

SOFTENG 350: Assignment #1

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Contents

1	Design Review	2
1.1	Usefulness Issues	2
1.2	Fit for Use Issues	3
1.3	Ease of Learning Issues	4
1.4	Efficiency of Use Issues	4
1.5	Error Frequency and Severity Issues	5
1.6	Subjective Satisfaction Issues	5
2	Nielson's Heuristics	6
2.1	Visibility of system status	6
2.2	Match between system and the real world	6
2.3	User control and freedom	7
2.4	Consistency and standards	7
2.5	Error prevention	8
2.6	Recognition rather than recall	9
2.7	Flexibility and efficiency of use	9
2.8	Aesthetic and minimalist design	10
2.9	Help users recognise, diagnose, and recover from errors	11
2.10	Help and documentation	12
3	Impacts of Human Memory	13
3.1	Recognition	13
3.2	Cognitive Load	14
3.3	Shortcuts	15

1 Design Review

In this section of the report, the issues within subsections are ordered by criticality. Issues are categorised in the usefulness category if they refer to the content, although this may overlap with the fit for use section. If issues could fit into multiple categories, they are shown in the most relevant category.

The system goal for the AskAuckland web page is to provide information relating to a user's query regarding the University. Therefore, searching should be fast, easy, and accurate. The content should relate to students of the University (both current and future). Issues are things that hinder this ideal experience.

1.1 Usefulness Issues

Searching does not appear to support the Maori language. As Maori is commonly spoken and an official language of NZ, there are accessibility issues.

Search our frequently asked questions by keyword or phrase.

Me pehea taku utu i aku utu

Example: How do I pay my fees?

Search filters applied

Topic

Current students

Refine your search by topic:

Academic information Accommodation Coronavirus Degree Planning Enrolment Exams Fees and money matters Graduation ID cards IT help International students Printing Programmes and courses Postgraduate Records Scholarships Sport and Recreation Student Engagement Summer school Support services

No results found.

A simple search for “academic integrity” has many results relating to academic integrity. However, academic integrity is never defined in the articles. Furthermore, none of the links in the articles leads to a definition of academic integrity.

Next to some articles, there is an “Updated” flag; however, the date of the post/update is not visible. This lack of specificity limits the functionality of this feature. The time posted is essential for these articles as they may become outdated. An article from five years ago is not as relevant as one posted six months ago.

Results 1 - 10 of 2

Calculating your grade point average
You can view your cumulative Grade Point Average (GPA) on MyAucklandUni, the Student Portal. If you can't see it, please check Why can't I see...

Logging into Canvas Updated
To log into Canvas, please go to canvas.auckland.ac.nz. Enter your University username (e.g jbloo07) and password and click on login. Canvas is...

Looking for a lecture room is also difficult. It requires going to the sixth result after searching “campus map” and requires four clicks to reach the city campus map pdf. This also makes it inefficient for use, as this process would need to be repeated each time.

When searching “exam” with the coronavirus topic, there is one result which is not relevant to exams. This would be a fairly common question asked, but there does not appear to be information on the AskAuckland site.

There are no search results for “coffee” and “cafe”. This type of search should be covered as it would be a commonly asked question.

1.2 Fit for Use Issues

The search for “covid-19” yields twelve results.

Search our frequently asked questions by keyword or phrase.

covid-19

Example: How do I pay my fees?

Search filters applied

Topic

Current students

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

Results 1 - 10 of 12

Further specifying the search by adding the “Coronavirus” topic reduces search results to just two results.

Search our frequently asked questions by keyword or phrase.

covid-19

Example: How do I pay my fees?

Search filters applied

Topic

Current students Coronavirus

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

Results 1 - 2 of 2

The implementation of topics seems to be faulty. The titles of some of the removed articles are “Self-isolation in accommodation”, “Holding accommodation if still in China”, and “Making changes to your graduation application”. These results would be useful for students, so having them filtered out when using the “coronavirus” topic is counter-intuitive and not good user experience. Therefore, the functionality of “topics” is compromised.

Another potential issue with the topic feature is removing a topic from a search by clicking “Current students” under topic removes the search term.

1.3 Ease of Learning Issues

Hover effects for links are variable, with most being underlined, but some being underlined and highlighted.

The search button does not get underlined or highlighted; only the mouse cursor is changed to a pointer.

Most clickable aspects are shown in blue. However, the current breadcrumb is clickable but not blue. A further question is why the current breadcrumb is clickable, as it provides no functionality.

Another anti-pattern is the “Example: How do I pay my fees?” section, which is blue but not clickable.

[Home](#) / [AskAuckland](#) / [Current students](#) / [Coronavirus](#)

Search our frequently asked questions by keyword or phrase.

 × Q

[Example: How do I pay my fees?](#)

Typing in a word then hovering over the 'x' icon does not change the mouse cursor to a pointer which is an anti-pattern, a little confusing. Also, the 'x' icon has a small hit-box, making it harder to click.

AskAuckland

Your online help and support centre

[Home](#) / [AskAuckland](#) / [Current students](#)

Search our frequently asked questions by keyword or phrase.

 × Q

[Example: How do I pay my fees?](#)

The page numbers that appear at the bottom of a search page have a small hit-box, making them harder to click according to Fitt's law.

Vaccine for Coronavirus

Currently, there is no vaccine to protect against COVID-19, and no anti-viral treatment recommended for COVID-19 infection. People infected with the...

[1](#) [2](#) [3](#) [4](#) [Next >](#)

1.4 Efficiency of Use Issues

Each visit to AskAuckland requires the user to pick either “current” or “future” student. This is a time-consuming step for returning users as it must be done each time.

AskAuckland

Your online help and support centre

[Home](#) / [AskAuckland](#)

Find the answers to your questions about the University of Auckland.

I am a:

Future student

You are thinking about studying at the University, you are applying for admission, or you have just accepted an offer.

Current student

You are enrolling in courses and attending University.

1.5 Error Frequency and Severity Issues

When a user makes a spelling error, no results are returned, and there is no indication that the user has made a mistake.

Search our frequently asked questions by keyword or phrase.

Example: How do I pay my fees?

Search filters applied

Topic

Current students

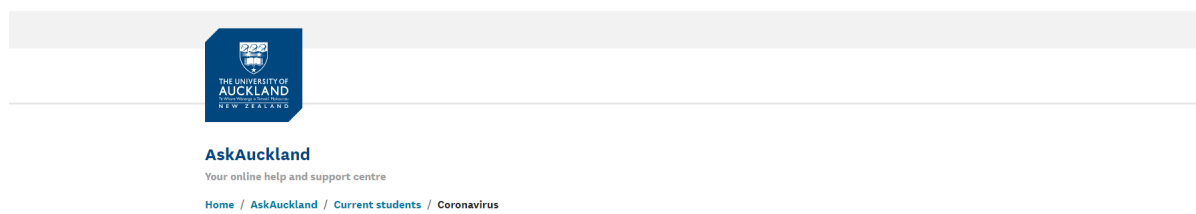
Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

No results found.

1.6 Subjective Satisfaction Issues

The top bar seems to have no use other than to hold the University of Auckland logo, which appears to be a bad use of space.



2 Nielson's Heuristics

Nielson's heuristics are a general guideline on user interface design. In this section, these ten characteristics will be examined in regards to six scenarios:

1. What a current student should do about COVID-19
2. What support for Maori students is available
3. How to find a specific lecture theatre
4. What is academic integrity
5. Find out where to get a coffee on campus
6. Ask about something in the Maori language

The process for gathering issues started with an observation and exploration of the main AskAuckland web page, looking specifically for anti-patterns and visual issues. Following this, the scenarios were carried out while constantly examining signs of usability issues. These were all recorded and then categorised into the ten heuristics. The criticality of each item is noted and determined by the impact on users trying to perform a scenario. There are three levels of criticality: low, medium, and high. If an issue completely blocks a scenario, then it is of high criticality, while an issue that annoys a user would be of low criticality.

2.1 Visibility of system status

2.1.1 Previous Clicked Link Not Purple - Low Severity

A convention across many websites is to colour links purple if they have been previously visited. This helps the user recognise what they have used before for future searches. Although missing this feature reduces the ability of users to identify articles they have already visited, it is not severe enough to hinder any tasks.

Solution: If a user has visited an article before, the link in the search results should be purple.

2.2 Match between system and the real world

2.2.1 Maori Language Support - High Severity

Searching does not work if the language used to search is Maori. There is also no option to change the language of the site to be in Maori. Maori is an official language of New Zealand; people who can only speak Maori would not be able to use the AskAuckland site. Consequently, this issue can ultimately hinder a user from completing the primary task of searching.

Search our frequently asked questions by keyword or phrase.

Me pehea taku utu i aku utu

Example: How do I pay my fees?

Search filters applied

Topic

Current students

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

No results found.

Solution: Either translate Maori and search using the translation or implement Maori language support with a switch language button.

2.3 User control and freedom

2.3.1 Search Term Not Saved - Low Severity

When in an article, clicking “Current students” breadcrumb does not preserve the search term used to find the article. A user who would like to visit multiple articles would be annoyed by this issue.

AskAuckland

Your online help and support centre

[Home](#) / [AskAuckland](#) / [Current students](#)

Search our frequently asked questions by keyword or phrase.

Ask your question

Example: How do I pay my fees?

Solution: Add another breadcrumb which is shown when in articles, allowing the user to go back to their previous search term.

2.4 Consistency and standards

2.4.1 Choosing Topic Eliminates Relevant Results - High Severity

Searching for “covid-19” yields twelve results, adding the “coronavirus” topic reduces the number of results to two. This is disconcerting as the topic and search terms are synonyms, but many important results are

omitted. Therefore, the risk is high that users would miss articles and not be able to complete their scenario if they encounter this issue.

Search our frequently asked questions by keyword or phrase.

covid-19

Example: How do I pay my fees?

Search filters applied

Topic

Current students Coronavirus

Refine your search by topic:

Academic information Accommodation Coronavirus Degree Planning Enrolment Exams Fees and money matters Graduation ID cards IT help International students Printing Programmes and courses Postgraduate Records Scholarships Sport and Recreation Student Engagement Summer school Support services

Results 1 - 2 of 2

Solution: Better tagging of search results, articles which mention coronavirus should be tagged with the corresponding topic.

2.4.2 Inconsistent Link Styling - Low Severity

While most links are coloured blue, there are some exceptions. The “Example: How do I pay my fees?” paragraph is not a link although it is blue. Although the current breadcrumb is not coloured blue, it is a link. Links in the footer are white. Hover animations for links vary as well: underlining, highlighting, and no animation. This issue is only a minor annoyance for users and would not prevent any from completing their task.

Home / AskAuckland / Current students / Coronavirus

Search our frequently asked questions by keyword or phrase.

covid-19

Example: How do I pay my fees?

Solution: Make all links blue, with underline hover animation.

2.5 Error prevention

2.5.1 Misspelling Not Checked - Medium Severity

This is quite a common mistake for users to make. So the fact that there is no indication that there has been a misspelling (something like “No results, please check your spelling”) is an issue. If a user is not a native English speaker or their spelling is not accurate, this error could prevent them from completing a scenario, but most users would recheck their search term.

Search our frequently asked questions by keyword or phrase.

coronaavirus

Example: How do I pay my fees?

Search filters applied

Topic

Current students

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

No results found.

Solution: Instead of the message “No results found.” add the phrase “Please recheck your spelling.” to the end.

2.6 Recognition rather than recall

2.6.1 Search Term Not Shown - Low Severity

When inside an article, it is not clear which search term was used to reach this article. If a user leaves the page, they may forget what they were looking for. Most of the time, a user should be able to tell what search term was used, so this issue would only be a minor hindrance.

AskAuckland

Your online help and support centre

[Home](#) / [AskAuckland](#) / [Search](#)

Unable to return to New Zealand because of travel restrictions

What should I do if travel restrictions mean I cannot return to New Zealand?

Solution: Include the search term as an additional breadcrumb on the article page.

2.7 Flexibility and efficiency of use

2.7.1 Mandatory Selection of Future or Current Student - Low Severity

This feature is a roadblock for experienced users. It limits the speed at which users who are used to the site can ask a question, but does not hinder particular scenarios greatly.

AskAuckland

Your online help and support centre

[Home](#) / AskAuckland

Find the answers to your questions about the University of Auckland.

I am a:

Future student

You are thinking about studying at the University, you are applying for admission, or you have just accepted an offer.

Current student

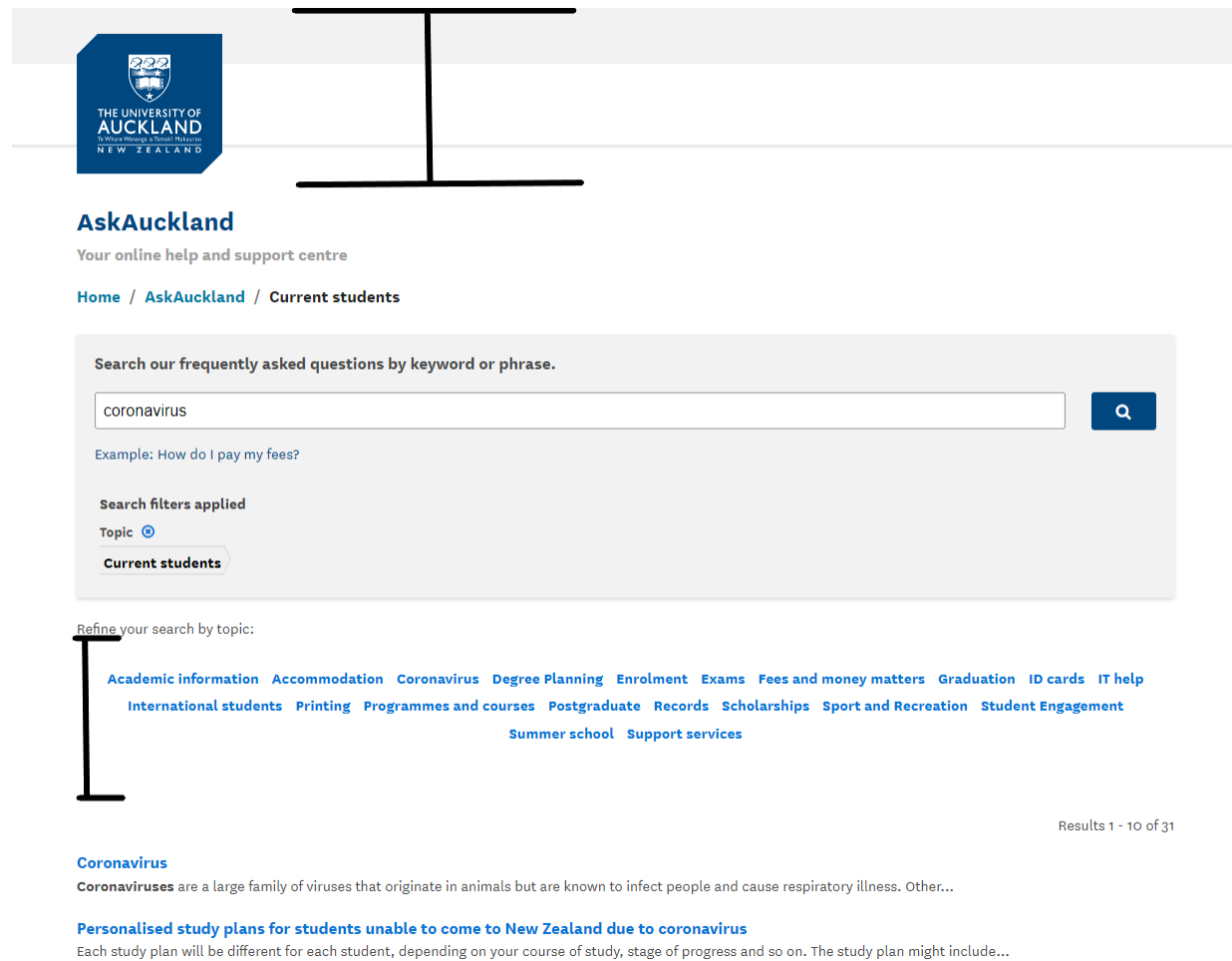
You are enrolling in courses and attending University.

Solution: Save the previous answer in a cookie and use that for future sessions. Or on the homepage, have a search bar on top which can be used immediately.

2.8 Aesthetic and minimalist design

2.8.1 Only two results showing - Low Severity

The top bar and containing the University of Auckland logo and the topic section take up unnecessary amounts of space. Users would not be confused but may be slightly annoyed by having to scroll to see their search results.



The screenshot shows the AskAuckland website. At the top left is the University of Auckland logo. Below it is the text 'AskAuckland' and 'Your online help and support centre'. A breadcrumb trail reads 'Home / AskAuckland / Current students'. A search bar contains the text 'coronavirus'. Below the search bar is an example question: 'Example: How do I pay my fees?'. Underneath is a section for 'Search filters applied' with a 'Topic' filter set to 'Current students'. A list of search results is shown, including 'Coronavirus' and 'Personalised study plans for students unable to come to New Zealand due to coronavirus'. A large bracket on the left side of the page indicates the area to be modified.

Search our frequently asked questions by keyword or phrase.

coronavirus

Example: How do I pay my fees?

Search filters applied

Topic

Current students

Refine your search by topic:

Academic information Accommodation Coronavirus Degree Planning Enrolment Exams Fees and money matters Graduation ID cards IT help International students Printing Programmes and courses Postgraduate Records Scholarships Sport and Recreation Student Engagement Summer school Support services

Results 1 - 10 of 31

Coronavirus

Coronaviruses are a large family of viruses that originate in animals but are known to infect people and cause respiratory illness. Other...

Personalised study plans for students unable to come to New Zealand due to coronavirus

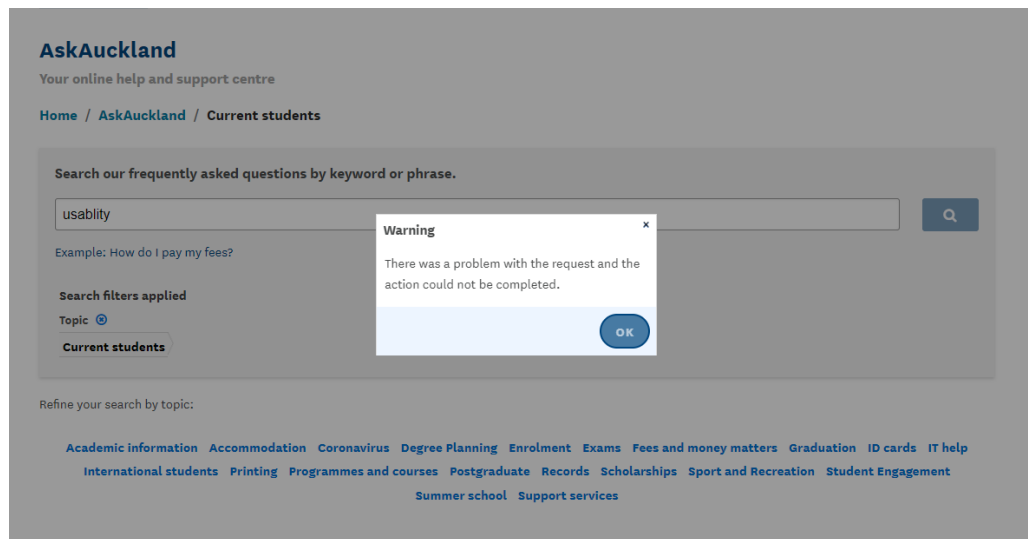
Each study plan will be different for each student, depending on your course of study, stage of progress and so on. The study plan might include...

Solution: Move the logo to the left-hand side of the screen and move up the main content of the page. Replace the topic section with a drop-down list in alphabetical order (Hick-Hyman Law). Making these changes should result in an extra four results available without scrolling.

2.9 Help users recognise, diagnose, and recover from errors

2.9.1 Unclear Error Message - Medium Severity

Although error messages were rare, there were occasions where searching for something after the site had been idle results in an error message. The error message is not useful for the user. After searching again, the warning did not occur. This is a confusing experience for the user. Some users may leave the site after receiving a message like this or think there is something wrong with the search term, so the impact is moderate.



Solution: Use a more meaningful error message for the user such as “Please try again, you have timed out.”.

2.10 Help and documentation

2.10.1 No Contact Page - High Severity

The main purpose of the AskAuckland website is to get answers to commonly asked questions. If a question returns no results, there is currently no indication of how else the user can receive a response. Scenarios such as looking for coffee the definition for academic integrity are not possible due to this inflexibility.

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

No results found.

Solution: In the search results section, add a link “Can’t find an answer to your question? Click here” where the user can submit custom questions to be answered.

3 Impacts of Human Memory

The current state of the website does have considerable concern for human memory limitations. However, there are some areas which can be improved to improve the user experience.

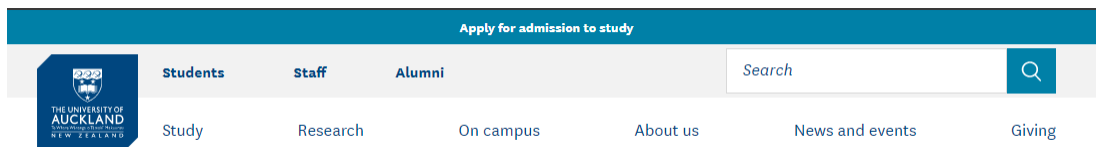
3.1 Recognition

Using known patterns in the user interface allows users to recognise them and learn how to use the website faster. Here are some examples used:

- Blue colour for links
- Underline links on hover with the mouse
- Search field appearance and functionality
- A loading GIF appears after clicking the search icon, indicating the user to wait on the current page and that their input has been recognised.

The site also takes advantage of known logos and icons to aid in recognition; they are also more readable than words:

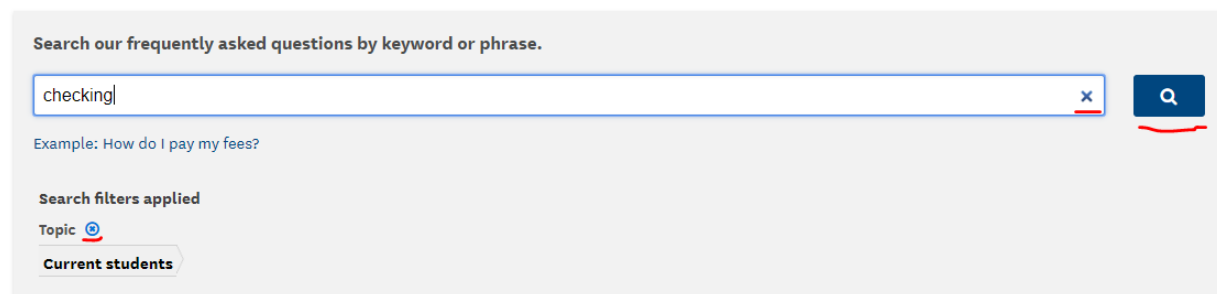
- The logo in the top left corner is consistent in both look and functionality as the one on auckland.ac.nz.



- The previous and next icons are recognisable and have the same hover effect as links, indicating they can be clicked.

< Previous 1 ... 3 4 5 ... 19 Next >

- In the search section, the search icon and the two delete icons are easily recognisable, although the two delete icons are not the same shape.



- Another issue is with the hover functionality of the delete icon in the search field. There is no hover effect, which contradicts the other buttons on the page.

When an element on the web page has functionality that a user is familiar with but uses a different pattern, this makes the interface more difficult to learn. The topic section is an anti-pattern. The functionality of the topic section is to allow the user to pick one item from a list of items to refine the search. However, this type of functionality is already covered by a drop-down.

Refine your search by topic:

[Academic information](#) [Accommodation](#) [Coronavirus](#) [Degree Planning](#) [Enrolment](#) [Exams](#) [Fees and money matters](#) [Graduation](#) [ID cards](#) [IT help](#)
[International students](#) [Printing](#) [Programmes and courses](#) [Postgraduate](#) [Records](#) [Scholarships](#) [Sport and Recreation](#) [Student Engagement](#)
[Summer school](#) [Support services](#)

3.2 Cognitive Load

Lowering the amount of information that needs to be held in the user's head at one time reduces stress. In the website, many features support the user's working memory:

- Topics shown on the results page and updates when picking a new topic.
- After clicking the search button, the results appear on the same page as the search without clearing the search.
- Breadcrumbs show where you are on the site as well as whether you are on current student or future student.

The names of topics are all short, with an average of 1.75 words.

The user task stack is small, so if someone is interrupted when searching, they should be able to return to that page and recall their task. This effect further enhances these issues:

- An issue is that removing a topic removes the search term. The user may forget this piece of information.
- Another issue is the search term not visible on article pages, leading to the same problem.

However, these two issues are alleviated by the recently viewed section feature.

Recently Viewed

- [Previous exam questions](#)
- [Release of NCEA results](#)
- [Coronavirus](#)
- [Unable to return to New Zealand because of travel...](#)
- [Searching for classes](#)

3.3 Shortcuts

A useful feature for experienced users is the physical affordance of typing enter instead of clicking the search button.

Overall, the website has areas of improvement, but there are already many features which counteract human memory limitations.