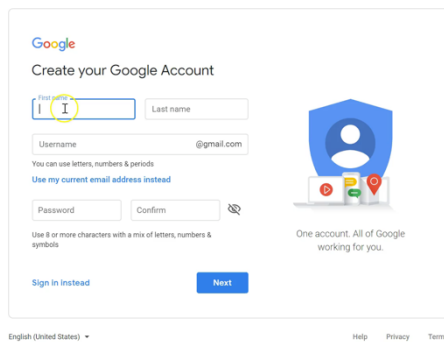
Read all parts of the assessment task before you begin.

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

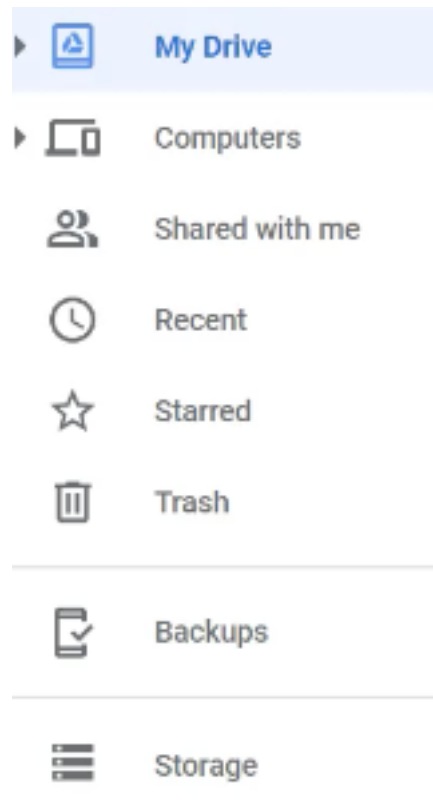
- (a) Describe the role of the interface of your chosen website.

The role of Google as an interface is to be a:
Central point for access into other google-owned interfaces, (such as YouTube, google documents, google drive, google sheets, etc.)
search bar for users to search online
place for users to upload any form of content(photos, videos, websites, information etc.)
platform for users to run online programs
platform to link any other google(signed in to google) devices
Platform to access google settings and preferences
Online Data storage service
Calendar
Translator
News site
General social network(google+)

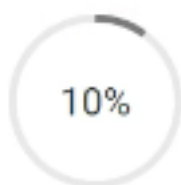
- (b) Identify examples from the interface that illustrate at least FOUR of Nielsen's Heuristics, which are shown on page 2. Illustrate your answer with screenshots from the video.

! Are you sure you entered the right birthday?

The above screen shot shows an error message from google. This illustrates the use of the “match between the system and the real world” heuristic. It shows red text which in the real world can be associated with things like red lights(telling people to stop) or warning messages. Google have also used an icon(Before the text in the picture) which is red with an exclamation mark and in the shape of a stop sign. The exclamation mark is used to illustrate that the message is important as in the real world this punctuation usually follows important notices such as on warning notices.



The above message also demonstrates the “match between the system and the real world” heuristic. It shows the use of icons to demonstrate what each feature does such as the “trash” icon which shows a trash can which is easily linked to real life.



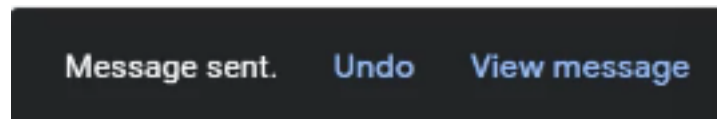
Setup progress

The above screen shot shows the Gmail setup progress. It demonstrates the “Visibility of system status” heuristic. It shows the user how much of the setup they have completed.

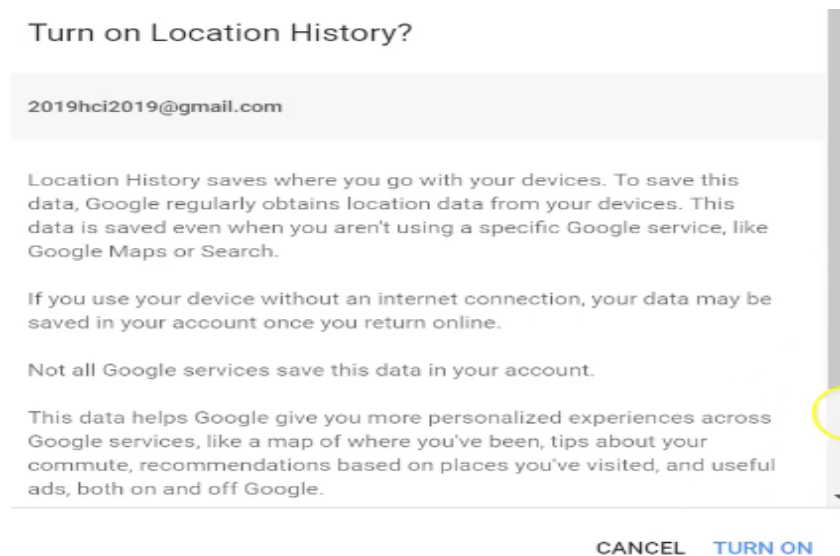


The above screenshot shows the main toolbar of google docs. This picture demonstrates

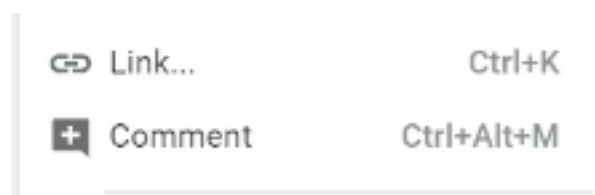
the application of the “Aesthetics and minimalist design” heuristic. It shows all immediately necessary information but does not display all information at once. It has a basic, easy to navigate design with only necessary information being displayed and has the rest of the information ready for easy access.



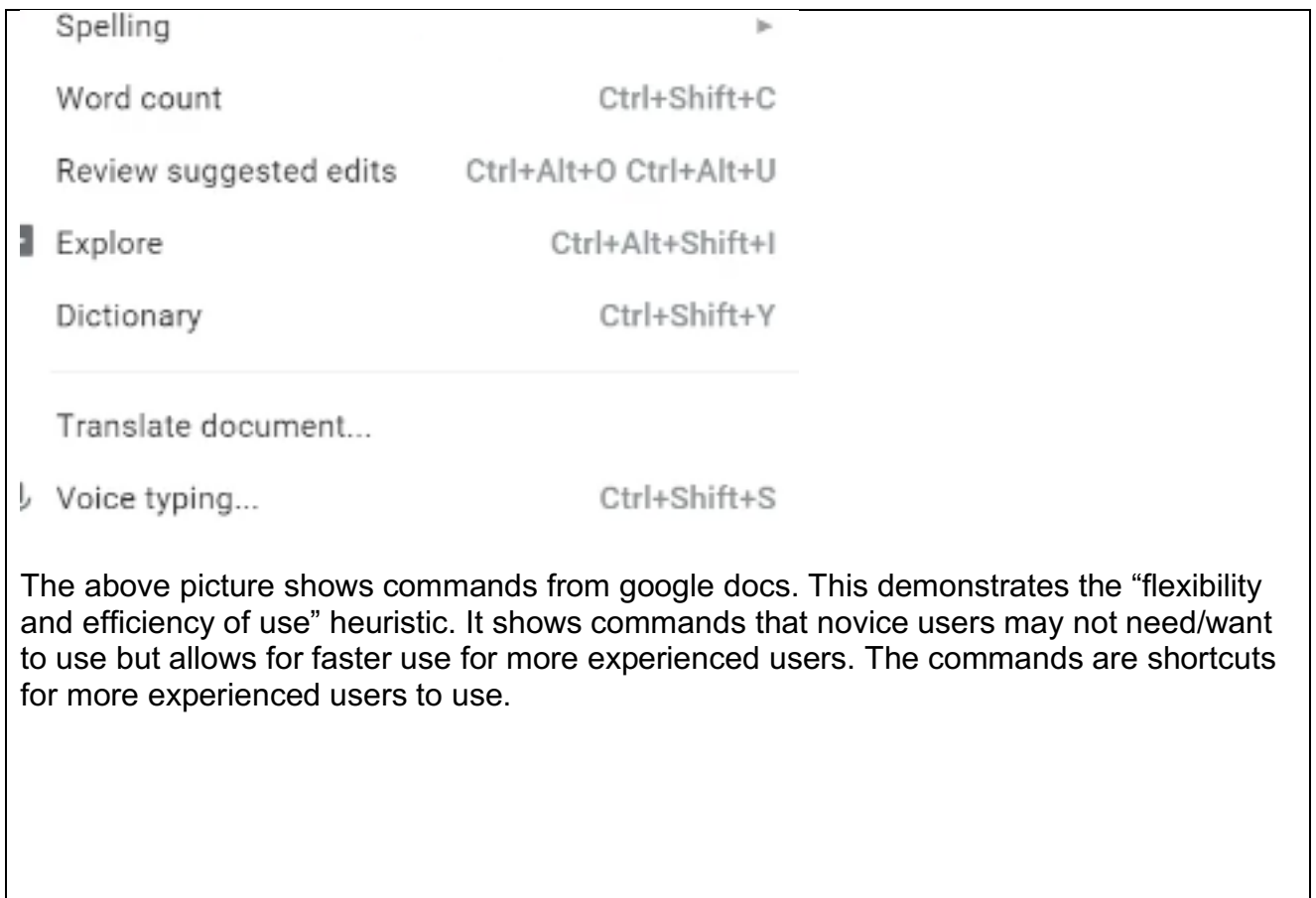
The above picture shows a message that appears after sending an email on gmail. This demonstrates the “user control and freedom” heuristic. It demonstrates this by giving the user an option to cancel their action. It lets the user undo their message if they want to.



The above picture shows the message that appears when turning on location history in google settings. It demonstrates the “error prevention” heuristic. It makes sure that a user wants to make the decision before allowing them forward in the action preventing any mis clicks from causing problems.



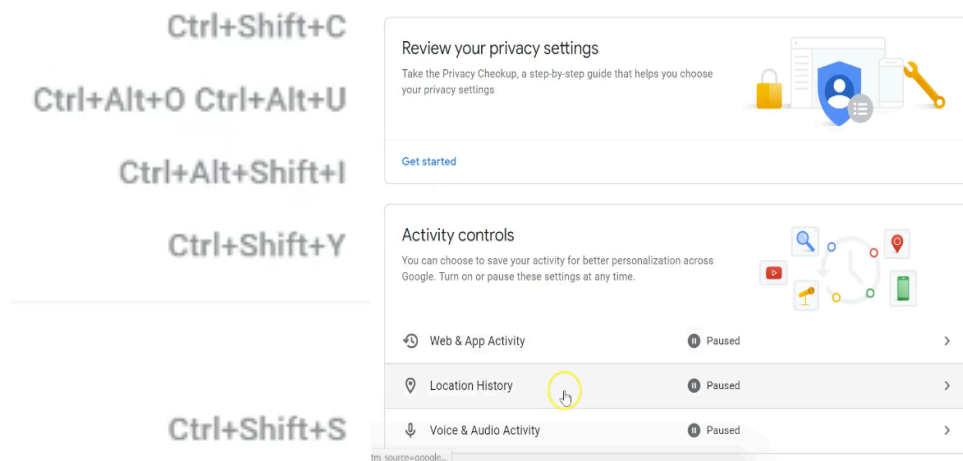
The above picture shows two commands. This demonstrates the “consistency and standards” heuristic. It shows the commands which do the same thing across all google services(excluding ones where commenting on content and/or adding links is unavailable).



- (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.

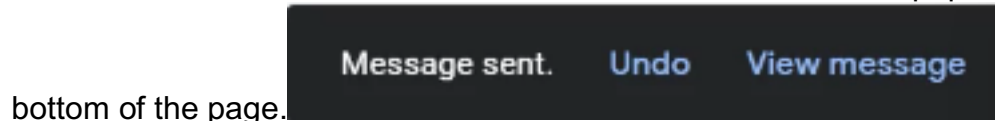
In terms of “flexibility and efficiency of use”, I would give google an 8/10

Google is a very effective interface in terms of the “flexibility and efficiency of use” heuristic. Google allows for many shortcuts and allows for the expert user to be able to complete actions with more efficiency than without the shortcuts. Google also remembers users settings so that the user can log on and won't have to re-enter information(name, date of birth, preferences in settings, shortcuts, etc.). These points are illustrated in the next two pictures showing commands and showing user settings.



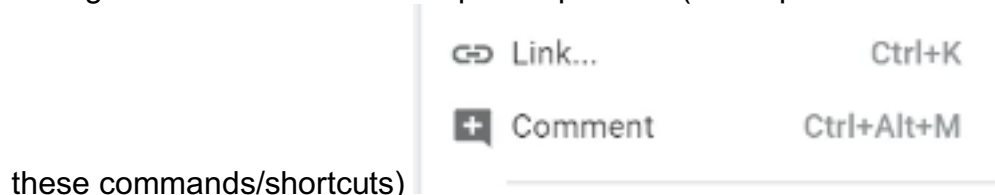
In terms of “user control and freedom”, I would rate google 3/10.

Google isn't very effective in terms of the “user control and freedom” heuristic. Google doesn't have many options for their users to cancel actions or undo/redo. The most that google displays of this is the “message sent” message. It is the only message that allows users to cancel/undo an action and it is an almost unnoticeable pop-up message at the



In terms of the “consistency and standards” heuristic, I would rate google 9/10

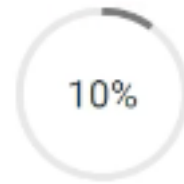
In terms of the “consistency and standards” heuristic, google is a very efficient platform/interface. Google has very consistent commands/shortcuts which work throughout almost all of their separate products(some products are not applicable for



these commands/shortcuts)

In terms of the “Visibility of system status” heuristic, I would rate google 1/10

In terms of the “Visibility of system status” heuristic, google is not efficient at all. The only

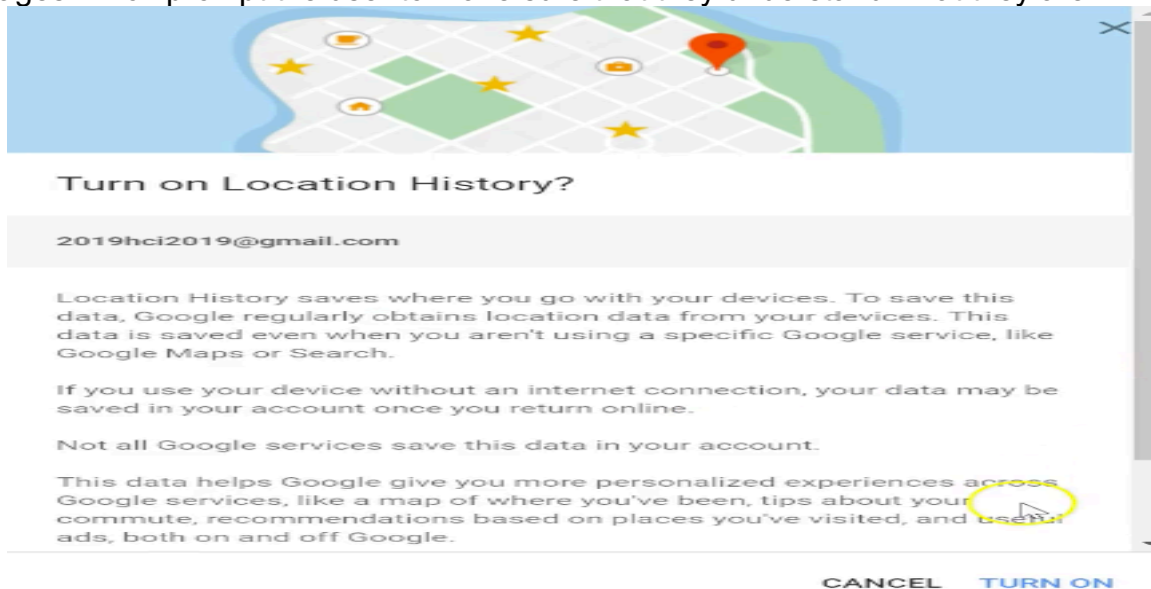


shown “system status” is the setup progress for Gmail.

This picture shows the progress “circle”, this is the only progress that any part of google shows at all. This means that users are “left in the dark” about how much more they have to do to achieve their intended outcome. This can be annoying for users who don’t have much patience or simply want to know how much they have completed of a certain task.

In terms of the “error prevention” heuristic, I would rate google 6/10

In terms of the “error prevention” heuristic, google is “okay”. Google does not grey out or remove any options which could cause problems for the user. The closest thing is the messages which prompt the user to make sure that they understand what they are



doing.

In terms of the “Aesthetics and minimalist design” heuristic, I would rate google 8/10.

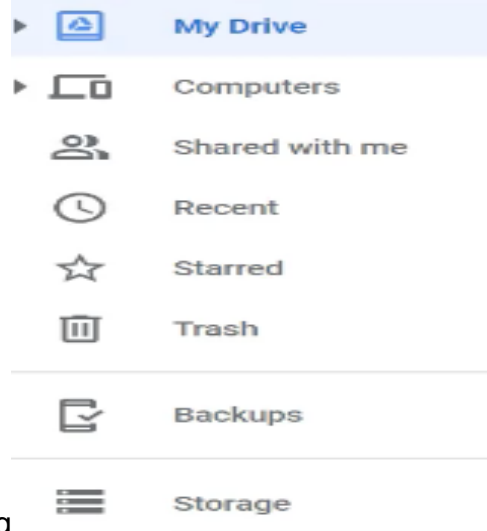
In terms of the “Aesthetics and minimalist design” heuristic, google is very effective. Google successfully show the most important information without overcrowding the screen and has simple, tidy and generally pleasing designs. It has kept the designs in-offensive and basic.



In terms of the “match between the system and the real world” heuristic, I would rate google 7/10.

In terms of the “match between the system and the real world” heuristic, google is fairly effective. It has a fair number of matches between the system and the real world but

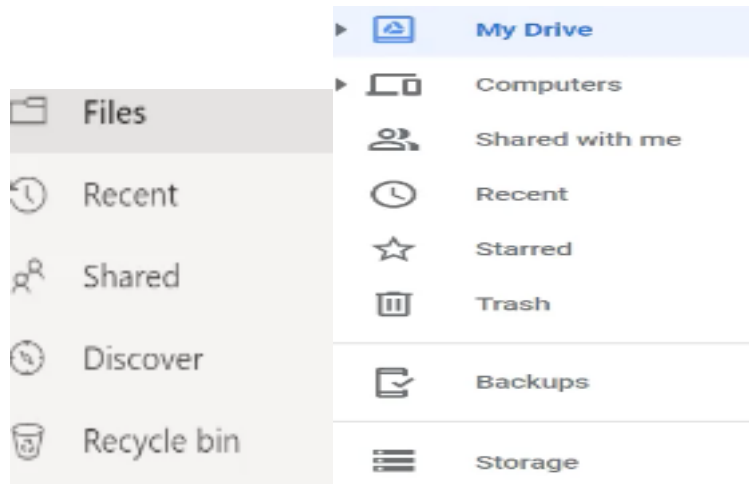
some of its icons aren't very good, such as the storage icon, which doesn't seem to



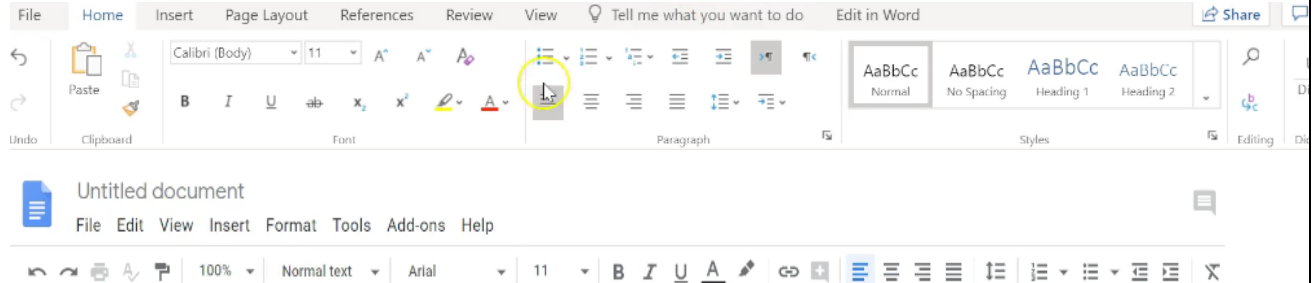
relate to anything

- (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.

In terms of the “match between the system and the real world” heuristic, Google and Microsoft Office are very similar. They each have similar icons. But unlike Google, more of Microsoft's icons make more sense as real world matches than those on Google.



In terms of the “Aesthetics and minimalist design” heuristic, Google is better than Microsoft Office as it generally shows less unimportant or rarely needed features unlike Microsoft Office.



In terms of the “Visibility of system status” heuristic, Google is very poor, but Microsoft is



Setup progress

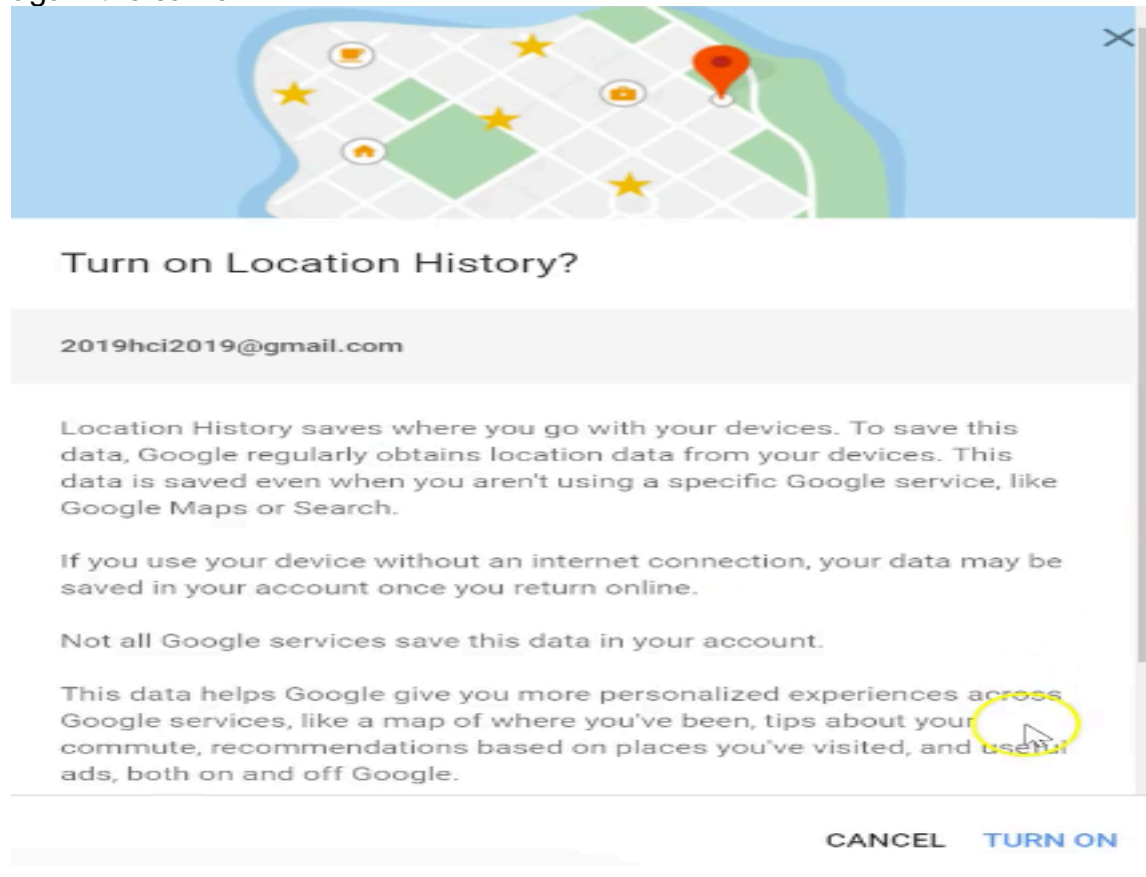
worse. Google has only one display of system status overall, but

but

In terms of the “consistency and standards” heuristic, Google is very good. It has the same commands for shortcut throughout its interface. Microsoft Office operates in the same way as well. Both have excellent continuation of commands throughout their respective

interfaces.

In terms of the “error prevention” heuristic, google does not perform too well. Google lacks some extra features which stop the user from performing certain actions. Office is once again the same.



- (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.

In terms of the "match between the system and the real world" heuristic, Google could improve upon its icons. It could change its storage icon to something similar to the files icon in Microsoft office. This could make it easier for the user to recognize features.

In terms of the "Aesthetics and minimalist design" heuristic, google could possibly make their icons/information bigger as with less content the toolbars have more space but there is probably a better way to make use of the space such as how office fits its tools right to the edges of the screen.

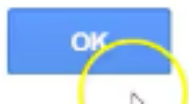
In terms of the "Visibility of system status" heuristic, google could improve their interface by adding more of their progress "circles" to different applications, such as filling out forms or making an account. This would help users to understand how far through something they are.

In terms of the "consistency and standards" heuristic, google has very little room for improvement other than that some of the commands can be complicated for novice users. Google could try to improve this by limiting number of keys in a command to 2 or 3.

In terms of the "error prevention" heuristic, google could grey out or remove any unavailable actions instead of displaying an error message

Error

Sorry, you have exceeded your sharing quota.



. Unhelpful error messages could annoy the user as they aren't told how to fix the problem which could then lead to the problem becoming worse.