

CMPT 880/890

Writing labs

Outline

- Feedback and summaries
- Writing arguments

Feedback on first summary

- Lots of room for improvement
- Main problems:
 - grammar and mechanics
 - unclear sentences
 - organization of paragraphs
 - overall organization of summary

Feedback on first summary

- Grammar and mechanics:
 - articles (*a, an, the*, etc.)
 - capitalization
 - starting sentences with 'and' and 'but'
 - spelling (!)
 - title and author of the passage

Feedback on first summary

- Unclear sentences:
 - sentences that are difficult to parse
 - sentences whose meaning is difficult to determine
 - sentences that seem to mean nothing at all
 - word choice

Feedback on first summary

- Paragraph organization
 - summaries should be written in paragraphs
 - a paragraph should convey a single idea
 - many that I read were collections of statements, seemingly extracted from the reading at random

Feedback on first summary

- Overall organization of the summary
 - what is the author trying to say?
 - what is the main claim?
 - what are the main ideas, arguments, reasons?
 - describing the paper vs. summarizing the content

Look familiar?

The other key aspect of this thesis is availability. This is defined as how accessible an individual is. It is in many ways the other half of the natural interaction of awareness. While others are aware of you, you are available to them. In this context, it is the level of social interaction that you are capable of or willing to be a part of. Whereas awareness is the interpretation by others of data about you, availability relates more to the raw data (embodiment, location, activity) about you as an individual. Where awareness is the metaphor for the social status you provide, availability contains the semantic information that you present.

Writing a summary

- Read the passage carefully.
- Determine the passage's structure.
- Identify the author's purpose in writing.
- Reread, divide, label, and underline.
 - what's important?
- Write one-sentence summaries of each main point.
- Write a one-sentence summary of the entire passage.
 - should express the central idea of the passage
- Write a first draft of your summary.
- Reread, check your summary, revise.

Summarize rather than describe

- Describes the article:
- This article focuses on the growing problem and cause of noise pollution. It explores the effects of population growth, urban sprawl, and the increase of traffic and aircraft prevalence on noise levels. This article offers specific information regarding decibel measurements and risks of prolonged exposure. The author provides specific decibel levels for a variety of machines and situations.

Summarize rather than describe

- Summarizes by providing content and limited detail:
- This article provides information on the growing problem and causes of noise pollution. Population growth, urban sprawl, and increases in traffic and aircraft transportation are having a marked effect on noise levels. Escalating decibel levels and prolonged exposure increase the risks to hearing and health. In the United States, 30 million employees are vulnerable to the possibility of hearing loss because of hazardous noise levels on the job. Children and animals are also at risk to the physical effects of noise, such as stress, elevated blood pressure, and increased heart rate. Various decibel measuring machines are available for various situations. In conclusion, the article show that health and hearing risks due to combined decibel levels and extended exposures occur in everyday life.

What's a summary for, anyway?

- For writing your related work section
 - Short paper: 5 articles summarized in one paragraph
 - Conference paper: 20 articles summarized in one page
 - M.Sc. Thesis: 75 articles summarized in one chapter
- For keeping track of what you've read
 - Annotated bibliography

Exercise

- Summarize the colour-blindness article

Arguments

The structure of an argument

- Claim
- Reason(s) for the claim
- Evidence for the reasons

- It is important to understand the argument before you write the paragraph / paper!
- Write the argument out in point form first!

Questions (for the writer)

- What is my claim?
- What reasons support my claim?
- What evidence supports my reasons?
- Do I acknowledge and respond to likely objections?
- What principle makes my reasons relevant to my claim?

Argument exercise

- Write a claim, reason(s), warrants, and evidence about which programming language should be taught in first-year computer science classes
- Include (for practice) all the elements
- Make up the evidence (but make it sound believable)

What is the main claim?

- "Python should be taught in first-year CS"

What is our reason for this claim?

- "Because..."
- note that there are several possible reasons:
 - simple syntax
 - many libraries available
 - free IDEs
- for the moment, choose one
 - simple syntax
- "Because its syntax is simple"
- "Because its syntax is simpler than other languages"

What is our reason for this claim?

- Two issues here:
- 1. we have made another claim
 - that Python has simple syntax
 - this will have to be defended as well
- 2. we have to make sure that people will understand why the reason is relevant to the claim.

What connects reason to claim?

- What is our warrant?
 - General principle underlying our reason/claim pair
- "Students who are new to programming often have great difficulty with syntax, and lowering this barrier will help them focus on learning algorithmic concepts."
- Possible additions:
 - "Simple syntax is important because..."
 - "... which is the purpose of first-year CS"

Return to the second claim

- (that Python has simple syntax)
 - do we need another reason for this claim?
 - do we have evidence?
- Assume we want to give another reason
- First, we could make the claim more specific:
- "Python is simpler than languages like C++ and Java"
- Reason:
- "Because Python is a scripting language, and scripting languages have simpler syntax than system languages"

Evidence

- We can make general statements about the language:
- "In Python, statements are terminated with an end-of-line, rather than a semicolon"
- "Block structure is indicated by indentation, rather than with brackets"
- tie your evidence back to the main claim:
- "Semicolons and brackets are common stumbling blocks for beginning programmers"

Evidence

- Give examples:
- "The following code is a common bracketing error in C++ or Java:"

```
if (x < 0)
    cout << "x was negative";
    x = -x;
```

- "The corresponding Python executes as expected, since the indentation itself determines the block:"

```
if x < 0:
    print "x was negative"
    x = -x
```


Evidence

- Provide other examples
 - chosen so that the audience will understand
- "Another example is the ubiquitous 'Hello World' program. In C++, the following is required:"

```
#include <iostream.h>
int main()
{
    cout << "Hello World!";
}
```

- “In Python, simple programs really are simple:”

```
print "Hello World!"
```
- examples from (Zelle, 2000)

Deal with potential objections

- What are the potential objections to Python?
 - need for indenting
 - dynamically typed
 - scripting language, not a 'real' language
 - “Scheme would be better”
- Which should be dealt with in this paragraph?
 - Who is the audience?
 - which objections are they likely to share?
- For this example, assume indenting is important to the audience

Deal with potential objections

- State the objection
- "One of the criticisms of Python is that students may have difficulty with the strict indenting rules"
- Could also bridge from the earlier example
- "Although Python's indenting rules provide a simple mechanism for determining a block, ..."
- How to deal with the objection?
 - Claim, reason, evidence

Deal with potential objections

- Claim:
- "Indentation, however, is not likely to be a problem"
- Reason:
- "Because current editors and IDEs for Python provide extensive indentation support, such as automatic indenting and highlighting the current block"
- Evidence:
- "as can be seen in the popular SPE editor shown in Figure 1."
- Check: is this enough of a reason for the audience?

Deal with potential objections

- Is it enough to counter the objection?
 - Depends on your audience
 - It's possible that the real fight is over the objections, not the main claim
- Could add other reasons or other claims:
- "In addition, researchers in the area of CS education have suggested that correct program indentation is an important skill that should be taught early, and that Python's focus on indentation helps students practice and master this skill from the start (Zelle, 2000)."

Conclude

- Come back out from the details
- Remind the reader of the main points
 - main reasons
 - objections that have been answered
- Restate the main claim
- "In summary, Python's simple syntax, which allows students to focus on important concepts, and its lack of substantial drawbacks, make it an ideal choice for first-year computer science."