

# Final Test Information

CSCI 5902– Fall 2022

Monday November 28, 2022 in class

# Final Test

- Monday Nov. 28 in class
- 90 minutes (be on time)
- It is worth – 12% or 17% of your grade
- **Remember your Dalhousie ID**
- No talking during test!!
- No aides allowed

# Format of the Test

- All topics covered in class:
  - Lecture notes are on website (01, 1, 2, 3, 4, 5, 5b, 6)
- Format of questions:
  - Multiple choice
  - Short answer (can be in point form)
  - Applied – show that you understand concepts

# Summary of Course Topics

(note, this a summary and may not be complete – see notes and chapters as well)

- UX Design Lifecycles and Design Paradigms in UX Design –Lectures 01, 2, 3 (Ch 5, 30, 31, 32)
  - Affordances and how they impact design
  - Gestalt's principles
  - CRAP
  - Others
  - Important concepts for designing everyday things, for example:
    - perceived affordances
    - causality
    - visible constraints
    - mapping
    - transfer effects
    - idioms & population stereotypes
    - conceptual models
    - individual differences
    - why design is hard
  - Cognition Processes, Mental Models & Metaphors
  - Don Norman's "Stages of Action" model
  - Fundamental UX Life Cycle Activities and Model

# Summary of Course Topics

(note, this a summary and may not be complete – see notes and chapters as well)

- **Data Elicitation (Lecture 1 - Ch 7, 11)**
  - Preparing for data elicitation
  - Interviews types and other study types (e.g., observations), probing
  - Contextual Inquiries
- **Identifying and understanding users, data modeling and prototyping (Lectures 3 and 5 – CH 7, 9, 11, 12, 14, 15, 20)**
  - Different users and their needs
  - Models (e.g., flow models, physical models, etc.)
  - Models for users and task structures (e.g., Personas, task models, HTI, etc.)
  - Task Analysis Techniques (e.g., modeling, Goals, tasks and actions, Use cases, Scenarios, etc.)
  - Design thinking and brainstorming
  - Prototyping (e.g., Types and fidelity, etc.)

# Summary of Course Topics

(note, this a summary and may not be complete – see notes and chapters as well)

- Summarizing/Analyzing and Presenting Data (Lecture 4 – CH 7 and 8)
  - Data types
  - Graphs
  - Methods to code and analyze quantitative and qualitative data
  - Methods to present data
  - Affinity diagramming/WAAD
- Evaluations – with users and without users (Lectures 5b and 6) (CH 23, 24, 25)
  - User studies (e.g., field studies, interviews, controlled study etc.)
  - Question types
  - Inspection models and other ways to collect data without data (e.g., Cognitive Walkthroughs, Heuristics, logs, etc.)

# Example questions – multiple choice

(note these are examples only that represent the type of questions)

When performing UX design, "affordance" means:

- a) To make a budget friendly design
- b) To help the user know how to use the design**
- c) To offer many options to the user
- d) To make design puzzling
- e) All of the above
- f) None of the above

Which of the following statements is *false*?

- a) There are only three types of affordances in UX design: Emotional, Cognitive and Physical**
- b) An example of Emotional Design would be to include a photo of a sunset on a travel website
- c) An example of Cognitive Design would be to add a description of link when a user hovered it
- d) An example of Functional Design would be to have large visible buttons
- e) All of the above
- f) None of the above

# Example questions – short answer

(note these are examples only that represent the type of questions)

Explain 2 of the 4 design elements of C.R.A.P. and give an example of each.

*Ans: Contrast*

- *used to to direct the viewer's eyes to what's important (primary task).*
- *For example, if a user is editing a document, then only those buttons that they can use while editing are highlighted (and those that can't be used are greyed out).*

*Ans: Alignment*

- *uses alignment (horizontal and vertical) to help group elements and make the design clean and clear*
- *For example, group all menu items across the top of web pages such as home, contact us, etc. horizontally so the user knows where to go to navigate).*



# Example Questions – Applied

(note these are examples only that represent the type of questions)

What is the following image an example of (in terms of design) and explain why this helps the user:

The screenshot shows the Air Canada website's flight booking interface. At the top, there are navigation tabs: Flights, Vacations, Flight Passes, Hotels, Cars, My Bookings, Check-in, and Flight Status. Below these, the trip type is set to Round-trip. The origin is Halifax YHZ and the destination is Toronto YYZ. The departure date is 17 May and the return date is 21 May. The number of passengers is 1. A calendar is displayed for May and June 2018, with the 17th and 21st highlighted in red. A red 'Find' button is visible. The 'Offers' section on the left shows a picture of a building. The Air Canada logo and 'AIR CANADA boutique' are at the bottom right.

MAY 2018							JUNE 2018						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28	29	30

*Ans: This is an example of visible constraints (it shows the imitations of the actions possible perceived from object's appearance which helps someone understand it's perceived affordance). By restricting the dates, it provides feedback to the user to help them know how to use it and to help them reduce errors.*