

Student Id: _____

Name: _____

CS 352: Usability Engineering
Dr. Burnett, Winter 2019
Midterm Exam
Open 3x5 notecards (two)

1. (15 pts) Using either your team's project or the online grocery store:

(a) select an aspect to think about and write it here: _____

(b) Draw three Concepts relating to that aspect, and label them Concept #1, Concept #2, and Concept #3 (so that we can clearly see where one ends and another begins).

2. (20 pts) True or false.

_____ T or F: An example of the Gulf of Evaluation is a user having problems figuring out how to delete a file.

_____ Given: in class, Dr. Burnett sang an excerpt from "The Raven" (a poem), showing that she could still remember it decades after having memorized it in high school.

T or F: this was a demonstration of the effect of multiple encoding on memory.

_____ T or F: The paler (less saturated) two colors are, the harder it is to tell them apart.

_____ T or F: No user(s) are needed for an analytical evaluation.

_____ T or F: The human visual system is optimized for brightness, not contrast.

3. (30 pts total). Short answer: (About 1-3 sentences each).

a. (5 pts) What is the difference between formative vs. summative evaluation?

b (5 pts) Why do we humans often forget "clean-up" steps?

c. (5 pts) What is one way a low-fidelity prototype is better than a high-fidelity prototype?

d. (5 pts) Recall the Research part of your team project in Part 4 (P-R-I-C-P-E); was that analytical work, empirical work, or neither of those two? Explain your answer (1-3 sentences).

e. (5 pts) You have decided to do a field interview with "Joe" for an on-line grocery you are developing. You want to find out one thing: whether Joe is careful about the quality of the produce he buys. Joe is very busy, so you are allowed only one question in the interview. Write your one and only field interview question to find this out.

(f) (5 pts) What is a mental model? (1-3 sentences)

4. (15 pts total) Using the UI pictured here, point out an example of how any three of the following Gestalt principles of visual perception help (or harm) our ability to understand this UI: *Proximity*, *Similarity*, *Continuity*, *Symmetry*, *Figure/ground*, *Common fate*.

Be specific about *which piece* of the UI you are referring to, *which Gestalt principle* you are talking about, and *how that principle used that way will help (or harm)* someone's ability to understand the UI.



a. Principle: _____

Where is one example you see it (point it out with an arrow, circle, etc):
 How that example's use of that principle helps or hurts (about 1 sentence):

b. Principle: _____

Where is one example you see it (point it out with an arrow, circle, etc):
 How that example's use of that principle helps or hurts (about 1 sentence):

c. Principle: _____

Where is one example you see it (point it out with an arrow, circle, etc):
 How that example's use of that principle helps or hurts (about 1 sentence):

5. (20 pts) 1. (Design Process) 15 points. PRICPE

Suppose you were designing a new remote control device to turn on/off various lights in someone's living room. Give a concrete example of what *each step's outcome* of PRICPE might look like for your device, up to (not including) the "E" for the device. About 1 sentence or sketch for each letter is expected.

Grading note: Do not spend much time on each -- I'm not interested in the quality of each example, I'm just interested in whether they correctly identify a possible outcome from each of P,R,I,C,P, and differences between them.

Predisposition's output example:

Research's output example:

Insights's output example:

Concepts's output example:

Prototype's output example:

6. (0 points, optional): In my team project, my guess is that each team member has contributed the following amount of the work so far:

(team member): <u>me</u> _____: _____%	(team member): _____: _____%
(team member): _____: _____%	(team member): _____: _____%
(team member): _____: _____%	(team member): _____: _____%