# Potential Final Exam Questions (15%)

Welcome to the second assignment! This assignment aims at getting you to think critically about the course reading materials while putting on the hat of a user interface design educator, thus move beyond the simple recollection of facts to a demonstration of the understanding of the course material.

There are two parts of this individual assignment. The first part is optional but recommended if you are not sure about the quality of your questions. You can also use it as one of the questions for your second part. See below for details.

## Details

You are going to create two course assessment questions, which have the potential to become part of the final examination of the course (but there is no guarantee and they will likely be slightly modified).

The source of your questions must come from the Readings listed in the Syllabus section on Canvas (https://canvas.sfu.ca/courses/63144/assignments/syllabus), or the lecture slides, up to and including Week 11. Each question must be in no more than 100 words (a drawing/image is counted as 50 words), and the answer must be in short format with a maximum word count of 250 (a drawing is counted as 100 words). The questions and answers will be evaluated using the following rubrics (adapted from Paul Hibbitts' course materials):

| Aspect | Quality (from high to low for each aspect) |
|---|---|
| Relevance | • **Exceptional** – extremely strong linkages to course learning objectives and the course materials. Extremely relevant to the creation of effective user interfaces.<br>• **Excellent** – Very strong linkages to course learning objectives and the course materials. Very relevant to the creation of effective user interfaces.<br>• **Good** – Moderately strong linkages to course learning objectives and the course materials. Moderately relevant to the creation of effective user interfaces.<br>• **Fair** – somewhat strong linkages to course learning objectives and the course materials. somewhat relevant to the creation of effective user interfaces.<br>• **Poor** – Vague linkages to course learning objectives and the course materials. Slightly relevant to the creation of effective user interfaces. |
| Level | • **Exceptional** – Question contains the aspect of evaluation or creation and provides a very meaningful intellectual challenge.<br>• **Excellent** – Question contains the aspect of application of analysis and provides a moderately intellectual meaningful challenge.<br>• **Good** – Question contains the aspect of remembering or understanding (i.e., comprehending) and provides a somewhat meaningful intellectual challenge.<br>• **Fair** – Question contains the aspect of remembering or understanding (i.e., comprehending) and provides a limited meaningful intellectual challenge.<br>• **Poor** – Question contains the aspect of remembering or understanding (i.e., comprehending) and provides very little to no meaningful intellectual challenge. |

| Clarity | • **Exceptional** – Question and correct answer are very clear and not ambiguous. Writing is exceptionally clear, concise, and well organized. |
|---|---|
| | • **Excellent** – Question and correct answer are moderately clear and not ambiguous. Writing is very clear, concise, and well organized. |
| | • **Good** – Question and correct answer are mostly clear and not ambiguous. Writing is mostly clear, concise, and well organized. |
| | • **Fair** – Question and correct answer are somewhat clear and somewhat ambiguous. Writing is somewhat clear, concise, and well organized. |
| | • **Poor** – Question and correct answer are unclear and are ambiguous. Writing is unclear or disorganized. |

## Sample Questions

*Good Question (Extremely strong linkage to course materials, involves creation, clear description of expected answer)*

Q: From the reading "Usability 101: Introduction to Usability" we know that usability testing needs users to perform representative tasks with the design in order to improve usability. If you are a designer and you plan to test a mailing app, describe three tasks you would test and briefly indicate why for each task.

A: Description of three tasks that involve the target user performing a task that they typically use a mailing app for. In all cases, observe how they perform those tasks and ask them to describe the process. Example task 1: ask the target user to use the mailing app to find a recipient, write an email with subject and content, and then send it. Example task 2: ask the target user to use the mailing app to check if he/she has received an email. Example task 3: ask the target user to find an email sent by a particular contact.

*Moderate Question (Extremely strong linkage to course materials, involves understanding of materials, moderately clear description of expected answer but leaves some uncertainty on how detailed the answer should be)*
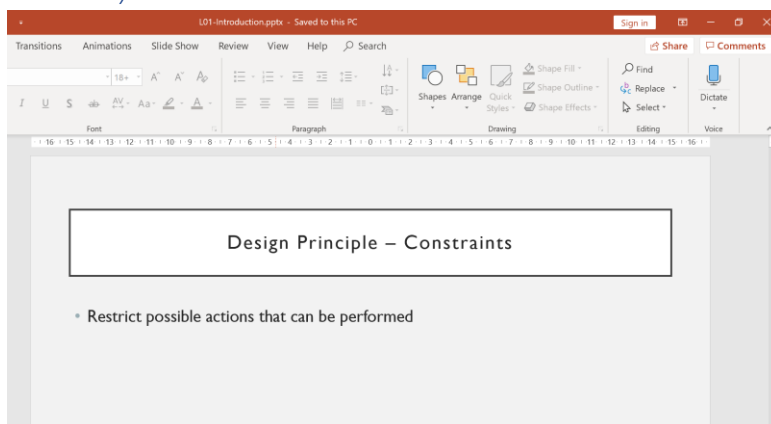


Q: This screenshot shows an example of the Error Prevention heuristic from Nielsen's Heuristics. Explain how it is achieved.

A: The functionalities grouped by Font, Paragraph, and part of Drawing is disabled (greyed out) to prevent the user from selecting an unsupported operation. In this example where no text nor shape are selected, the user should not be able to make adjustments relevant to those components.

*Bad Question (vague linkage to course materials, provides somewhat meaningful intellectual challenge, somewhat unclear and ambiguous)*

Q: Explain how a door handle can be poorly designed.

A: A door handle can provide false affordance for opening in a different direction. It can also be placed at a height that is inconvenient for some people or need a lot of strength to operate.

*Bad Question (strong linkage to course materials, provides no meaningful intellectual challenge, clear about what is needed but too general about the interface and its quality)*

Q: State 3 Nielsen's Heuristics that makes an interface easier to use.

A: Recognition over recall, Error, User control and freedom, Flexibility and efficiency of use.

## Template

Use the following table as a template for each of your questions.

| |
|---|
| **Question number**: [1/2] |
| **Source**: [chapter & page in book/link] |
| **Question**: [Max. 100 words, a drawing/image is counted as 50 words] |
| **Answer**: [Max. 250 words, a drawing is counted as 100 words] |

## Part 1: One Question & Answer [Optional]

You can choose to submit **one question and its answer** as a practice. It does not count towards your total but is useful for you to have a sense of what level of questions you are creating (we will give you some feedback before the due date of Part 2 so you can have a chance to improve). There is no late submission.

## Part 2: Two Questions & Answers

This is where your questions (and answers) will be marked. You can reuse what you have for Part 1 (hopefully improved).

## Submission (Both Part 1 & 2)

Submit Part 1 **by July 14** and Part 2 **by July 23**, each in a single PDF file to the corresponding folder on Canvas. Begin your document with a cover page stating that it is Assignment 2 and for which part, followed by your name, SFU email, and student ID. The name of the file should be in this format: **<firstname_lastname>_<studentID>_Assignment2_PartX.pdf**, where X is the part number. Note that you don't need to include '<' and '>', for example: John_Smith_012345678_Assignment2_PartX.pdf.

Assignment late penalty: 10% per calendar day (each 0 to 24 hour period past due), max 2 days late. This only applies to Part 2.

Your document should be using 12-pt Arial font, single spacing, with 1-inch margins.

## Useful Resources:

- Asking good test questions:
  https://teaching.cornell.edu/teaching-resources/assessment-evaluation/asking-good-test-questions

- Exam questions: types, characteristics, and suggestions:
  https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/developing-assignments/exams/questions-types-characteristics-suggestions
- Different types of questions based on Bloom's Taxonomy:
  http://faculty.academyart.edu/faculty/teaching-topics/teaching-curriculum/enhancing-teacher-student-interaction/different-types-questions-blooms-taxonomy.html

## Academic Honesty

It is expected that within this course, the highest standards of academic integrity will be maintained, in keeping with SFU's Policy S10.01, "Code of Academic Integrity and Good Conduct." In this class, collaboration is encouraged for in-class exercises and the team components of the assignments, as well as task preparation for group discussions. However, individual work should be completed by the person who submits it. Any work that is independent work of the submitter should be clearly cited to make its source clear. All referenced work in reports and presentations must be appropriately cited, to include websites, as well as figures and graphs in presentations. If there are any questions whatsoever, feel free to contact the course instructor about any possible grey areas.

Some examples of unacceptable behavior:

- Handing in assignments/exercises that are not 100% your own work (in design, implementation, wording, etc.), without a clear/visible citation of the source.
- Using another student's work as a template or reference for completing your own work.
- Using any unpermitted resources during an exam.
- Looking at, or attempting to look at, another student's answer during an exam.
- Submitting work that has been submitted before, for any course at any institution.

All instances of academic dishonesty will be dealt with severely and according to SFU policy. This means that Student Services will be notified, and they will record the dishonesty in the student's file. Students are strongly encouraged to review SFU's Code of Academic Integrity and Good Conduct (S10.01) available online at: http://www.sfu.ca/policies/gazette/student/s10-01.html.